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## Evaluation of Centrally Sponsored Schemes in Water Resources, Environment and Forest Sector

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# Volume 1: APPROACH & METHODOLOGY



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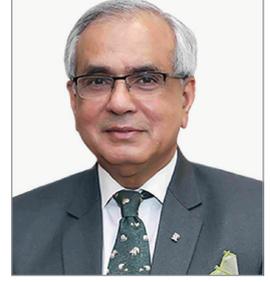
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Water Resources, Environment and Forest Sector**

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**Volume 1: APPROACH & METHODOLOGY**



**Dr. Rajiv Kumar**  
Vice Chairman  
National Institution for Transforming India  
Government of India  
New Delhi, India



## MESSAGE

The sustainable use of natural resources is critical for our growing economy and the need is even more pronounced due to the effects of climate change. Alongside conservation of the environment, India needs policies and programs that ensure that the people dependent on environmental resources obtain better livelihoods from its conservation. Moreover, this would help in the climate-proofing of vulnerable sectors such as water resources, forestry, agriculture, fisheries and infrastructure.

Given that India has only 4% of the world's renewable water sources but hosts around 18% of the world's population, the Water Resources sector plays a vital role in ensuring water and food security and achieving our Sustainable Development Goals. Ensuring conjunctive use of surface and groundwater, substantial improvements in water use efficiencies and equitable supply to all sectors is at the forefront. The spatial and temporal variations need to be addressed by enhancing the country's water storage capacity by creating decentralized storage structures. A paradigm shift from an asset creation approach to a service-based approach needs to be adopted wherein the maintenance and management of the existing assets must be prioritized. Institutional reforms are warranted to contain the deepening water conflicts among user groups and ensure equitable water distribution and conjunctive use, like setting up state water resources regulatory authority and strengthening the participatory irrigation management practices and water use efficiency.

From a comprehensive inter-sectoral view, changes in extant policies of crop procurement and subsidized electricity are necessitated. These interventions need to be supplemented by robust data collection and monitoring mechanisms backed by new technological interventions. Given the strained financial resources, mobilization of resources through alternative means becomes critically important in funding and ensuring the adequate maintenance of the related infrastructure. Building public-private partnerships by incorporating experiences from related areas like sewage treatment, roads, highways, etc., is needed. Water being a state subject, requires the states to come forward to set up these institutional mechanisms.

In the environment and forest sector, India is among a few countries in the world where forest cover is consistently increasing. The population of tigers, a keystone species, has also doubled, much in advance of the 2022 deadline committed in the St. Petersburg Declaration. The evaluation of changes in biodiversity of forest ecosystems and the development of local forest-dependent communities are critical. But to supplement the government funding, innovative instruments such as domestic carbon offset markets, payment for ecosystem services, carbon taxes, and impact bond instruments need to be piloted and implemented.

This evaluation report is an important accomplishment in capturing the performance, strengths, and weaknesses of the sixteen different schemes. It makes streamlined suggestions for improvement to support India's water and food security while maintaining the environmental/ecological balance to become an Atmanirbhar Bharat.

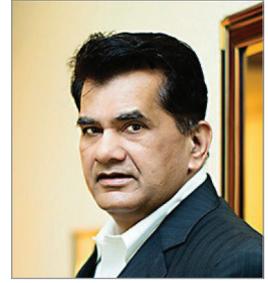
DECEMBER, 2020  
NEW DELHI  
INDIA

**Dr. Rajiv Kumar**





**Amitabh Kant**  
Chief Executive Officer  
National Institution for Transforming India  
Government of India  
New Delhi, India



## MESSAGE

NITI Aayog's mandate is to facilitate transformation in India, and through the Development Monitoring and Evaluation Office (DMEO), we are working towards institutionalizing evidence-based policy-making, to strengthen systems of governance in the country. While evaluations have been carried out in India since the 1950s, this evaluation has been different in both its scope and its methods. For the first time, all important sectors under the National Development Agenda covering all the Centrally Sponsored Schemes have been evaluated. Simultaneously conducting such large-scale multiple studies across sectors has allowed for rich cross-learning, standardization, and adoption of leading survey methodologies and data quality processes.

However, evidence generation is not enough – uptake must be ensured too. The findings from this study must now be used to drive reform and future policy initiatives across the Ministries and Departments within its remit. The study provides data-backed recommendations to improve government service delivery, at the scheme, Umbrella scheme, and sector level. The Ministry officials have been closely involved throughout the study, via a thorough consultative process, to optimize the robustness of the study and its recommendations.

It is also important to measure key outcomes so as to understand whether schemes deliver on key objectives or not. The D/o Water Resources, River Development and Ganga Rejuvenation, D/o Agriculture and Farmer's Welfare, and D/o Land Resources needs to collect regular data on important outcomes to finetune policies and program implementation. Some of these outcome indicators include the actual gap between irrigation potential created and utilized, change in crop yield and ground water level attributable to the projects, income enhancement of farmers, number of person-days of employment generated, among others. Similarly, the Ministry of Environment, Forest and Climate Change needs to measure amount of carbon sequestered, improvement of livelihood opportunities and diversification of income sources as outcomes.

In the larger context of the XVth Finance Commission and devolution of funds from the Centre towards States, these evaluation studies also play an important role in advancing NITI Aayog's goal of cooperative federalism. The study examines heterogeneous implementation of Centrally Sponsored Schemes and identifies sub-national best practices amenable to national scaling up, facilitating learning among States and with the Centre.

Finally, to make hard evidence the basis of policy decision-making in the country, there is a need at all the levels of the Government to measure outcomes and impacts regularly. This study is a step in that direction.

DECEMBER, 2020  
NEW DELHI  
INDIA



**Amitabh Kant**



## Preface

The Government of India (GoI) spends close to Rs. 10 lakh Cr. annually on development activities, through nearly 750 schemes implemented by Union Ministries. Of these 750, a total of 128 are Centrally Sponsored Schemes (CSS), implying that they are funded jointly by the Centre and the States, and implemented by the States. Over the years, federalism and the expectations of government service delivery in India have evolved, and this vast proliferation of schemes is in sore need of rationalization. The rationalization of schemes is expected to improve Centre-State relations, the effectiveness and efficiency of public finance, and the quality of service delivery to citizens.

To this end, all schemes were mandated to undergo third party evaluations, to provide an evidentiary foundation to the 15<sup>th</sup> Finance Commission for scheme continuation from 2021-22 to 2025-26. The task of conducting these CSS evaluations was granted to NITI Aayog, specifically to Development Monitoring and Evaluation Office (DMEO). This volume is thus a part of a historic exercise undertaken between April 2019 and August 2020, to evaluate 128 CSS, under 28 Umbrella CSS, under 10 Packages or Sectors. The studies together cover close to 30% of the GoI's development expenditure, amounting to approximately Rs. 3 lakh Cr. (USD 43 billion) per annum.

In order to fulfill this mandate to the highest standard possible, to optimize both the robustness and the uptake of the evidence generated, DMEO adopted a nationally representative mixed-methods evaluation methodology and a consultative review process for the reports. Altogether, the project incorporates the direct input of approximately 33,000 individuals, through 17,500 household interviews, 7,100 key informant interviews, and 1,400 focus group discussions. The views of Central, State, district, block, ward, and village administrations, as well as non-governmental experts and civil society organizations, have been elicited. Through qualitative and quantitative analysis of secondary literature, validated by this primary data collection, the analysis was done at three levels: the sector, the umbrella CSS, and the scheme itself. The key parameters for analysis, including relevance, effectiveness, efficiency, sustainability, impact, and equity (REESIE), have been selected based on international best practices in evaluation. In addition, across 10 packages, certain cross-cutting themes have been identified for analysis, including transparency, sustainability, gender, technology, private sector etc. The reports thus produced then underwent a consultative review process involving NITI Aayog subject matter divisions, concerned Ministries and Departments, and external experts. The entire project was implemented through 10 consultant firm teams selected from the private sector through an open tender process, managed by my small but fiercely dedicated team at DMEO.

Throughout this project, hundreds of people across the country have pushed themselves through festivals, monsoon rains, cyclones, and a global pandemic, COVID-19, to present these volumes. DMEO owes a debt of gratitude to each one of these contributors, but especially to all the beneficiaries interviewed, for sharing their precious time and experiences with our teams. Ultimately, this exercise, like all others by the Government of India, is in service of the sovereign citizens of this country.



## Acknowledgment

We would first of all like to express our deepest gratitude to the Ministry of Finance for recognizing the crucial need for evidence in the deliberations of the 15<sup>th</sup> Finance Commission and entrusting the conduction of these historic evaluations to NITI Aayog. Further, Dr. Rajiv Kumar, Vice-Chairman NITI Aayog, and Shri Amitabh Kant, Chief Executive Officer, have played a fundamental role, first in entrusting this weighty responsibility to the Development Monitoring and Evaluation Office (DMEO) and subsequently as mentors throughout the study, in providing all necessary support and guidance for the completion of the project.

Our invaluable partners in this exercise have been the Department of Water Resources, River Development & Ganga Rejuvenation (D/o WR, RD & GR), Department of Agriculture, Cooperation and Farmer's Welfare (DAC&FW), Department of Land Resources (DoLR), and Ministry of Environment, Forest and Climate Change (MoEFCC) and all its officials, without whose cooperation this evaluation would not have been possible. Sh. Upendra Prasad Singh, Secretary, Sh. K Guite, and Dr. R Sathish, Economic Advisor from D/o WR, RD & GR, Sh. Sanjay Agarwal, Secretary and Sh. B V N Rao, Deputy Commissioner from DAC&FW; Sh. Ajay Tirkey, Secretary and Sh. Umakant, Joint Secretary from DoLR; and various divisions under the Departments provided invaluable support for the Water Resources sub-package. Sh. Rameshwar Prasad Gupta, Secretary, , Sh. Yashvir Singh, Economic Advisor, the various divisions from MoEFCC provided invaluable support for the Environment and Forest Resources sub-package. We are grateful to them for giving us access to available data, for patiently sharing their expertise through Key Informant Interviews, and for providing their vital comments on the draft reports during various stages of the study. A detailed list of Key Informant Interviews can be found in the annexures to this report.

In the spirit of Centrally Sponsored Schemes in our federal structure, equally important partners in this endeavor have been the state governments of Assam, Andhra Pradesh, Bihar, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Maharashtra, Madhya Pradesh, Manipur, Mizoram, Odisha, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, Uttarakhand and West Bengal and their Chief Secretaries. They provided both ground support and operational independence to our field partners for the primary study. State Nodal Officers and other officials also provided invaluable support. We are deeply thankful for their gracious cooperation in completion of the study.

Next, we must thank our external expert, Dr. Amarjit Singh, ex-Secretary (D/o WR, RD & GR), and Dr. Deepak Khare, Professor (Department of Water Resources Development and Management, IIT Roorkee) for helping us refine and rationalize the report through their insightful comments, corrections and feedback at each stage. From deep fundamentals of the sector to the latest developments, these experts helped ensure that the report was as comprehensive, cogent, and technically robust as possible, within the short timeframes available.

Coming to the implementation teams, it goes without saying that the selected consultant firm, M/s KPMG Advisory Services Pvt. Ltd. has done a remarkable job, particularly given the

significant challenges of scale, time, and resources presented by this project. Particular appreciation is due to Mr. Sumouleendra Ghosh, Director, Mr. Manpreet Singh, Partner, and Mr. Anand Kulkarni, Technical Director and their full team. They conducted hundreds of interviews across 18 States of India, an extraordinary triumph of operational planning and logistics, through monsoons, festive seasons, a cyclone, and a pandemic.

At NITI Aayog, this exercise would not have gotten off the ground without the consistent support of the Procurement Management Committee and Bid Evaluation Committee, particularly Mr. Sonjoy Saha, Adviser (PPP/PAMD), Sh. Avinash Mishra, Adviser (Water & Land Resources), Sh. Jitendra Kumar, Adviser (Natural Resources & Environment), and Ms. Sanchita Shukla, Director, Internal Finance Division. Staff at the NITI Aayog Water & Land Resources vertical, particularly Sh. Mishra, Ms. Namrata Singh, Young Professional and Sh. Gopal Sharan, Scientist C, and NRE Adviser Sh. Jitendra Kumar have also been instrumental in seeing this project to fruition. The Internal Finance Division further merits special mention here for its extensive efforts.

DMEO team has been at the core of the evaluation studies - in this package specifically, Ms. Sumitra K, Monitoring and Evaluation Lead, Ms. Fatima Mumtaz, Young Professional and Sh. Kuldeep Pal, Economic Investigator worked on every last detail of this herculean endeavor, under the guidance of Deputy Director Generals Sh. Alok Mishra and Ms. Harkiran Sanjeevi. Across packages, Deputy Director General Sh. Ashutosh Jain also oversaw coordination, standardization and monitoring of the study design, analysis and implementation processes across packages. They were supported by the Evaluations Core Team: Dr. Shweta Sharma, Sh. Anand Trivedi, Ms. Sanjana Manaktala, Ms. Shruti Khanna, Ms. Vatsala Aggarwal, Sh. O.P. Thakur and Sh. Jayanta Patel. The Primary Data Quality Review team comprising Sh. Venugopal Mothkoo, Sh. Paresh Dhokad, Sh. Krishn Kant Sharma and Sh. Jayanta Patel contributed across packages in data quality and analysis. The DMEO administration and accounts officers, including Sh. D. Bandopadhyay, Sh. Munish Singhal, Sh. D.S. Sajwan, Sh. Manoj Kumar and others provided vital support on documentation, approvals, payments etc.

Given the massive scope and scale of the exercise, this report owes its successful completion to the dedicated efforts of a wide variety of stakeholders. The country is deeply grateful to each one of them.

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## List of Abbreviations

AIBP	Accelerated Irrigation Benefits Programme
CADWM	Command Area Development and Water Management
CAMPA	Compensatory Afforestation Fund Management and Planning Authority
CAPI	Computer Assisted Personal Interview
CBD	Convention on Biological Diversity
CCF	Chief Conservator of Forests
CF	Conservator of Forests
CSS	Centrally Sponsored Scheme
DFO	Divisional Forest Officer
DMEO	Development Monitoring and Evaluation Office
EA	Enquiry Area
ENVIS	Environmental Information System
FAO	Food and Agriculture Organization
FGD	Focus Group Discussion
FMBAP	Flood Management and Border Areas Programme
FMP	Flood Management Programme
FPM	Forest Fire Prevention & Management
FRI	Forest Research Institute
GIM	Green India Mission
GWJ	Groundwater Minor Irrigation
HKKP	Har Khet Ko Pani
HH	Household
IAS	Impact Assessment Studies
IC	Irrigation Census
ICFRE	Indian Council of Forestry Research and Education
IDWH	Integrated Development of Wildlife Habitats
IIFM	Indian Institute of Forest Management
IT	Information Technology



KII	Key Informant Interview
LTIF	Long Term Irrigation Fund
MEE	Management Effectiveness Evaluation
MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
MIS	Management Information System
MM	Mixed-Methods
MoEFCC	Ministry of Environment Forest and Climate Change
NABARD	National Bank for Agriculture and Rural Development
NAP	National Afforestation Program
NGO	Non-Governmental Organisation
NITI	National Institution for Transforming India
NPCA	National Plan for Conservation of Aquatic Eco-systems
NRCP	National River Conservation Plan
NTFP	Non-timber Forest Products
NWAP	National Wildlife Action Plan
PCCF	Principal Chief Conservator of Forests
PDMC	Per Drop More Crop
PMKSY	Pradhan Mantri Krishi Sinchayee Yojana
PPP	Public Private Partnership
PSU	Public Sector Undertaking
QUAL	Qualitative Methods
QUANT	Quantitative Methods
R&D	Research & Development
REESIE	Relevance Effectiveness Efficiency Sustainability Impact and Equity
RMBA	River Management Activities & Works related to Border Areas
RRR	Repair, Renovation and Restoration
SCSP	Scheduled Caste Sub-Plan
SDG	Sustainable Development Goals
SMI	Surface Minor Irrigation
SOP	Standard Operating Procedure



SPFM	Special Package for Maharashtra (Vidarbha and Marathwada)
TBC	Telephonic Back Check
ToR	Terms of Reference
TSP	Tribal Sub-Plan
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFF	United Nations Forum on Forests
UT	Union Territory
WDC	Watershed Development Component
WII	Wildlife Institute of India



## Executive Summary

The Government of India, with a view to ensure efficient and effective use of public resources, has made evaluation of the Centrally Sponsored Schemes (CSS) and Central Sector schemes mandatory before the schemes come up for fresh appraisal. Development Monitoring and Evaluation Office (DMEO), a part of National Institution for Transforming India (NITI) Aayog has selected KPMG Advisory Services Private Limited (KPMG) to undertake an independent third party evaluation of certain CSSs in Water Resources and Environment and Forest sectors so that the findings of the evaluation are made available to appropriate authorities for determining the rationalization of the schemes, especially during the commencement of the 15<sup>th</sup> Finance Commission in 2020. The CSSs for the two sectors are as follows:

Water Resources	Environment and Forest
<ul style="list-style-type: none"> <li>• Accelerated Irrigation Benefits Programme (AIBP)</li> <li>• Command Area Development and Water Management – Har Khet Ko Pani (CADWM)</li> <li>• Repair, Renovation and Restoration – Har Khet Ko Pani (RRR)</li> <li>• Surface Minor Irrigation – Har Khet Ko Pani (SMI)</li> <li>• Groundwater Minor Irrigation – Har Khet Ko Pani (GWI)</li> <li>• Per Drop More Crop (PDMC)</li> <li>• Watershed Development Component (WDC)</li> <li>• Flood Management and Border Areas Programme (erstwhile FMP + RMBA) [FMBAP]</li> <li>• Irrigation Census (IC)</li> <li>• Special Package for Maharashtra (SPFM)</li> <li>• Long Term Irrigation Fund – NABARD (servicing of loans) [LTIF]</li> <li>• Impact Assessment Studies (IAS)</li> <li>• National River Conservation Plan (NRCP)</li> </ul>	<ul style="list-style-type: none"> <li>• National Mission for Green India</li> <li>• Integrated Development of Wildlife Habitats</li> <li>• Conservation of Natural Resources and Ecosystems</li> </ul>

This report is the final evaluation report on the study and this volume (Volume I) comprises the Background and Approach & Methodology for the study, whereas Volume II and Volume III have the analyses, conclusions and recommendations for Water Resources and Environment & Forest sectors respectively.

As per the scope of this study, the evaluation has to be conducted at sector level, umbrella and individual scheme level and for a number of cross-sectional themes (such as gender, climate change, technology, etc.) for the period of 2015-16 to 2019-20 using output-outcome results chain and through application of **Relevance, Effectiveness, Efficiency, Sustainability, Impacts**



**(REESI) and Equity framework.** The ultimate aim of the study is to achieve program harmonization across the studied CSSs.

In line with the detailed scope, KPMG has carried out the study using a mixed-method (a mix of qualitative and quantitative research methods) approach wherein firstly secondary study (literature review) was undertaken and the findings of secondary study were subsequently triangulated using findings from primary studies [interviews of key stakeholders across the country associated with the CSS called Key Informant Interviews (KIIs), Focus Group Discussions (FGDs) and Household survey in the beneficiary states].

Further, to ensure fair coverage across all regions of the country and other parameters like performance in the schemes (as available in public domain), a detailed methodology was adopted to select beneficiary states for primary studies (Key Informant Interviews, Focus Group Discussions and Household Survey). This list of selected states, which has also been discussed with and vetted by DMEO and concerned ministries for the two sectors, is provided below:

Both Water Resources and Environment and Forest	Only Water Resources	Only Environment and Forest
<ul style="list-style-type: none"> <li>• Andhra Pradesh</li> <li>• Assam</li> <li>• Maharashtra</li> <li>• Rajasthan</li> <li>• Tamil Nadu</li> <li>• Uttar Pradesh</li> </ul>	<ul style="list-style-type: none"> <li>• Bihar</li> <li>• Himachal Pradesh</li> <li>• Jharkhand</li> <li>• Karnataka</li> <li>• Manipur</li> <li>• Punjab</li> </ul>	<ul style="list-style-type: none"> <li>• Kerala</li> <li>• Madhya Pradesh</li> <li>• Mizoram</li> <li>• Odisha</li> <li>• Uttarakhand</li> <li>• West Bengal</li> </ul>

The interviews were conducted virtually (through video and audio conferencing) and surveys were conducted on site. The information gathered from the primary studies was analysed and triangulated with findings from the secondary study, post which the conclusions and recommendation were finalized after rounds of discussion with the relevant ministries and DMEO. These analyses, conclusions and recommendations for sector and schemes are part of Volume II (Water Resources) and Volume III (Environment and Forest) of the final evaluation report for this study.



# 1 Introduction

The Government of India, with a view to ensure efficient and effective use of public resources, has made evaluation of the Centrally Sponsored Schemes (CSS) and Central Sector schemes mandatory before the schemes come up for fresh appraisal. The government has adopted an output-outcome monitoring framework to strengthen monitoring and evaluation of schemes. After the Five-Year Plans were discontinued at the end of 12th Five Year Plan, in order to rationalize the available resources based on the recommendations of the Finance Commission for the achievement of the National Development Agenda, the government had made the approval of the schemes coterminous with the Finance Commission cycle.

The period of the 14<sup>th</sup> Finance Commission was expected to end in March 2020, and thereafter the 15<sup>th</sup> Finance Commission commences. The Government has mandated the Development Monitoring and Evaluation Office (DMEO), a part of National Institution for Transforming India (NITI) Aayog to undertake independent third party evaluation of all the CSS in a time bound manner so that the findings of the evaluation are made available to appropriate authorities for determining the rationalization of the schemes.

After the conclusion of due process for selection of consultant for Evaluation of Centrally Sponsored Schemes (CSS) in Package 9 – Water Resources, Environment and Forest Sector (hereafter ‘Package 9’), DMEO engaged KPMG Advisory Services Private Limited to undertake the evaluation. This final evaluation report has been prepared in accordance with the terms of reference for the aforementioned study.

Package 9 comprises two distinct sectors for evaluation as indicated in the table below:

Table 1: Sectors under evaluation as part of Package 9

	Sector	No. of schemes to be evaluated	Ministries concerned
1	Water Resources	13 <sup>1</sup>	Ministries of Jal Shakti, Rural Development (Land Resources), and Agriculture and Farmers’ Welfare

<sup>1</sup> Administration of the National River Conservation Program (NRCP) has been transferred to the Ministry of Jal Shakti from the Ministry of Environment, Forest and Climate Change. Accordingly, NRCP has been evaluated as part of the Water Resource sector, instead of the Environment and Forest sector as originally proposed in the ToR for the study. Two other schemes, i) Assistance for



	Sector	No. of schemes to be evaluated	Ministries concerned
2	Environment and Forest	3	Ministry of Environment, Forest and Climate Change

For the ease of readability and better flow, the final evaluation report has been divided into three volumes – this volume i.e. Volume I covers the Background and Approach & Methodology of the study, Volume II covers the analyses and recommendations for Water Resources sector and Volume III covers the analyses and recommendations for Environment and Forest sector.

The evaluation comprises broadly two parts: a) secondary literature review of the water resources and environment and forest sectors, the CSS to be evaluated, their contribution to the sector through secondary research and literature review; and thereafter b) investigation of the identified issues through primary research comprising qualitative and quantitative components.

The aim of the first part of the study was to develop a deeper understanding of the sector and the schemes through available data, performance reports, and interactions with respective ministries. This was mainly to identify issues, challenges, areas of concern and frame major enquiry themes. The first part of the study also included analysis with an emphasis on qualitative methods. During the inception report preparation phase, a significant progress was made in the first part of the study. This included sectoral analysis, framing of investigation themes and a preliminary analysis of the schemes. As the study progressed, the preliminary findings and conclusions were strengthened and recommendations were framed, based on additional inputs from key informants or other stakeholders (which constitute the second part of this study), and review of additional secondary sources with an aim to validate or reject the preliminary findings.

The second part of the study is aimed at providing a clear view of the performance of the sectors as well as schemes through conduct of primary studies and triangulating the result of the primary studies with findings from secondary studies to generate conclusions and frame recommendations. This part includes determining the actual scheme level and sector level outcomes of every scheme with respect to the intended outcomes. Since there are many stakeholders involved in these schemes, including different types of beneficiaries, achievement

Sutlej Yamuna Link Canal Project and ii) Atal Bhujal Yojana, originally proposed to be evaluated as part of this study have been excluded due to unavailability of scheme guidelines and required details about the scheme.



of outcome of the scheme is dependent on many intermediate steps. Further, such a large number of intermediate steps make it crucial to use a theory-based approach for impact evaluation. Therefore, a considerable emphasis is given on the development of a logical framework to establish the results chain for each scheme and then applying this logical framework or log-frame for evaluation of the schemes. The set of criterion used in this study is the REESI (standing for Relevance, Effectiveness, Efficiency, Sustainability, Impact) and Equity and against these criteria the schemes have been evaluated.

The final evaluation report incorporates the findings based on primary data collection, viz. Key Informant Interviews, Focus Group Discussions and Household Surveys and the secondary research.



## 2 Background of the study

### 2.1 Objectives of the Study

The overall objective of the study is to gain holistic understanding of performance of various centrally sponsored schemes under two sectors – Water Resources and Environment and Forest which would highlight specific inputs for program harmonization and identify structural gaps for further intervention. As mentioned before, the results of this study is expected to be utilized as inputs to 15<sup>th</sup> Finance Commission and other appropriate authorities, as applicable. The stated objectives of the study for both the sectors are provided in the tables below:

Table 2: Objectives for Water Resources Sector

Major objectives	Specific understanding
To assess the status of the Water Resources sub-sector	<ul style="list-style-type: none"> <li>• Status of access, quality &amp; adequacy, equity and sustainability of water resources</li> <li>• Understanding on overall nature and responsiveness of water resource planning</li> </ul>
To provide a forward-looking assessment on the Water Security scenario of the country and providing overarching policy suggestions	<ul style="list-style-type: none"> <li>• Four key dimensions: Household water security, Economic water security, Urban water security and Environmental water security</li> </ul>
To qualitatively and quantitatively map the intended and actual contribution of PMKSY to Water Resources sub-sector outcomes	<ul style="list-style-type: none"> <li>• Effect on agriculture sectors in terms of cropping pattern, productivity, diversity</li> <li>• Effect on ground water</li> <li>• Effect on rural economy in terms of income, skill enhancement and employment</li> </ul>
To assess Umbrella schemes and each CSS schemes	<ul style="list-style-type: none"> <li>• Focusing on Relevance, Effectiveness, Efficiency, Sustainability, Impact (REESI) and Equity framework.</li> <li>• Focusing on cross-sectional themes</li> <li>• Understanding unintended consequences</li> </ul>
To Identify scalable best practices	<ul style="list-style-type: none"> <li>• Innovations and creation of case studies</li> </ul>
To provide recommendations	<ul style="list-style-type: none"> <li>• Changes required in schemes design and execution</li> </ul>



Table 3: Objectives for Environment and Forest Sector

Major objectives	Areas of Enquiry
Ecological restoration of existing natural habitats and migratory routes	<ul style="list-style-type: none"> <li>• Change in quantity of forest cover</li> <li>• Change in quality of forest cover</li> <li>• Increase in developmental activities leading to encroachment on natural habitats.</li> <li>• Rise of pollution in lakes and wetlands</li> </ul>
Mitigation of human-wildlife conflicts and community engagement	<ul style="list-style-type: none"> <li>• Degradation and fragmentation of existing natural habitats</li> <li>• Compensatory policies for conflict situations</li> </ul>
Wildlife population stabilization and improvement	<ul style="list-style-type: none"> <li>• Comprehensive census data of wildlife species</li> </ul>
Wildlife health	<ul style="list-style-type: none"> <li>• Poaching of wildlife and illegal trading of animal goods</li> </ul>
Preparedness against disasters such as forest fires	<ul style="list-style-type: none"> <li>• Infrastructure for prevention and control of forest fires</li> </ul>
Promoting eco-tourism for sustainable development	<ul style="list-style-type: none"> <li>• Revenue from eco-tourism in national parks and wildlife sanctuaries</li> </ul>
Climate Change Resilience	<ul style="list-style-type: none"> <li>• Impact of climate change on vulnerable sectors</li> <li>• Availability of finance for undertaking adaptation interventions</li> </ul>
Intra-generational Equity: Livelihood Security for the Poor	<ul style="list-style-type: none"> <li>• Improvement in livelihood for forest-dependent communities</li> </ul>
Inter-generational Equity	<ul style="list-style-type: none"> <li>• Decline in country's natural capital</li> </ul>
Integration of Environmental Concerns in Economic and Social Development	<ul style="list-style-type: none"> <li>• Diversion of forest land for development purposes</li> </ul>
Efficiency in Environmental Resource Use	<ul style="list-style-type: none"> <li>• Increase in air pollution leading to environmental degradation</li> <li>• Insufficient waste management and processing infrastructure</li> <li>• Increase in quarrying and other mining activities</li> <li>• Achieving self-sufficiency in timber production</li> </ul>
Environmental Governance	<ul style="list-style-type: none"> <li>• Consultation with local communities in management and regulation of use of environmental resources</li> </ul>

Major objectives	Areas of Enquiry
Enhancement of Resources for Environmental Conservation	<ul style="list-style-type: none"> <li>• Availability of finance for undertaking conservation measures</li> <li>• Multi-stakeholder partnerships with research and development agencies</li> </ul>

## 2.2 Scope of the Study

The study focused on evaluation of certain Water Sector and Environment and Forest Sector CSS for the period of 2015-16 to 2019-20 through application of **Relevance, Effectiveness, Efficiency, Sustainability, Impacts (REESI) and Equity framework.**

The study has adopted meta-analysis, key informant interviews and household surveys to gain insights on the performance of CSS. It intends to identify gaps in outcome of existing schemes, institutional gaps, process of monitoring and evaluation of CSS schemes at state and national levels, technology adoption, and constraints in planning and execution. Meta-analysis is focused on understanding the sectoral performance and contribution of umbrella schemes to overall sectoral performance based on past studies and the field study is being carried out to understand the output and outcomes better, gain fresh insights on various aspects of the sector and schemes and triangulate and cross-check the insights/ findings with those documented in past studies and also cross-check the insights/ findings from one group of stakeholders with those of another group of stakeholders.

Meta-analysis includes review and analysis of national and international sector documents, scheme level expenditure and financial allocations, annual reports published by different ministries, assessment and evaluation reports by implementing bodies, researchers, non-governmental organisations, etc.

The field study includes both qualitative and quantitative methods. Qualitative study involves in-depth interviews with key informants responsible for different schemes at national, state and district levels to understand scheme level planning, execution, performance and gaps at different levels and focus group discussions to capture current practices, outputs and outcomes/ impacts of the schemes. Quantitative study involving household survey is carried out at the selected villages where the schemes are implemented to capture current practices and outcomes/ impacts of schemes.



More specifically, the evaluation study is expected to undertake the following, as documented in the Terms of Reference:

### **Sector analysis**

The approach for sector level analysis involves meta-analysis to identify gaps in the broad sectoral outcomes where the national priorities/SDGs are not being addressed either due to absence of interventions or non-performance of existing schemes/ interventions. Understanding potential convergence of the scheme, both intended and actual, with other developmental programs of the Central and the State Governments as well as with the private sector, CSR efforts, international multilateral and bilateral aid, etc. has been undertaken as part of sectoral performance analysis.

### **Scheme analysis**

The approach for scheme evaluation involves meta-analysis and non-experimental evaluation. It captures the implementation mechanism of different schemes including the various stakeholders involved in the process like state departments, various ministries, sector experts, implementing agencies, contractors, etc. For this purpose, it relies mostly on information made available by ministries concerned, reports by reputed agencies, academic papers, past evaluation studies and qualitative methods including interviews with the key stakeholders of the schemes.

The scheme level outcome assessment is based on triangulation of primary and secondary data. It includes an assessment of the relevance, effectiveness, efficiency, sustainability, impact, and equity of the umbrella schemes and the individual CSS along with a detailed methodology for primary surveys.

In addition to non-experimental evaluation design, secondary data has been used for triangulation as well as analysis on the 14 cross-sectional themes identified in the Terms of Reference as per the scheme life-cycle approach:

1. Accountability and transparency
2. Direct/indirect employment generation
3. Gender mainstreaming
4. Building resilience to climate change (including but not limited to developing water disaster preparedness) & ensuring sustainability



5. Role of Tribal Sub-plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population
6. Use of IT / technology for driving efficiency and effectiveness
7. Development, dissemination and adoption of innovative practices, technology and know-how\*
8. Stakeholder & beneficiary behavioural change
9. Research and development
10. Laws / regulations, regulatory bodies and reforms
11. Water sharing treaties / agreements and diplomacy\*
12. Conjunctive use of water – surface, groundwater, soil moisture and rainfall usage optimizations\*
13. Unlocking synergies with other government programs
14. Impact on and role of private sector, community and civil society / NGOs in the scheme especially in use of participatory resource management.

\* only for water sector

This report contains the approach for addressing the cross-sectional themes and a brief analysis on these themes.

### **Beneficiary-level outcome**

The beneficiary level outcome assessment is based on primary surveys of beneficiary households. This has been done mainly using a non-experimental quantitative impact evaluation design to assess the outcome indicators identified for every scheme.

### **Program Harmonization**

The study has explored the theme of harmonization across schemes for both water resources sector and environment and forest sector to identify the right mix or bouquets of schemes that are: i) relevant to beneficiaries, ii) effective and efficient in their implementation and iii) the benefits from the scheme are sustainable over the long term. The analyses has taken into consideration factors such as duplication of efforts / inputs, potential synergies, scaling back non-impactful schemes, cost-effectiveness among other things. The cost analysis has focused on the overall costs of the schemes, adequacy of the funds for such national program while the cost-benefit analysis determines the costs of achieving specific benefits of the program.



## Identifying and highlighting scalable best practices

The study identifies good practices that have been successful in creating impact in the sector and the individual CSS. The report has developed a few case studies based on this.

The following CSS are covered in the study:

Table 4: List of CSS for Water Resources Sector

#	Umbrella CSS	CSS
1.	<b>Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)</b>	Accelerated Irrigation Benefits Programme (AIBP)
2.		Command Area Development and Water Management – Har Khet Ko Pani (CADWM)
3.		Repair, Renovation and Restoration – Har Khet Ko Pani (RRR)
4.		Surface Minor Irrigation – Har Khet Ko Pani (SMI)
5.		Groundwater Minor Irrigation – Har Khet Ko Pani (GWI)
6.		Per Drop More Crop (PDMC)
7.		Watershed Development Component (WDC)
8.	-	Flood Management and Border Areas Programme (erstwhile FMP + RMBA) [FMBAP]
9.	-	Irrigation Census (IC)
10.		Special Package for Maharashtra [Vidarbha and Marathwada] (SPFM)
11.	-	Long Term Irrigation Fund – NABARD (servicing of loans) [LTIF]
12.	-	Impact Assessment Studies (IAS)
13.	-	National River Conservation Plan (NRCP)

Table 5: List of CSS for Environment and Forest

#	Umbrella CSS	CSS	Sub-schemes	
1.	<b>Environment, Forestry &amp; Wildlife</b>	Conservation of Natural Resources and Ecosystems	Biosphere Reserves	
			National Plan for Conservation of Aquatic Ecosystems	
2.		National Mission for Green India		Green India Mission
				National Afforestation Programme
				Forest Fire Prevention and Management Scheme
3.		Integrated Development of Wildlife Habitats		Project Tiger
				Project Elephant



#	Umbrella CSS	CSS	Sub-schemes
			Development of Wildlife Habitats

## 2.3 Structure of Report

The final evaluation report comprising three volumes follows following structure:

Section	Item	Description
<b>Volume I</b>		
<b>Initial section</b>	<ul style="list-style-type: none"> <li>List of Tables</li> <li>List of Figures</li> <li>List of Abbreviations</li> </ul>	Reference to tables and figures used in the report and abbreviations
	<ul style="list-style-type: none"> <li>Executive summary</li> </ul>	The broad highlights of scope of study, methodology, coverages and findings.
<b>Body of the report</b>	<ul style="list-style-type: none"> <li>Introduction</li> </ul>	The overview of water sector schemes and need of study
	<ul style="list-style-type: none"> <li>Background of the study</li> </ul>	It covers the objectives of study, scope and highlights the structure of the report
	<ul style="list-style-type: none"> <li>Approach and Methodology</li> </ul>	Outlines the methodology adopted for review of literature as well as field study. Also, highlights the limitations of the study
<b>Appendices</b>	<ul style="list-style-type: none"> <li>Appendix 1</li> </ul>	Details of Key informant interviews
	<ul style="list-style-type: none"> <li>Appendix 2</li> </ul>	Details of Household Survey
	<ul style="list-style-type: none"> <li>Appendix 3</li> </ul>	Discussion Guides and Tools
<b>Volume II</b>		
<b>Initial section</b>	<ul style="list-style-type: none"> <li>List of Tables</li> <li>List of Figures</li> <li>List of Abbreviations</li> </ul>	Reference to tables and figures used in the report and abbreviations
	<ul style="list-style-type: none"> <li>Executive summary</li> </ul>	The broad highlights of scope of study, methodology, coverages and findings.
<b>Chapter 1</b>	<ul style="list-style-type: none"> <li>Sector Level Analysis: Water Resources</li> </ul>	Background of the Sector Performance of the Sector Issues and Challenges Recommendations and Solutions
<b>Chapter 2</b>	<ul style="list-style-type: none"> <li>Scheme Level Analysis</li> </ul>	Introduction Individual Scheme Analysis covers: a) Background of Scheme



Section	Item	Description
		<p>b) Performance of Scheme (It should also include performance on REESI+E framework and cross-sectional themes)</p> <p>c) Issues and Challenges and</p> <p>d) Recommendations and Solutions</p> <p>Scheme Level Summary includes Scheme's Performance on REESI+E Framework &amp; Scheme's Performance on Cross-sectional Themes and Scheme's Issues and Challenges (All these are presented through Infographics)</p>
<b>Chapter 3</b>	<ul style="list-style-type: none"> <li>Conclusions &amp; Recommendations</li> </ul>	<p>Gap Analysis of Sectoral Issue highlighting Interventions Gaps at Sector Level, Gap Map Synthesis of Sector and CSS Schemes</p> <p>Recommendations at Sectoral Level</p> <p>Synthesis of Scheme/ Umbrella Level Recommendations - to be listed for major issues identified at scheme/ UCSS level</p> <p>Summary for Rationalization of Scheme- It should include introduction to the section, infographic and detailed explanation for rationalization decisions</p>
<b>Appendices</b>	<ul style="list-style-type: none"> <li>Appendix 1</li> </ul>	Case Studies
	<ul style="list-style-type: none"> <li>Appendix 2</li> </ul>	Bibliography (The complete list of bibliography corresponding to Volume II is included here)
<b>Volume III</b>		
<b>Initial section</b>	<ul style="list-style-type: none"> <li>List of Tables</li> <li>List of Figures</li> <li>List of Abbreviations</li> </ul>	Reference to tables, figures used in the report and abbreviations
	<ul style="list-style-type: none"> <li>Executive summary</li> </ul>	The broad highlights of scope of study, methodology, coverages and findings.
<b>Chapter 1</b>	<ul style="list-style-type: none"> <li>Sector Level Analysis- Environment &amp; Forest</li> </ul>	<p>Background of the Sector - Forests and wildlife, Pollution abatement, Climate change</p> <p>Performance of the Sector - Forests and wildlife, Pollution abatement, Climate change</p> <p>Issues and Challenges</p>



Section	Item	Description
<b>Chapter 2</b>	<ul style="list-style-type: none"> <li>• Scheme Level Analysis- Environment &amp; Forest</li> <li>• National Mission for a Green India</li> <li>• Integrated Development of Wildlife Habitats</li> <li>• Conservation of Natural Resources and Ecosystem</li> </ul>	<p>Introduction</p> <p>a) Background of Scheme</p> <p>b) Performance of Scheme</p> <p>Scheme's Performance on REESI+E Framework</p> <p>Scheme's Performance on Cross-sectional Themes</p> <p>c) Issues and Challenges</p> <p>d) Recommendations and Solutions</p>
<b>Chapter 3</b>	<ul style="list-style-type: none"> <li>• Conclusions &amp; Recommendations- Environment &amp; Forest</li> </ul>	<p>Gap Analysis of Sectoral Issue highlighting Interventions Gaps at Sector Level</p> <p>Gap Map Synthesis of Sector and CSS Schemes</p> <p>Recommendations at Sectoral Level</p> <p>Synthesis of Scheme/ Umbrella Level Recommendations</p> <p>Summary for Rationalization of Schemes</p>
<b>Appendices</b>	• Appendix 1	Details of Key Informant Interviews
	• Appendix 2	Details of Household Surveys
	• Appendix 3	Case Studies
	• Appendix 4	Proposed environment sector indicators
	• Appendix 5	Convergence in Biosphere Reserves
	• Appendix 6	NPCA MIS landscape
	• Appendix 7	NGT cases for lakes and wetlands
	• Appendix 8	Ex-gratia for death due to human-wildlife conflict
	• Appendix 9	Implementation of landscape-based approach
	• Appendix 10	Bibliography (The complete list of bibliography corresponding to Volume III is included here)



## 3 Approach and Methodology

### 3.1 Overall Approach

This section presents our overall approach and methodology for the engagement. In effect, this section documents the process of evaluation of Umbrella CSS (its underlying schemes) and other CSS both for Water Resources and Environment and Forest Sectors, which are to be evaluated as per the scope of this study. The stated intent of the evaluation includes sectoral analysis of defined themes, umbrella and scheme level analysis, identifying scalable and best practices and recommendations on program harmonization.

As the ToR mentions “impact” as one of the parameters to be used for evaluation of the schemes, KPMG analyzed global practices to contextualize evaluation of impact in relation to the current exercise.

There are various definitions of ‘impact evaluation’ and guidelines to undertake it, which have been formulated and used by the International Initiative for Impact Evaluation (3ie), Network of Networks on Impact Evaluation (NONIE), Evaluation Cooperation Group (ECG), Organization for Economic Co-operation and Development (OECD) and World Bank. Most of these definitions and guidelines focus on attribution of an impact to an intervention and the appropriate methodology to undertake impact evaluation.

From an analysis of the various definitions and guidelines, it may be stated that the current engagement may not be a typical impact evaluation exercise. Further, this engagement is not limited to identifying attribution of a particular program or scheme. Instead, it has a wider scope of developing an understanding on the sectoral trends in an independent manner, as well as in relation to the CSS and providing inputs for scheme harmonization.

Therefore, for designing this evaluation, our approach is based on the widely-accepted view – that ‘irrespective of the type of evaluation, *the primary purpose of the evaluation drives the design of the evaluation and choice of various evaluation methods*’. Keeping in mind the purpose, context, available resources and budget, known or anticipated availability of data, understanding of requirement of the engagement and to achieve the desired result, KPMG has adopted a Mixed-Methods (MM) approach.

#### **Mixed-Methods Approach for the assignment**



Mixed-Methods (MM) approach combines the breadth of quantitative (QUANT) methods with the depth of qualitative (QUAL) – and “triangulating” information from different approaches, making it useful for assessing different facets of complex outcomes or impacts of the programs (schemes). MM strengthens the reliability of data, validity of the findings and recommendations and hence this approach results in enhanced outcome from any study than what is achieved through using only one method. MM also broadens and deepens the understanding of the processes through which program outcomes and impacts are achieved, and how these are affected by the context within which the program is implemented. Therefore, MM approach seems to most suitable approach for this assignment.

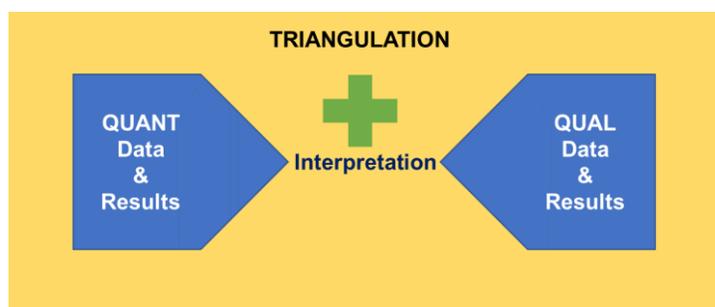


Figure 1: Overview of MM Approach

Applying the Mixed-Methods (MM) approach for evaluation requires creating road map based on four decision points. Clear choices emerge on each of the four decision points for the assignment:

- i. combine QUANT and QUAL at all the stages;
- ii. concurrent design of QUANT and QUAL;
- iii. relatively equal weightage to both QUANT and QUAL; and
- iv. design to be multilevel.

The decision matrix with an analysis of decision points for the current evaluation exercise is given in the table below.

Table 6: Decision matrix under MM approach

#	Decision Points in Mixed-Methods	Approach for the engagement
1.	At which <b>stage or stages</b> of the evaluation to combine <b>QUANT &amp; QUAL</b> ?	<b>Combine at All stages.</b> MM design becomes much stronger if QUANT and QUAL approaches are integrated into several (or ideally all) stages of the evaluation- hypothesis, design, data collection, and analysis.



2.	Whether to use QUANT & QUAL methods <b>sequentially or concurrently?</b>	<b>Concurrent design</b> QUANT and QUAL data to be collected simultaneously, using triangulation to compare information on outcomes, impacts and other key indicators from different independent sources. Operational considerations for the current assignment make it imperative to use concurrent design.
3.	Whether QUANT & QUAL methods be given <b>relatively equal weight, or one of the methodologies be dominant?</b>	<b>Balanced Approach</b> - relatively <b>Equal weight</b> is given to <b>QUANT</b> and <b>QUAL</b> approaches. QUANT surveys to be combined with a range of different QUAL techniques, which focus on the process and contextual analysis.
4.	Whether the design be <b>single or multi-level?</b>	<b>Multi-level</b> MM combines QUANT and QUAL data at each level to provide valid and credible findings on the basis of smaller and more economical samples.

### 3.2 Methodology

The detailed methodology to undertake this evaluation engagement has four steps, as shown below:

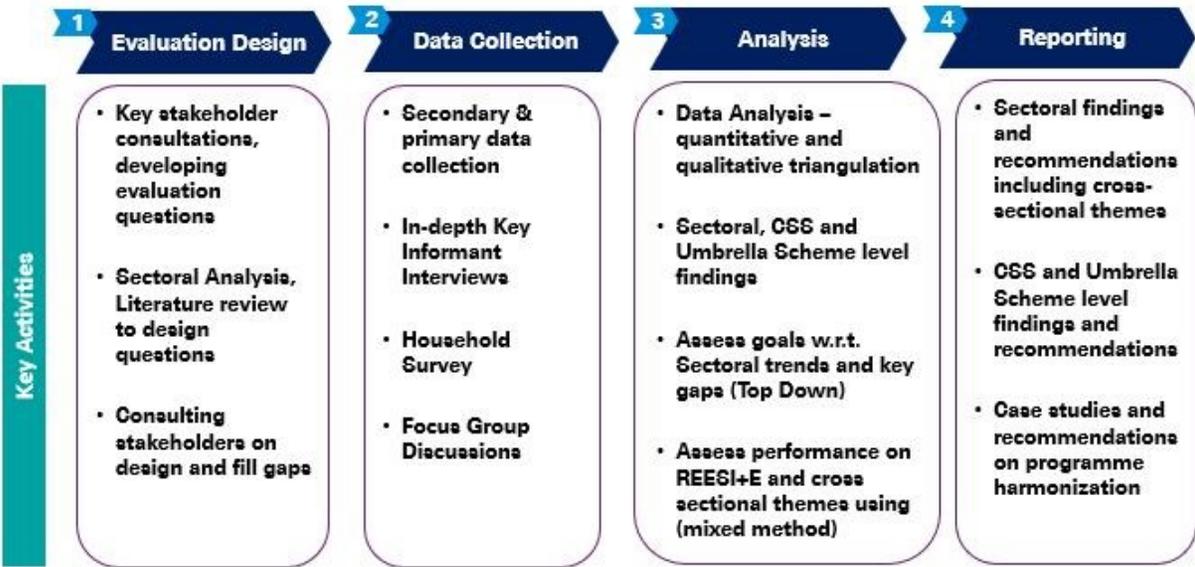


Figure 2: Steps in evaluation study

One of the major aspects of the methodology is to use MM approach during different aspects of the evaluation exercise.



Using MM method also requires planning for integration of QUANT and QUAL methods for different aspects of the evaluation. The key elements of integration of QUANT and QUAL are as follows:

- **Formulation of hypotheses:** *For developing hypothesis, MM combines both approaches of deduction (QUANT) from the existing theories as well as induction (QUAL), as the study evolves.*
- **Sampling:** *MM sampling uses the same sampling frame to generate both a large QUANT survey sample and to select a small but representative sample for in-depth QUAL analysis.*
- **Evaluation Design:** *In the current evaluation design, the two approaches are combined so as to use QUAL methods to study the project implementation process and the influence of contextual variables on project performance where a QUANT survey of beneficiaries is conducted for program attribution.*
- **Data collection and recording methods:** *Data collection approach for this engagement builds on the strengths of QUANT data while digging deeper, capturing sensitive data, studying processes and behavioral change.*

## Evaluation Design

A detailed evaluation plan based on MM approach for integration of Quantitative (QUANT) and Qualitative (QUAL) is provided in the figure below. It is imperative to emphasize that the current assignment deals with complex development interventions. Complex development interventions are usually defined as interventions that have some of the following characteristics:

- country-led planning and evaluation;
- the program evolves in a nonlinear manner;
- many components or services and multiple objectives;
- there are both quantitative and qualitative outcomes;
- target populations are difficult to identify or monitor; and
- there are complex processes of behavioural change involving the target population, service providers and other agencies.



Considering the objective and features of the schemes, all the CSS for evaluation in the Water Resources and Environment and Forest sectors for Package 9 have multiple characteristics of a complex intervention, thereby making this evaluation assignment a unique exercise.

Accordingly, the evaluation design for this assignment is made to address the requirement of both secondary and primary studies as well as the integration of QUANT and QUAL at all levels of the evaluation.

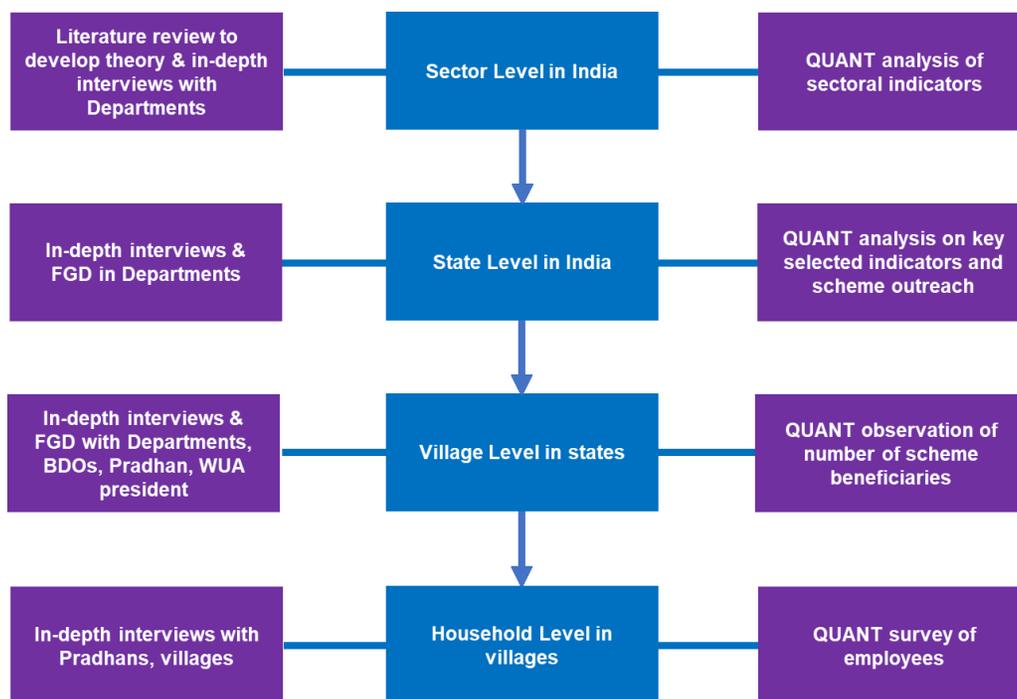


Figure 3: Evaluation design for assignment across levels

For segregation based on sources of data, two separate sections provide details of secondary analysis (meta-analysis) and primary analysis. However, the actual implementation of the exercise is more concurrent than sequential. The initial phase of the evaluation is mostly secondary study while the subsequent phases is a mixture of secondary as well as primary.

The Evaluation Design began by developing a logical framework. The logical framework (also called a results chain) is a model that describes causal relationships and maps a sequence of inputs and activities to outputs, outcomes and impacts. Typically for mature schemes/ programs (whose implementation period is more than 5 years) outcomes and impacts are tracked whereas in more recently launched schemes/ programs with less than 5 years of implementation period, the evaluation focuses more on activities, outputs and outcomes.



A sample logical framework is shown below:

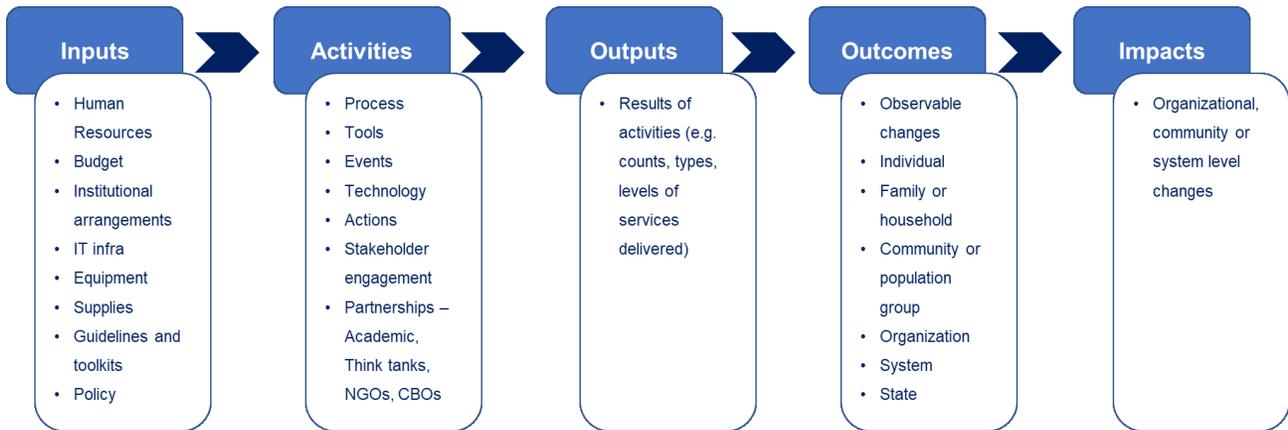


Figure 4: Sample logical framework

For each CSS, the outputs, outcomes and impacts have been identified through schemes guidelines and analyzing their performance against output—outcome indicators, which have already been framed for many of the CSS.

After analyzing the indicators, hypotheses have been developed on the various CSS using REESIE framework. The framework is showcased below:

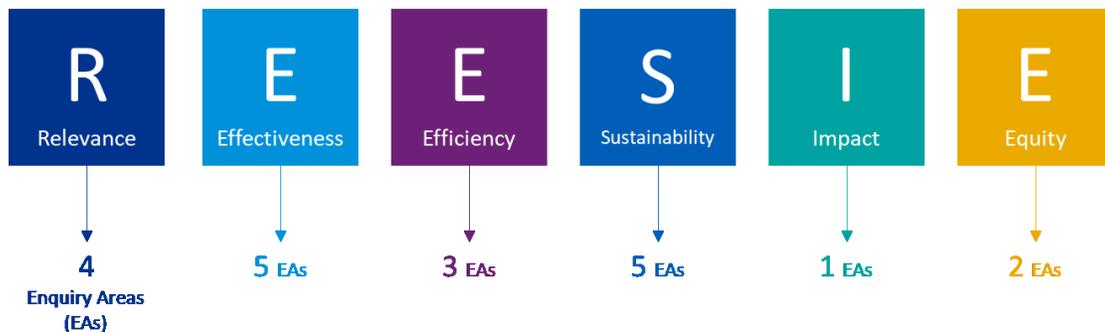


Figure 5: Overview of REESIE framework

**The diagram above is illustrative. Not all enquiry areas are applicable for all schemes.** We have developed Enquiry Areas (EAs) based on importance of that enquiry area, anticipated data availability and the effort needed to collect the data.

Using the REESIE framework, we have adopted the following step-wise methodology to map the scheme with the data sources:



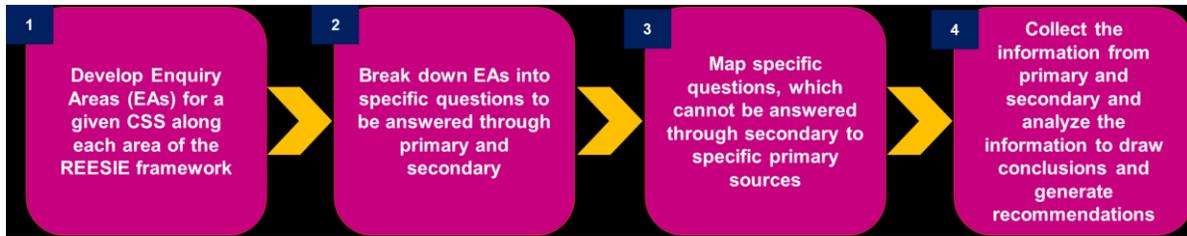


Figure 6: Methodology under REESIE framework

In addition to scheme specific analysis as per the REESIE framework, each of the CSS has been evaluated against relevant cross-cutting themes from among accountability, employment generation, gender mainstreaming, climate change and sustainability, role of TSP and SCSP, technology, innovation, behavioural change, R&D, synergy with other government programs, reforms, role of private sector, water sharing agreements, and conjunctive use of water.

Once the data sources are identified, we have proceeded to data collection, analysis and reporting.

### Data Collection (Shift in design)

In the mixed-methods evaluation, only those tools and techniques are selected that are best suited to the budget, time, data, various constraints and the purpose of evaluation. A data collection plan comprising stakeholders mapping, data sources, tools and sampling methodology for both secondary and primary studies (as applicable) is provided in detail for the respective sections on secondary analysis and primary analysis.

Table 7: Proposed data collection plan

	Data Collection Tools		
	Description	Instrument	Respondent
<b>Qualitative (QUAL)</b>  	<b>Key Informant Interviews</b>	Interviews based on Structured and Semi-structured questionnaires	Key stakeholders involved in scheme implementation
	<b>Focus Group Discussions</b>	Topic to be provided and discussion to be recorded	Direct and Indirect Beneficiaries of the schemes and officials at district or village level involved in implementation
<b>Quantitative (QUANT)</b>	<b>Planned vs. Actual Review (financial and physical)</b>	Review of targets, and goals vs. outcomes and actual performance	Available literature and documents and scheme administrators at Central Ministries like Jal Shakti and Environment, Forest and Climate Change and State Departments like



	Data Collection Tools		
	Description	Instrument	Respondent
			Water Resources, Agriculture and Environment & Forest
	<b>Structured surveys of Households</b>	Survey Questionnaires	Selected households as per the Sampling Plan
<b>Innovative and Scalable practice</b> 	<b>Cross-sectional theme &amp; additional theme based</b>	Case studies to be identified using the criteria of Relevance, Effectiveness, Efficiency, Sustainability, Impact and Equity as per ECG guidelines.	

## Analysis

The complexity of this assignment requires a **multilevel mixed-methods analysis**. **Triangulation** has been used more systematically and is an integral part of the evaluation design. In this, QUANT and QUAL analysis techniques are used at different levels of a multilevel evaluation design.

## Reporting

The reporting for this assignment has been done on three aspects – sector, CSS including Umbrella CSS and program harmonization along with recommendations on each aspect. The reporting on sectoral aspect also included recommendations presented on key cross-sectional themes.

## 3.3 Literature Review

### 3.3.1 Methodology

The evaluation study is designed to understand the nuances of the schemes and their intended outputs in the sectors through secondary research and literature review. A detailed review has been undertaken of the relevant report/ documents, including the official scheme document, progress reports, project review documents, previous evaluation studies and monitoring reports



produced by the government (central, state, government agencies, etc.) and by non-government agencies (think tanks, academia, international development agencies). We have used quantitative data from the Jal Shakti Ministry, Ministry of Environment, Forest and Climate Change, NITI Aayog, State Irrigation or Water Resources Departments, Agriculture and Forest Departments, etc. as well as the budget documents, evaluation studies undertaken and previous research papers to assess the scale and nature of changes in outcomes and barriers that the schemes have surmounted since inception.

### 3.3.2 Conceptual framework

The conceptual framework for secondary analysis using both deductive and inductive method is to develop sector level understanding and to formulate scheme level hypothesis. As per Mixed-Methods (MM) approach, a combination of quantitative and qualitative data has been used for secondary analysis.

Table 8: Conceptual framework for Secondary Analysis

Secondary Analysis		
Data Type	Level	Type of analysis
<b>Quantitative</b>	Scheme	<ul style="list-style-type: none"> <li>• Meta level scheme data: geographical spread of beneficiaries and across gender and social groups, financial and physical performance, etc.</li> <li>• Non-scheme literature for developing hypotheses</li> </ul>
	Sector	<ul style="list-style-type: none"> <li>• Major sector indicators on water resources like baseline water stress, groundwater extraction, investment in sector across usage, finance and physical performance, etc.</li> <li>• Major sector indicators on environment and forest like pollution abatement, climate change, forests and wildlife.</li> </ul>
<b>Qualitative</b>	Scheme	<ul style="list-style-type: none"> <li>• Scheme evaluation reports – all the old CSS, which form part of umbrella schemes and have evaluation reports</li> <li>• Non-scheme literature for developing hypothesis</li> </ul>
	Sector	<ul style="list-style-type: none"> <li>• Literature available on thematic areas to develop deeper understanding of the issues</li> </ul>



Literature review forms the primary method of secondary analysis, comprising both quantitative and qualitative data. It is conducted through a four-pronged approach (i) *synthesis of key findings from the past evaluation studies of the key schemes* (ii) *systematic review of the literature on relevant studies conducted in India and* (iii) *systematic review of the literature on relevant studies conducted in other countries* (iv) *synthesis of findings from the systematic reviews of the meta-analysis conducted by researchers on similar topics/ intervention areas.*

A computer-assisted search was performed to identify the relevant literature from academic sources, think tanks, and international development agencies. For the water resources sector, the research covered areas of water availability and demand across sectors, water stress, water pollution, water security among others as well as scheme level evaluations studies and reports. For the environment and forest sector, the research covered pollution abatement, climate change, forests and wildlife.

### 3.3.3 Analytical model for secondary data analysis

The analytical model adopted for analysis of the secondary data consists of the following steps:

**a) Review existing literature, scheme documents, annual reports, MIS database/ reports and identify key areas of investigation**

The first step has been to review the existing literature, scheme documents, annual reports, MIS database/ reports and identify the key areas of investigation and the corresponding data points for the same.

**b) Search Existing Empirical Studies and develop Key Research Hypotheses**

Based on various empirical research and evaluation studies conducted in the sector and respective schemes, KPMG has defined the causal-effect relations across key research dimensions and developed the key research hypotheses for the study.

The next step after literature review was building hypotheses for evaluation. Literature review, done at sector level and scheme level, has helped in developing major themes for the evaluation.

**c) Collect secondary data from program MIS and analyze the previous studies**

Once the Key Areas of Investigation and Key Research Hypotheses were finalized, KPMG collected data on the quantitative indicators from program MIS to establish ground for confirmation or rejection of the Research Hypotheses. The analysis has also been supported



by the analysis across empirical studies, research/academic papers, evaluations studies, scheme documents, annual reports, and MIS database/reports in the sector.

**d) Triangulate the primary data analysis for confirming or rejecting current Research Hypotheses**

This is the phase of confirmation or rejection of the Key Research Hypotheses for suggesting pathways for change.

**e) Data analysis and interpretation of the results for drawing appropriate research conclusions**

The final step is to analyze the secondary data, concurrently with primary data and triangulate these for drawing conclusions. A combined analysis has been done on various interventions to examine the overall impact of several explanatory variables for the schemes and arrive at some recommendations for every scheme in the Evaluation Report.

### **3.4 Field Study Methodology**

The field study covered various aspects such as beneficiary perception regarding scheme processes and benefits, scheme outcomes and impact, challenges on scheme implementation, areas of improvement and the need to continue the scheme.

Field Study comprises the following:

- Key Informant Interviews (KIIs)
- Household Surveys
- Focus Group Discussions

While KIIs are expected to capture qualitative information regarding scheme implementation, surveys are expected to capture quantitative information and feedback about the schemes.

#### **3.4.1 State Selection – Water Resources**

State Selection is the first step towards primary research. Given that the choice of state may have a bearing on the conclusion reached after analysis of primary data, we have undertaken a principled approach while selecting states:



-  All states and union territories to be considered for selection
-  The states/ UTs that have maximum number of major CSS to be given more weightage.
-  Water-stressed states to be part of selection (as a proxy for water stress, groundwater extraction data of CGWB has been used. It has a high correlation with Baseline Water Stress indicator of WRI)
-  For states/ UTs that are not water-stressed, performance across CSS indicators to be used for selection.
-  The four major CSS – AIBP, HKKP, PDMC and WDC to be given equal weightages in calculating performance score.

Figure 7: Principles for state selection

In line with the above principles, our **basic state selection methodology** is provided below:

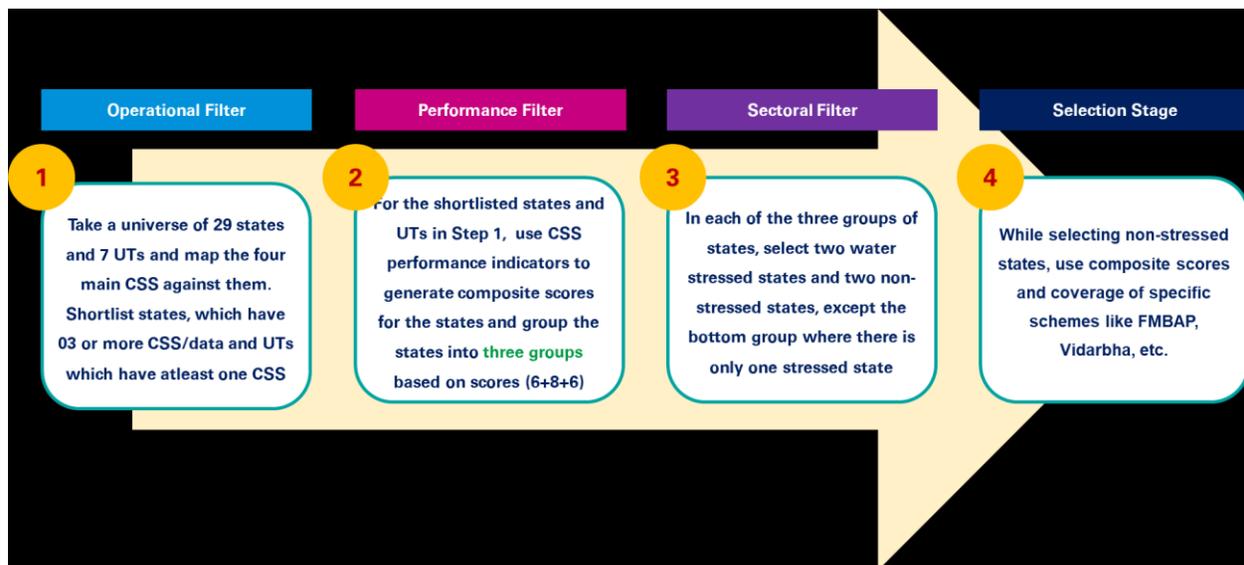


Figure 8: Methodology for state selection

The **universe of states for selection is the erstwhile 29 states and 7 Union Territories** in the Union of India. As provided in the Terms of Reference of this engagement, we have to choose a minimum of 12 states or 11 states and 1 union territory for primary research. There are four basic steps in state selection as explained below:



**Step 1 (Operational Filter):** This step involves mapping the four CSS under PMKSY against the universe of states and union territories and preparing a shortlist of states with more than three CSS or have data for at least three CSS and union territories with at least one CSS. Through this, a shortlist of 24 states and 2 union territories was prepared. This is basically the operational filter, which helps in rationalizing the number of states for further analysis.

**Step 2 (Performance Filter):** In this step, the shortlisted states and union territories in Step 1, were scored through a weighted average scoring method based on performance across scheme indicators. Output and Outcome indicators were identified for each CSS under PMKSY and their values were listed against each state. Then these values were normalized and provided a scaled score between 0 and 1 using the following formulae for each state:

- For Positive Indicators (where higher values mean better performance)

$$\text{Scaled Performance Score (S)} = \frac{X - \text{min value of } X \text{ across states}}{\text{max value of } X \text{ across states} - \text{min value of } X \text{ across states}}$$

Where X is the value of the indicator

- For Negative Indicators (where lower values mean better performance)

$$\text{Scaled Performance Score (S)} = \frac{\text{Max value of } X \text{ across states} - X}{\text{max value of } X \text{ across states} - \text{min value of } X \text{ across states}}$$

Where X is the value of the indicator

Using the scaled scores, which lie between 0 and 1, a weighted average score was calculated for each state. The various output and outcome indicators for each CSS under PMKSY and the weights assigned to them to calculate the weighted average score are showcased in the table below:

Table 9: Output and outcome indicators for each CSS under PMKSY

CSS	Indicator	Indicator Sub-weightage
AIBP	Percentage IPC Created vis-à-vis target (current)	100%
HKKP	Irrigated Command areas as on 31 <sup>st</sup> March 2018	25%
	IPU/IPC percentage as on 31 <sup>st</sup> March 2018	75%



CSS	Indicator	Indicator Sub-weightage
PDMC	Percentage physical achievement (i.e. micro-irrigation coverage) till 31 <sup>st</sup> March 2019	100%
WDC	Water Holding Structure created / rejuvenated till 30 <sup>th</sup> September 2019	12.5%
	Additional irrigation potential created till 30 <sup>th</sup> September 2019	12.5%
	Central share released as percentage of project cost till 31 <sup>st</sup> March 2019	75%

The output and outcome indicators were taken from data furnished by the Ministries or from CWMI Report published by NITI Aayog. Once the score against each CSS was calculated, the weighted average composite score for each state and union territory was calculated by providing equal weightage to all four CSS under PMKSY – that is in case four schemes are present in a state and data is available on all four schemes, 25% weightage is provided to each scheme. Similarly, if 3 schemes are present in a state or data is available for only 3 schemes, 33% weightage is provided to the three such schemes for a state. Using the above method, the performance scores of 20 states were calculated and the states were ranked according to their scores from top to bottom. Then the states were grouped into three, based on performance:

- Top six
- Middle eight
- Bottom six

Only the union territories of Andaman & Nicobar Islands and Puducherry have coverage of one CSS of PMKSY i.e. Per Drop More Crop but limited progress has been achieved till date in both the UTs. However, since there is coverage of at least one scheme, these two UTs were considered for further steps in the selection process.

**Step 3 (Sectoral Filter):** This step involved application of a water sectoral filter to select the states. The sectoral indicator is water stress in states. As a proxy for water stress, excessive groundwater extraction has been considered since wherever there is a lack of surface water, groundwater tends to be overutilized. Thus, states with more than 70% annual groundwater extraction, which fall under the categories – semi-critical (70%-90%), critical (90%-100%) and over-exploited (>100%)] are considered as water-stressed states . The data was taken from Groundwater extraction data published by CGWB (Dynamic Groundwater Resources of India,



2017). This had a high correlation [**R = 0.8**] with Baseline Water Stress (BWS) of Aqueduct 3.0 Water Risk Framework [of World Resources Institute (WRI)].

Table 10: Groundwater extraction across states

S. No.	States/UTs	AEGWR	CAGWE	% GE
<b>STATES</b>				
1	Andhra Pradesh	20.15	8.9	44.17%
2	Arunachal Pradesh	2.67	0.01	0.37%
3	Assam	24.26	2.73	11.25%
4	Bihar	28.99	13.26	45.74%
5	Chhattisgarh	10.57	4.7	44.47%
6	Goa	0.16	0.05	31.25%
7	Gujarat	21.25	13.58	63.91%
8	Haryana	9.13	12.5	136.91%
9	Himachal Pradesh	0.46	0.39	84.78%
10	Jammu & Kashmir	2.6	0.76	29.23%
11	Jharkhand	5.69	1.58	27.77%
12	Karnataka	14.79	10.34	69.91%
13	Kerala	5.21	2.67	51.25%
14	Madhya Pradesh	34.47	18.88	54.77%
15	Maharashtra	29.9	16.33	54.62%
16	Manipur	0.39	0.01	2.56%
17	Meghalaya	1.64	0.04	2.44%
18	Mizoram	0.19	0.01	5.26%
19	Nagaland	1.98	0.02	1.01%
20	Odisha	15.57	6.57	42.20%
21	Punjab	21.58	35.78	165.80%
22	Rajasthan	11.99	16.77	139.87%
23	Sikkim	1.52	0	0.00%
24	Tamil Nadu	18.2	14.73	80.93%
25	Telangana	12.37	8.09	65.40%
26	Tripura	1.24	0.1	8.06%
27	Uttar Pradesh	65.32	45.84	70.18%
28	Uttarakhand	2.89	1.64	56.75%
29	West Bengal	26.56	11.84	44.58%
<b>UNION TERRITORIES</b>				
1	Andaman & Nicobar	0.33	0.01	3.03%
2	Chandigarh	0.04	0.03	75.00%
3	Dadra & Nagar Haveli	0.07	0.02	28.57%
4	Daman & Diu	0.02	0.01	50.00%
5	Delhi	0.3	0.36	120.00%
6	Lakshadweep	0.004	0.002	50.00%
7	Puducherry	0.2	0.15	75.00%

states highlighted in blue show water stress



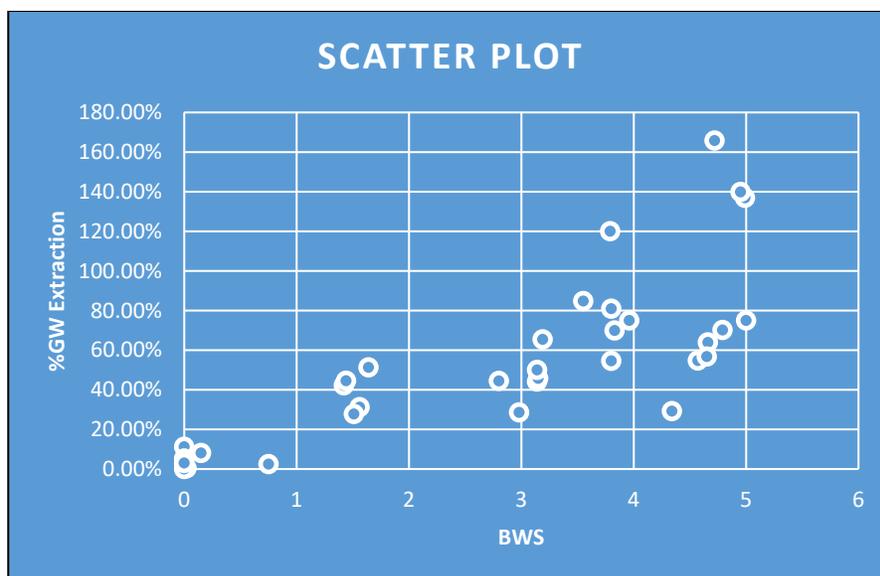


Figure 9: Scatter Plot of Groundwater extraction data and BWS values across states

Then, in each of the three groups of states created in Step 2, two states were selected based on water stress except the group with bottom six states where only one water-stressed state was present. The water-stressed states selected are as follows:

- In Top six group – *Rajasthan, Tamil Nadu*
- In Middle eight group – *Uttar Pradesh, Punjab*
- In Bottom six group – *Himachal Pradesh*

**Step 4 (Selection Stage):** In Step 4, the remaining states in each of the three groups above were selected. Performance in output and outcome indicators was given more weightage in selection of states. However, coverage of specific schemes like FMBAP and Special Package for Maharashtra (Vidarbha and Marathwada) in the states to be selected was also considered.

The final list was as follows:

- From the Top group of six states, **Karnataka, Andhra Pradesh, Rajasthan, Tamil Nadu** are selected
- From the Middle group of eight states, **Maharashtra, Uttar Pradesh, Punjab, Assam** are selected
- From the Bottom group of six states, **Himachal Pradesh, Manipur, Bihar, Jharkhand** are selected



In addition to the 12 states selected above, we also selected the union territory of Puducherry as it was the only union territory that had coverage of one PMSKY scheme viz. Per Drop More Crop and also fell in the semi-critical category with respect to groundwater withdrawals (and therefore, might be considered as water-stressed). The achievement in PDMC for Puducherry was also more than that in Andaman & Nicobar Islands. The selection of Puducherry ensures coverage of at least one union territory as per the terms of reference of this study.

The states and union territory selected after the four steps mentioned above are shown in colour on the map of India below (before bifurcation of the state of J&K into two UTs):

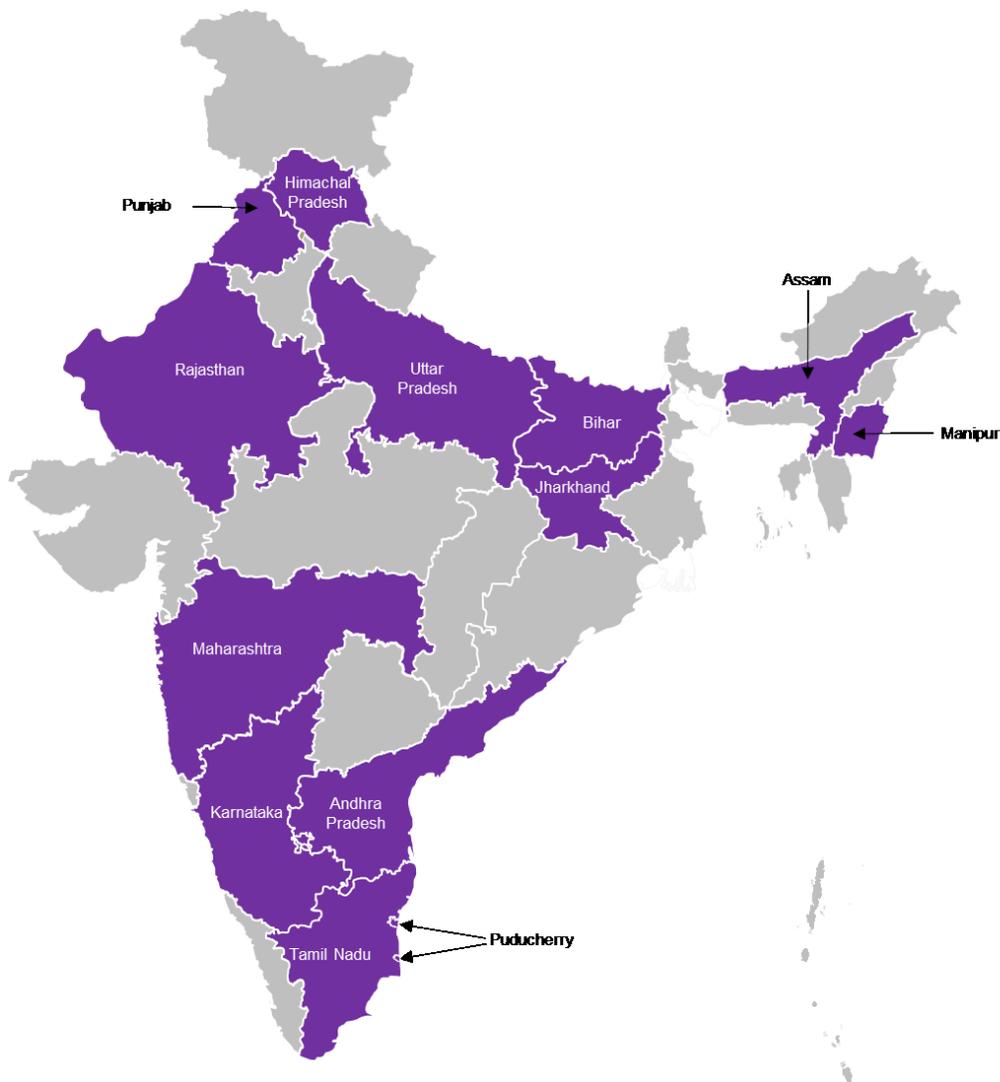


Figure 10: Result of state selection

The area shown in grey are the remaining states and union territories in the selection universe that are not selected. **It can be seen that the states cover a major portion of India with fair**



**representation across Northern, Southern, Eastern, Western and North-eastern parts of the country.**

To further ascertain the validity of state selection, it has been checked against other criteria as shown below:

***Checking the validity of the selected against other criteria***

**Coverage by other CSS under evaluation**

A simple analysis of the selected states showed that one of the other major CSS, the FMBAP was covered in selected states like Bihar, Assam, Punjab, Himachal Pradesh, etc. Similarly, for NRCP, out of the four states which received maximum Central Assistance, three – Tamil Nadu, Punjab and Maharashtra – were part of our selection.

**Coverage of Agro-climatic Zones in India**

The erstwhile Planning Commission after examining the earlier studies on the regionalization of the agricultural economy had recommended that agricultural planning be done on the basis of agro-climatic regions. For resource development, the country had been broadly divided into fifteen agricultural regions based on agro-climatic features, particular soil type, climate including temperature and rainfall and its variation and water resources availability. This is shown in the map below:



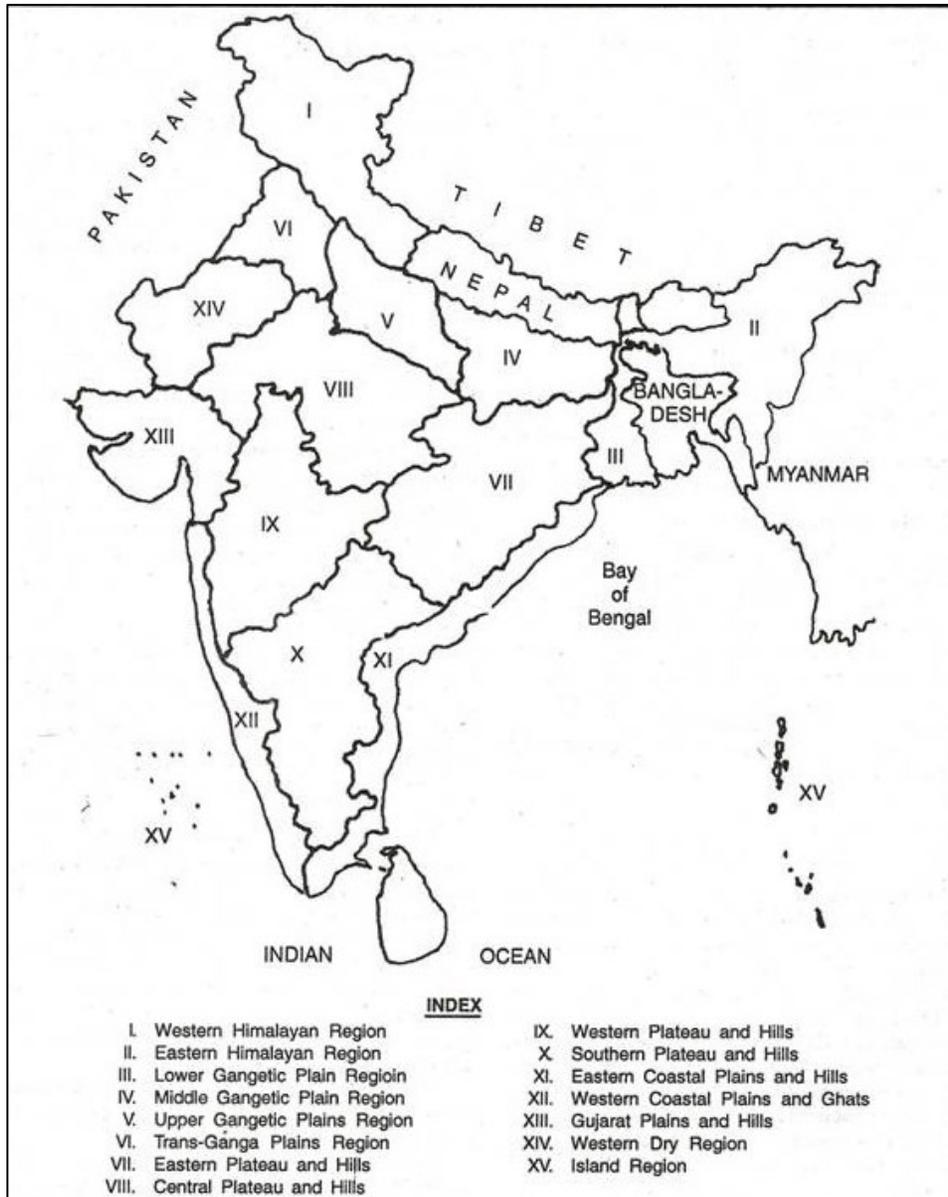


Figure 11: Agro-climatic zones in India

A simple comparison of the states under various agro-climatic zones in India and the selected states shows that our selection broadly covers the various agro-climatic zones in India except a few like Gujarat Plains and Hills, Island Region, etc.

### 3.4.2 District and Village Selection – Water Resources

The initial plan was to select 9-10 villages considering the project completion status for different schemes in the region. The approach was to collect the list of villages for each scheme from the concerned state departments in a prescribed format and randomly select villages from the list.



For large-scale schemes like AIBP, CADWM, the villages were selected to cover both head and tail span of the underlying project. For schemes like PDMC, SMI and RRR, the village selection was based on consultation with the stakeholders and the villages selected predominantly include those where the schemes have been implemented. For WDC scheme, in consultation with stakeholders, a combination of good and poorly performing villages was selected.

With change in scenario (lockdown across nation limiting the transportation and physical meeting owing to COVID-19 pandemic), the details of the villages were collected by coordinating with state/ district officials over online medium and telephone.

### 3.4.3 State Selection – Environment and Forest

The Centrally Sponsored Schemes to be evaluated broadly belong to two sectors i.e. forests and wildlife. The performance in these sectors can be represented through two indicators:

#### 1. **Change in forest cover from 2015-2017**

The forest cover data is available only for two years i.e. 2015 and 2017 in the reference period for the study. This data was sourced from datasets used in the SDG India Index - Baseline Report 2018<sup>2</sup>. On a scale of 1 to 3, states that were able to maintain or increase their forest cover were rated 3, states with a decrease in forest cover of less than 1% were rated 2 and remaining were rated 1.

#### 2. **Management Effectiveness Evaluation for National Parks & Wildlife Sanctuaries**

The Management Effectiveness Evaluation (MEE) is a key tool for managers of Protected Areas (PAs) to understand the strengths and weaknesses of protected area systems. It covers aspects of Context, Planning, Inputs, Process, Outputs and Outcomes. MEE has been commissioned by MoEFCC for PAs across the country and has been completed for 125 PAs so far<sup>3</sup>. The results of the MEE scores were averaged across states to arrive at an average score for each state. On a scale of 1 to 3, states with MEE score of more than 65 were rated 3, states with score between 40 and 65 were rated 2 and remaining were rated 1.

Using the data from above two indicators and their performance, all states and Union Territories (UTs) were scored on a scale of 1 to 3. The weightage provided to the two indicators was in the

<sup>2</sup> <https://niti.gov.in/content/sdg-india-index-baseline-report-2018>

<sup>3</sup> [http://wiienviis.nic.in/userlogin.aspx?Page=MEE\\_PAs\\_Final%20Report\\_2015.pdf&file=pdf](http://wiienviis.nic.in/userlogin.aspx?Page=MEE_PAs_Final%20Report_2015.pdf&file=pdf)



ratio of funding for forestry and wildlife schemes i.e. 26:74. Using the final scores, all states and UTs were arranged into three groups based on their performance.

**Group 1 (High-performing): States and implemented sub-schemes**

State	Project Tiger	Project Elephant	GIM	FPM	BR	NPCA	Total
Manipur			✓	✓		✓	3
Tamil Nadu	✓	✓			✓	✓	4
West Bengal	✓	✓		✓	✓	✓	5
Assam	✓	✓			✓	✓	4
Goa							0
Karnataka	✓	✓	✓	✓	✓		5
Kerala	✓	✓	✓		✓	✓	5
Sikkim			✓	✓	✓		3
Mizoram	✓		✓				2

**Group 2 (Medium-performing): States and implemented sub-schemes**

State	Project Tiger	Project Elephant	GIM	FPM	BR	NPCA	Total
Andhra Pradesh	✓	✓	✓	✓	✓	✓	6
Gujarat					✓	✓	2
Haryana				✓			1
Himachal Pradesh				✓	✓	✓	3
Jammu & Kashmir						✓	1
Jharkhand	✓	✓		✓			3
Rajasthan	✓					✓	2
Uttar Pradesh	✓	✓				✓	3

**Group 3 (Low-performing): States and implemented sub-schemes**

State	Project Tiger	Project Elephant	GIM	FPM	BR	NPCA	Total
Madhya Pradesh	✓		✓		✓	✓	4
Odisha	✓	✓	✓	✓	✓	✓	6
Telangana	✓						1



Uttarakhand	✓	✓	✓	✓	✓		5
Punjab			✓	✓		✓	3
Delhi							0
Arunachal Pradesh	✓	✓			✓		3
Chhattisgarh	✓	✓	✓		✓		4
Meghalaya		✓		✓	✓		3
Maharashtra	✓	✓	✓	✓			4
Andaman and Nicobar					✓		1
Puducherry							0
Nagaland		✓		✓			2
Tripura		✓		✓		✓	3
Bihar	✓			✓			2

12 states were selected from the three groups ensuring the following:

- Representation of different levels of performance
- Representation of at least one state from each of the six zones of the country
- Implementation of at least 2 sub-schemes in the state to ensure maximum coverage

The selected states are as follows:

Zone no.	Zone name	States
Zone 1	North & Central	Madhya Pradesh
		Uttar Pradesh
Zone 2	South	Tamil Nadu
		Kerala
		Andhra Pradesh
Zone 3	East	West Bengal
		Odisha
Zone 4	West	Maharashtra
		Rajasthan
Zone 5	North-East	Assam
		Mizoram
Zone 6	Hilly States	Uttarakhand

#### 3.4.4 Forest reserve selection methodology

The next step in the sampling methodology was to select the forest reserves where households would be surveyed. The aim of the selection process was to ensure adequate representation of



all sub-schemes in the sample, thus preference would be given to forest reserves that have more schemes under implementation.

Since some of the schemes are being implemented at the discretion of implementation agencies, information available in the public domain does not comprehensively cover names of forest reserves where the scheme is being implemented. In this regard, MoEFCC was approached for required information. Pending this information, other forest reserves that have been shortlisted include:

S.No.	Forest/Tiger Reserve	State	TR	ER	CNR	NAP	GIM
1	Panna Tiger Reserve	Madhya Pradesh	✓		✓		✓
2	Satpura Tiger Reserve	Madhya Pradesh	✓				✓
3	ER Uttar Pradesh	Uttar Pradesh		✓			
4	Tal Baghel	Uttar Pradesh			✓		
5	Mudumalai Tiger Reserve	Tamil Nadu	✓				
6	Nilgiri	Tamil Nadu		✓	✓	✓	
7	Anamalai Tiger Reserve	Tamil Nadu	✓	✓			
8	Periyar Tiger Reserve	Kerala	✓	✓			✓
9	Wayanad	Kerala		✓		✓	✓
10	Nilambur	Kerala		✓		✓	✓
11	Seshachalam Hills	Andhra Pradesh			✓	✓	
12	Sundarbans Tiger Reserve	West Bengal	✓		✓	✓	
13	Darjeeling	West Bengal				✓	
14	Similipal Tiger Reserve	Odisha	✓		✓	✓	
15	Melghat Tiger Reserve	Maharashtra	✓				
16	Manas Tiger Reserve	Assam	✓		✓		
17	Kaziranga Tiger Reserve	Assam	✓	✓			
18	Kolasib Landscape	Mizoram					✓
19	Tawi WS	Mizoram				✓	
20	Shivalik	Uttarakhand		✓		✓	



21	Nanda Devi	Uttarakhand			✓		
22	Sariska Tiger Reserve	Rajasthan	✓				

### 3.4.5 Village and household Selection – Environment and Forest

After selection of the forest reserves, two villages were selected from each forest reserve, one each from the core and buffer areas.

For selection of villages under Green India Mission, the endeavor was to cover different types of forest areas such as dense, open and blank forest to ensure adequate representation of various forest types. This was done after receiving Perspective Plans and Annual Plan of Operations approved for selected states under the Green India Mission.

For villages covered under the wildlife schemes, the endeavor was to cover households that have been relocated or under process of relocation and those that have members receiving compensation due to human injury, death or loss of crop / property. This was done after receiving MIS for village relocation and compensation for selected states under the wildlife schemes.

Towards IDWH-PT scheme, villages which have been identified for relocation or where relocation is under process were identified. For CNR-NPCA scheme, villages nearby to the underlying lake/water body were selected and the surveys were conducted.

### 3.4.6 Respondent Selection for Primary Survey

#### 3.4.6.1 Respondent Selection for Key Informant Interview

For primary studies, the mapping of states and schemes along with the status of number of Key Informant Interviews (KII) conducted is illustrated below.

Table 11: Mapping of schemes and states for Water Resources and Environment & Forest sectors

Schemes	National	Assam	Andhra Pradesh	Bihar	Himachal Pradesh	Jharkhand	Karnataka	Maharashtra	Manipur	Punjab	Rajasthan	Tamil Nadu	Uttar Pradesh	Madhya Pradesh*	Uttarakhand*	Chhattisgarh	Goa	Gujarat	Haryana	Jammu & Kashmir	Kerala	Meghalaya	Mizoram	Nagaland	Odisha	Sikkim	Telangana	Tripura	West Bengal	Arunachal	Total	
AIBP	5	7	8	3		5	8	24	3	5	6		6	1				3														84
CADWM	2	7	1	4		0	8	14	1	1	2		1	12				1														54
SMI	2	9		5	9	1	1		7					9	8					1		8										60
RRR	2		2	7					5		9	4	0	8								8					7				52	



Schemes	National	Assam	Andhra Pradesh	Bihar	Himachal Pradesh	Jharkhand	Karnataka	Maharashtra	Manipur	Punjab	Rajasthan	Tamil Nadu	Uttar Pradesh	Uttarakhand*	Chhattisgarh	Goa	Gujarat	Haryana	Jammu & Kashmir	Kerala	Meghalaya	Mizoram	Nagaland	Odisha	Sikkim	Telangana	Tripura	West Bengal	Arunachal	Total	
GWI	2	1																											1	4	
PDMC	2	10	11	5	6	5	7	7	4	8	6	5	13																	89	
WDC	2	5	6	4	4	4	5	3	4	4	5	5	4										3	4						62	
FMBAP	4	2		1	2								2	1					2								1			15	
IC	1	4	3	4	0	4	1	2	1	3	1	2	4	2		3	3	1	1	3			2		3	1	3	2		54	
SPFM	2							3																						5	
LTIF	1																													1	
IAS	1																													1	
NRCP	3		4			2	2	4	1	2		3					3		2				1	2	2					31	
Sector-WR	12	5	5	2	2	5	3	4	3	4	2	1	2	2										1	1	2				56	
CNRE	6	4	8									10	5	6	7					1		3		6				8		64	
GIM	6	3	5					7			5	5	4	4	10					7		6		8				4		74	
IDWH	7	6	4					9			2	2	3	5	3	1				4		4		7				5		62	
<b>Total</b>	<b>60</b>	<b>63</b>	<b>57</b>	<b>35</b>	<b>23</b>	<b>26</b>	<b>35</b>	<b>77</b>	<b>29</b>	<b>27</b>	<b>38</b>	<b>37</b>	<b>44</b>	<b>47</b>	<b>31</b>	<b>1</b>	<b>3</b>	<b>10</b>	<b>1</b>	<b>6</b>	<b>15</b>	<b>16</b>	<b>13</b>	<b>6</b>	<b>28</b>	<b>6</b>	<b>10</b>	<b>3</b>	<b>20</b>	<b>1</b>	<b>768</b>

Initially selected states

State initially selected but limited implementation observed

Additional states for KIIs

\*replacement states for SMI and RRR

For water resources, while conducting KIIs, it was observed that in some states, scheme implementation is either negligible or has not been initiated. In context of the same, KIIs were conducted in some additional states to get a comprehensive view of the schemes.

There has been a change in allocation of state for the schemes RRR & SMI. The reason for replacement is mentioned in the table below.

	Proposed state (In Inception report)	Analysis on constraints during primary research	Proposed replacement state
<b>SMI</b>	Jharkhand	State has not sent any proposal under PMKSY. The progress on the dashboard is a reflection of projects commissioned before the introduction of PMKSY. State claims that those projects have already been completed.	Madhya Pradesh



	Karnataka	A proposal of taking up of 788 Minor Irrigation Schemes under RRR with an estimated cost of Rs. 250.00 Cr. under PMKSY- HKKP was submitted to GOI letter dated 24.01.2019. The GOI has not accorded approval in 2018-19 and 2019-20. State is not aware of why the dashboard is showing the progress (271 completed out of 465).	Uttarakhand
<b>RRR</b>	Uttar Pradesh	Enquiry is ongoing on incomplete projects under RRR since before 2015 i.e. before the introduction of PMKSY. State is unable to send any proposals till that is over. Progress on dashboard is a reflection of pending projects.	Madhya Pradesh

Further, in discussion with the Client, Puducherry was dropped from the list of States/ UTs which were initially selected for undertaking primary study.

The key informant interviews were conducted for all the selected schemes while household survey was restricted to schemes with identifiable village level beneficiaries.

Table 12: Scheme specific data collection for water resources

Scheme name	Key informant interview	Household survey
<b>Water Resources</b>		
Accelerated Irrigation Benefit Program (AIBP)	Yes	Yes
Command Area Development and Water Management – Har Khet Ko Pani (CADWM)	Yes	Yes
Surface Minor Irrigation - Har Khet Ko Pani (SMI)	Yes	Yes
Repair, Renovation and Restoration - Har Khet Ko Pani (RRR)	Yes	Yes
Groundwater Minor Irrigation - Har Khet Ko Pani	Yes	
Per Drop More Crop (PDMC)	Yes	Yes
Watershed Development Component (WDC)	Yes	Yes
Flood Management and Border Area Program (erstwhile FMP + RMBA) (FMBAP)	Yes	



Irrigation Census (IC)	Yes	
Special Package for Maharashtra (SPFM)	Yes	
Long Term Irrigation Fund (LTIF)	Yes	
Impact Assessment Studies (IAS)	Yes	
National River Conservation Plan (NRCP)	Yes	
<b>Environment and Forest</b>		
<b>Conservation of Natural Resources and Ecosystems (CNRE)</b>	Yes	Yes
<b>National Mission for Green India (GIM)</b>	Yes	Yes
<b>Integrated Development of Wildlife Habitats (IDWH)</b>	Yes	Yes

For key informant interviews, the stakeholders were identified based on secondary research and snowballing (a technique commonly used in research when the potential respondent is hard to find or reach and the research participant refers the other participants for the study) for each scheme in different districts. Once the reference contact was collected, a database was prepared to take appointments and schedule interview. The interviews were conducted through online mode – video and audio conferencing.

### 3.4.6.2 Respondent Selection for Household Survey

For household surveys, the villages were identified and selected in specific states for AIBP, CADWM, SMI, RRR, WDC, CNRE, GIM and IDWH schemes (as these are implemented at village level) whereas for PDMC scheme, the list of beneficiaries was obtained from the district officials and identified respondents in the region were reached out to conduct the survey.



- Random Walk In village
- Permission from the village head
  - Identifying boundary and mid-point by talking to key informants (village head, AWW, teacher, Shop owner)
  - Follow right hand rule from middle of the village
  - Skip every 2 houses to select household
  - In case of "Rejection"/" Closed" house, go to next house

- Random selection of beneficiaries from the list provided by state/ district officials for a village by research team
- Calling all beneficiaries to take permission and confirming location by field team
- Conducting interview with respective beneficiary



The details of KIIs and surveys are provided in Appendix 1 and Appendix 2 respectively.

### 3.4.6.3 Respondent Selection for Focus Group Discussions (FGDs)

Focus Group Discussion has been planned with the scheme beneficiaries from each state in order to understand the level of awareness about the scheme and to explore the extent of services received under the schemes. As per the initial design proposed, the FGDs are supposed to follow the traditional method of face to face interaction. However, in view of COVID-19 a revised hybrid approach has been adopted and implemented i.e. recruitment of respondents happened on ground and discussion carried out virtually.

Following such hybrid method, the key assumptions that has been agreed upon for conducting the FGDs are as below:

- FGD to be conducted in the villages where HH survey will take place as the field team will do the recruitment of respondents.
- FGDs to be conducted with scheme beneficiaries
- Given social distancing guidelines, availability of place, recording quality, and willingness of participants to attend, the FGD participants to be 3-4 per group.

It has been planned to cover **150 FGDs** across both sub-sectors in keeping with the ToR requirements. All reasonable efforts and necessary precaution in this regard have been taken.

The Table below shows the distribution of 150 FGDs conducted across states and sub schemes from the Water Resources and Environment & Forest Sectors.

Table 13: FGD details of Water Resources and Environment & Forest sectors

	Andhra Pradesh	Assam	Himachal Pradesh	Karnataka	Madhya Pradesh	Maharashtra	Manipur	Mizoram	Odisha	Rajasthan	Tamil Nadu	Uttar Pradesh	Total
AIBP	2	4	0	4	0	4	2	0	0	0	0	0	16
CADWM	0	4	0	2	0	4	2	0	0	0	0	0	12



<b>SMI</b>	0	4	0	0	2	0	2	0	0	0	0	0	8
<b>RRR</b>	0	0	0	0	4	0	0	0	0	3	0	0	7
<b>PDMC</b>	2	2	0	2	0	0	2	0	0	0	2	1	11
<b>WDC</b>	3	3	0	4	0	4	6	0	0	1	6	0	27
<b>FMBAP</b>	0	13	1	0	0	0	0	0	0	0	0	5	19
<b>CNRE</b>	0	2	0	0	6	0	0	2	2	0	2	4	18
<b>GIM</b>	0	0	0	0	4	0	0	2	3	5	0	4	18
<b>IDWH</b>	0	3	0	0	6	0	0	0	0	1	4	0	14
<b>Total</b>	<b>7</b>	<b>35</b>	<b>1</b>	<b>12</b>	<b>22</b>	<b>12</b>	<b>14</b>	<b>4</b>	<b>5</b>	<b>10</b>	<b>14</b>	<b>14</b>	<b>150</b>

### Recruitment of Respondents:

Considering the COVID-19 pandemic situation, Ipsos adopted one or combination of options from below:

1. **Option 1:** In person recruitment by field team and discussion facilitated by moderators; field staff present at FGD site to address any technical/ logistics issue
2. **Option 2:** Field team to share beneficiaries' numbers and set up and start the FGD; moderators to continue the FGD; field staff is not present
3. **Option 3:** In depth interviews with beneficiaries if participants are not willing to assemble

The selection criteria of respondents varied from scheme to scheme. However, it has been ensured that all the respondents are adult and no preference is accorded to any particular gender. The eligibility of farmers in terms of land ownership, minimum crop cycle etc. has been detailed below for each of the schemes under the Water Resources sector.

### AIBP/CAD/SMI/RRR

- **Definition of a farmer:** There are no limitations on type of farmers but preference given to small farmers (with land holding of 1-2 hectares) and marginal farmers (with land holding less than 1 hectares)
- **Residence of the village for past how many years:** preferably greater than 5 years
- **Other farmers as per eligibility from the same HH:** Preferably senior member of the household

**PDMC:** For PDMC the list of beneficiaries shared by state/ district officials to be referred.



## WDC

- **Definition of a farmer:** Farmers who are landowners and also the farmers who are marginalized
- **Residence of the village for past how many years:** At least 5 years
- **Other farmers as per eligibility from the same HH:** Senior member of the household

**FMBAP:** All villagers are eligible respondents who have experienced flood in the villages they are residing at.

The respondents' category is different for the schemes under Environment & Forest Sector and this is shown below.

The respondents for **CNRE, GIM, IDWH** schemes are:

- Local committees - Biosphere reserve management authority,
- Biodiversity Management Committee
- Chief Conservator of Forests /DCF/CF

The scheme wise eligibility criteria are outlined below:

**CNRE:** Committees under the scheme: Self Help Groups (SHGs), Biodiversity management committee (BMC), Eco Development Committee (EDC) and Wetland Mitra

- **For Biosphere Reserves** – BMC, EDC and SHGs have played important role in bringing options of alternative livelihood, knowledge and skill development to the villagers thereby empowering the villagers socially, economically and technologically.
- **For NPCA-** there are Wetland Mitras (recently introduced concept) and Self-Help Groups (SHGs) (Kudumbasree ayalkoottams in Kerala); in wetlands that are under the forest department, EDC have been formulated. The participant should either
  - be part of committee and be actively involved in the planning of the programs under the scheme for at least one year.
  - representative head of community who are direct beneficiary of the programs implemented under scheme

## GIM

### Criteria for GIM & NAP sub-scheme



The Joint Forest Management Committee (JFMCs)/ Forest Development Agency (FDA) in villages are responsible for planning and implementing mission activities at village level.

Adequate consultations to be undertaken with the DFO for details of JFMCs/ EDCs in the area to identify members that can be a part of the FGD and ensure that:

- adequate representation of people from Scheduled caste; in case that is not possible, a representative of the socially most marginal community is included – the identified people should have been part of the committee for at least 1 year
- at least 2 women who have been part of the committee for at least 1 year, should be present as women members should constitute 50% of the JFMC (According to NAP guidelines, 3 out of 6 JFMC members are supposed to be women)
- President of JFMC/ EDC

### **Criteria for FPM sub-scheme**

Adequate consultations to be undertaken with the DFO to identify members for the FGD and ensure that:

- At least 2 women who have been employed through the FPM for at least one year and have participated in relevant trainings
- Community members who have been employed through FPM scheme during fire season for at least one year and have participated in relevant trainings
- Fire responders and fire watchers who have been employed through the FPM for at least one year and have participated in relevant trainings

### **IDWH**

Eco Development Committees (EDC) are established at the village level based on the scheme guidelines in order to integrate participatory village level planning into conservation efforts. Its major responsibilities include:

- Providing inputs for resource substitution, income generation, community welfare, ecotourism, etc. for reducing resource dependency of local communities on forests
- Enabling and ensuring reciprocity in the commitments between local people and forest departments for access and benefit sharing and capacity building
- Preparation of village level micro plans



The aim of establishing EDCs is to elicit support from local communities towards conservation activities and ensure site specific, need based inputs to communities in order to rationalize resource dependency while accounting for their development needs.

EDC guidelines have stipulations regarding their constitution. In order to acquire adequate insight, the team has to ensure that certain members are present during the discussion. This includes,

- Women members
- Members from Scheduled Castes and Scheduled Tribes
- Members who have been a part of the committee for at least 3-4 years

**Limitation:**

- Though a definite selection criterion has been outlined, yet the sampling for the participants were more purposive. So, the target group representation is limited to some extent.
- The detailed profile of the respondents could not be fetched at the time of discussion since the FGDs were happening virtually; so, duration of interaction got limited which reduced the scope of building rapport with the group to some extent.

**3.4.7 Workplan for field (primary) Study**

The detailed work plan for primary data collection and analysis is presented in the figure below.

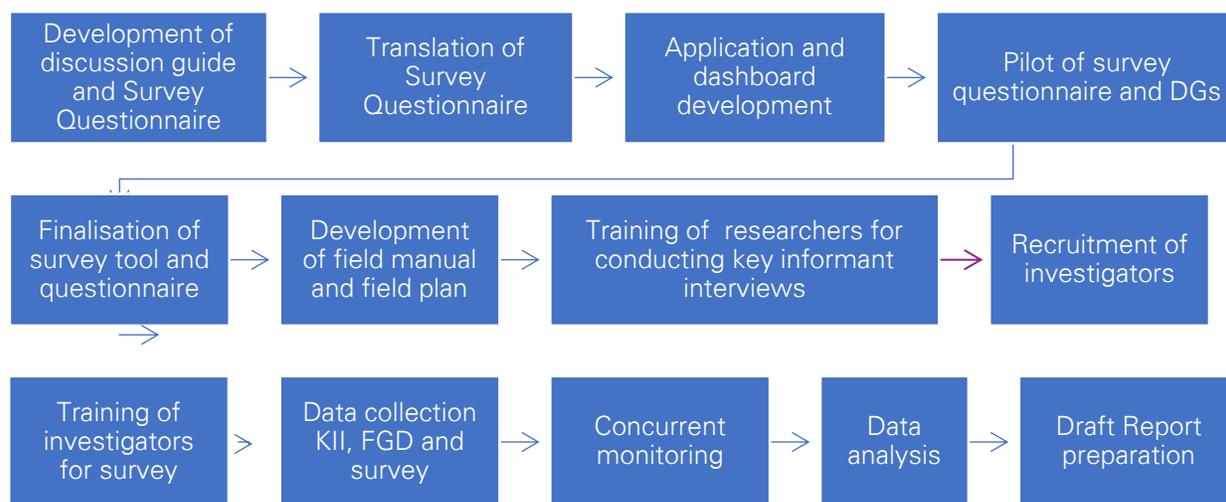


Figure 12: Work plan for primary data collection and analysis

**Discussion Guides for Key Informant Interviews**



For Key informant interviews, separate discussion guides (DGs) had been developed for each stakeholder to be interviewed for each scheme and are provided in Appendix 3. To ensure a systematic and consistent interview process for multiple stakeholders spread across different regions, the DGs including information area and probes were standardised. The discussion guides involve specific sector questions applicable for the schemes developed based on the REESI+E framework. Each interview was planned for a period of 45 to 90 minutes.

### Household Survey Tool

Being an ISO certified company, Ipsos (survey partner) has followed standard protocols while preparing questionnaires. The instruction for scripters and interviewers were highlighted in separate colours and the logical flow was maintained. For survey questionnaires, sequence of questions, content and language were checked by researchers to ensure face validity and content validity.

For surveys, interview length of 30 minutes was maintained, as a longer questionnaire might lead to respondent fatigue and poorer data quality towards the end of a survey. The tools were designed to capture demographic details of beneficiaries, access to basic amenities – water, sanitation, energy, health and agricultural practices, opinion on scheme implementation and impact of schemes on agriculture productivity, economy and overall community development. The scheme specific questions were prepared based on REESI+E framework taking the scheme objectives into consideration.

Table 14: Components of Survey Questionnaire for Water Resources

Sections	AIBP	CADWM	SMI	RRR	PDMC	WDC
Household Members Details	Yes	Yes	Yes	Yes	Yes	Yes
Health	Yes	Yes	Yes	Yes	Yes	Yes
Agricultural Practices	Yes	Yes	Yes	Yes	Yes	Yes
Planning and processes						Yes
Work/activities undertaken under the scheme	Yes	Yes	Yes	Yes	Yes	Yes
Training and Skill Development		Yes	Yes	Yes	Yes	Yes
Water users Association	Yes	Yes	Yes	Yes		
Fees for water	Yes	Yes	Yes	Yes	Yes	Yes
Efficiency and Impact of scheme	Yes	Yes	Yes	Yes	Yes	Yes



Table 15: Components of Survey Questionnaire for Environment and Forest

Sections	CNR	GIM	IDWH
Household member details	Yes	Yes	Yes
Awareness and participation (schemes)	Yes	Yes	Yes
Resources, Livelihood and basic amenities	Yes	Yes	Yes
Animal attack and conflict			Yes
Disaster and conflict resolution	Yes	Yes	
Environment	Yes	Yes	Yes

Scheme wise tools for both the sectors are provided in Appendix 3.

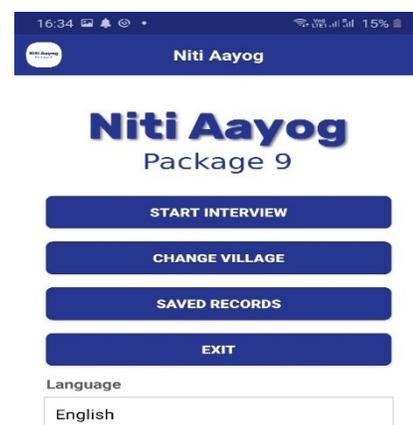
### Translation of Tool

A high quality, rigorous and thoughtful approach to translation is crucial to the success of the survey. The priority for translation is creating equivalent meaning rather than literal translation to ensure that the data collected is valid and comparable. The existing panel of translators, who are experienced in translating survey tools and well versed in vernacular languages as well as English translated the survey tools, which were further checked by Ipsos staff from the respective state before uploading on the application.

### CAPI Data collection:

An application was developed for household survey which can be used to collect data using smart phones and tablets. Following features are embedded on the application:

- Logical flow of questionnaire
- Scheme specific tab
- Offline data collection
- Data saving on the phone and syncing
- Multiple language
- GPS tracking
- Audio recording



### Discussion Guides for FGD

For Focus group discussion, we have developed scheme and state specific discussion guides. The key information areas have been aligned with the KII and Household interviews for the purpose of data triangulation



and addressing data gaps. The duration of the interaction is around 30-40 minutes. With the FGDs happening virtually, the initial phase of rapport building is being shortened; hence the total time has been limited to 30-40 minutes.

#### 3.4.7.1 Pilot test of tools and DG:

A four-step process was followed to do pre-testing for finalisation of tool and methodology.



For pilot test of DGs, officials from Chhattisgarh (non-selected) state were contacted and appointments were taken. Based on availability, interview was conducted telephonically to check the flow of discussion guide, length of interview, and feasibility of conducting interview telephonically. Further, the recordings and transcriptions were checked to develop format and quality protocols for the main interviews.

For FGD, 2 pilot discussions have been carried out for WDC in Bahraich, Uttar Pradesh. It was observed that the respondents were unable to relate to the official scheme names. Hence it was decided to consult the Panchayat Pradhan before starting the group discussion to confirm about the local scheme name and use it to facilitate easier recognition of the schemes by the respondents (villagers/ farmers). During the pilot study, it was also observed that the farmers being busy with their daily schedule, their availability for the group discussion could not be ensured for more than 30 minutes. Hence, the DGs have been revised to accommodate the discussion within the said time limit.

Based on data availability, household survey pilot was conducted in one specific taluk in Tamil Nadu for PDMC scheme. The supervisors took appointment and conducted interview over phone. Researcher well versed with language listened to the live interview and took observation notes on interview flow, time, feedback on specific questions, and sequence. The observations were reviewed and correction on response options were made.

Based on the experiences during the pilots both for KIIs and surveys, the tools were fine-tuned.

#### **Team deployment and training for data collection:**

KIIs were done by scheme experts from KPMG as well as researchers trained in conducting interviews. Ipsos selected researchers by reviewing their experience in conducting in-depth



interviews with government stakeholders. The selected researchers were provided online training on schemes and DG by scheme experts from KPMG. Each researcher was assigned specific scheme for better management of interviews. Post training, they were deployed to listen to live interviews being conducted by experts and take notes to achieve technical clarity on scheme specific interviews. Regional moderators were appointed to carry out the interviews with village Sarpanchs.

The FGDs were conducted in local languages. So, the language requirement was mapped state-wise and accordingly the moderators were appointed for carrying out the FGDs. All the moderators are well experienced in handling groups. State specific moderators have been appointed for the interaction with the farmers/ villagers. After appointment, each of the moderators was briefed on the discussion guide in details. Also, any issue, that cropped up at the time of field surveys, was resolved in consultation with the respective district officials and KPMG.

For Household survey, a central training was conducted by Ipsos researchers for the field managers in India. A detailed field manual consisting of details of tools, application, mode of data collection and quality check procedures was prepared and shared with the team. Further, the field managers conducted training for supervisors and enumerators at field level. The enumerators were provided list of villages (scheme wise), pictorial handouts and details of local names of projects for reference during data collection. This was done to help them avoid any mistake during data collection. Field work has been carried out in 2 phases. Phase 1 was completed before the submission of Mid-Term Report and phase 2 commenced after 16<sup>th</sup> August and continued for almost another one month.

#### 3.4.7.2 Challenges and modifications done during the course of Field Work (FW)

The challenges witnessed across various states and the steps adopted to address the same are detailed below.

**Tamil Nadu** was under prolonged lock down till 31<sup>st</sup> August. In view of the same, the following options were evaluated by the team:

1. Field Teams to check for feasibility of obtaining the e-pass and initiate field work (FW).



2. Wait till 31<sup>st</sup> August till the lock down is lifted and continuously assess feasibility of getting e-pass for team for districts (wherever feasible)
3. Shift the entire sample to Andhra Pradesh and Karnataka

Option 2 was finally adopted; hence the commencement of FW got delayed; however, the entire sample was completed within minimum time possible through deployment of additional resources.

**Manipur** was also under lock down till 31<sup>st</sup> August; so, the field work could not be started on time. Hence, various options (as detailed below) were evaluated by KPMG and IPSOS:

1. Deploy alternative local team in Manipur through known academic institutions or NGOs or other institutions (in view of travel ban and restricted movement of field team)
2. Interact with field officials to seek information on availability of contact numbers; if numbers available, then explore telephonic interviews
3. Complete sample in Assam (other alternative north-eastern states not considered in view of limited scheme implementation/ presence of many of the water resources schemes there)

Eventually, a new team was deployed after training and FW was initiated from 3<sup>rd</sup> September,2020.

In **Uttar Pradesh**, one of the field team members contracted COVID-19. So as per company directive, FW was stopped in Uttar Pradesh. The probable options were explored as a stop-gap solution:

1. To check with another local agency and hire that external agency to get the field work done. In this option, one senior member can be connected over phone during the interview for ensuring desired quality
2. Since inter-state travel is allowed, Ipsos team from neighboring states can travel to U.P. and complete the HH survey in the week
3. If quarantine period gets over by end of the week, complete the survey in first 2-3 days of the 1<sup>st</sup> week of September

Finally, option 3 was adopted and FW has resumed from 1<sup>st</sup> week of September.



### 3.4.8 Progress Monitoring and quality assurance

Quality assurance in fieldwork is one of the most important aspects of any research, as the analysis, interpretation, and strategic implications of the research rely critically on the quality of the data obtained. Ipsos is ISO 20252 certified company for both research and field work that requires that all processes are carried out in accordance with standards laid out in ISO 20252:2006.

**As regards the final delivery of the data and tables, 100% of the records delivered has been quality approved.** The quality control plan involved quality check mechanisms at the data collection level in different manner.

**On-ground check:** In addition to quality check by the Quality Control team post sync of surveys, there were two on-ground checks which were put in place:

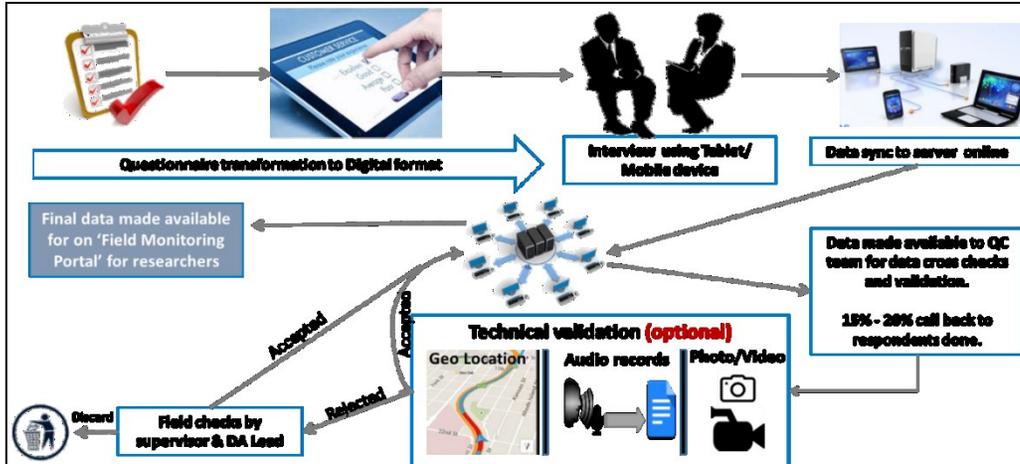
- i. **Accompaniment interview** – For 5% of the interviews, the field supervisors accompanied the interviewers to verify if the questions are administered correctly.
- ii. **Spot check:** 10% of interviews were spot checked by the field supervisor and remarks/ clarification were provided on real-time.

The following forms a part of the spot checks and observation process adhered to by the supervisors:

- Observe some of the interviews, to ensure that the Investigators are conducting themselves well, asking the questions in the right manner, and interpreting the answers correctly
- Meet with each member of the team on regular basis to discuss performance
- Help to solve any problems that interviewer might have with the assigned villages or understanding the concepts in the questionnaire or with difficult respondents.

**Telephonic back check (TBC):** Quality assurance teams ensured quality check of the interview conducted by different investigators on continuous basis. Team leader and Advisor provided key check points to quality assurance team for back check. 100% of the quality checks has been done telephonically (provided telephone numbers are available and numbers were within service) where records for some of the selected questions from the scheme-wise questionnaire are validated with the respondents. Accordingly, interviews were approved/ rejected. A typical process is shown below:





**Portal check:** 100% of the quality checks has been done through the web-portal where audio recordings of the interviews are listened on to and based on which the data is approved or rejected. In the survey application, certain screens/ pages are earmarked for recording of questions. These are used for checking the quality of survey.

The following parameters are considered for verification:

- i. Checking if the questions are administered correctly. In case of probe questions, quality check process to focus if the options are listed correctly.
- ii. Checking if no questions are skipped or missed in the sequence as per the application
- iii. Checking if all option(s) as mentioned by the respondent have been coded appropriately

Initially it was decided to do a 40% telephonic back check and 60% portal check of the interviews conducted. However, during initial internal checks for telephonic backchecks, audio check, GPS lat.- long. and selfie check, a few instances of non-compliances to quality were observed and reported, as detailed below:

- Inconsistencies between audio recording and response recorded
- Difference between survey start date and end date for same entry
- Telephonic backcheck inconsistent with the data recorded
- Audio is blank/ not available on dashboard
- Only enumerator is audible, not respondent
- Unacceptable differences in GPS locations
- Selfie of enumerator instead of respondent



**Hence, it was decided to adopt 100 % quality check of interviews. The parameters considered to be included in the Quality Assurance reports are as follows:**

- State
- District name
- Centre/Village
- Segment/Scheme
- HH Id
- Audio Yes/No
- Any deviation found in responses audio
- Telephonic Back Check (TBC) - Yes/No
- Any deviation found in responses TBC
- GPS Correct Yes/No
- Range of Lat/long points in Meter
- Selfie Yes/No
- Survey status Interview-Accept/Reject

The selected questions that were checked over telephone and or were audio checked are listed below. More focus has been devoted to scheme related questions. Note, the list below involves some scheme specific questions, which were checked as applicable.

Question	Checking Method
Household Information 1	Audio/TBC
Household Information_2	Audio/TBC
Household Information food related	Audio/TBC
Health	Audio/TBC
A Household member details	Audio/TBC
Agricultural Practices	Audio/TBC
Work/activities undertaken under PDMC	Audio/TBC
Water fees	Audio/TBC
Training and Skills development	Audio/TBC
Efficiency and Impact of Micro-Irrigation	Audio/TBC
Awareness and participation	Audio/TBC

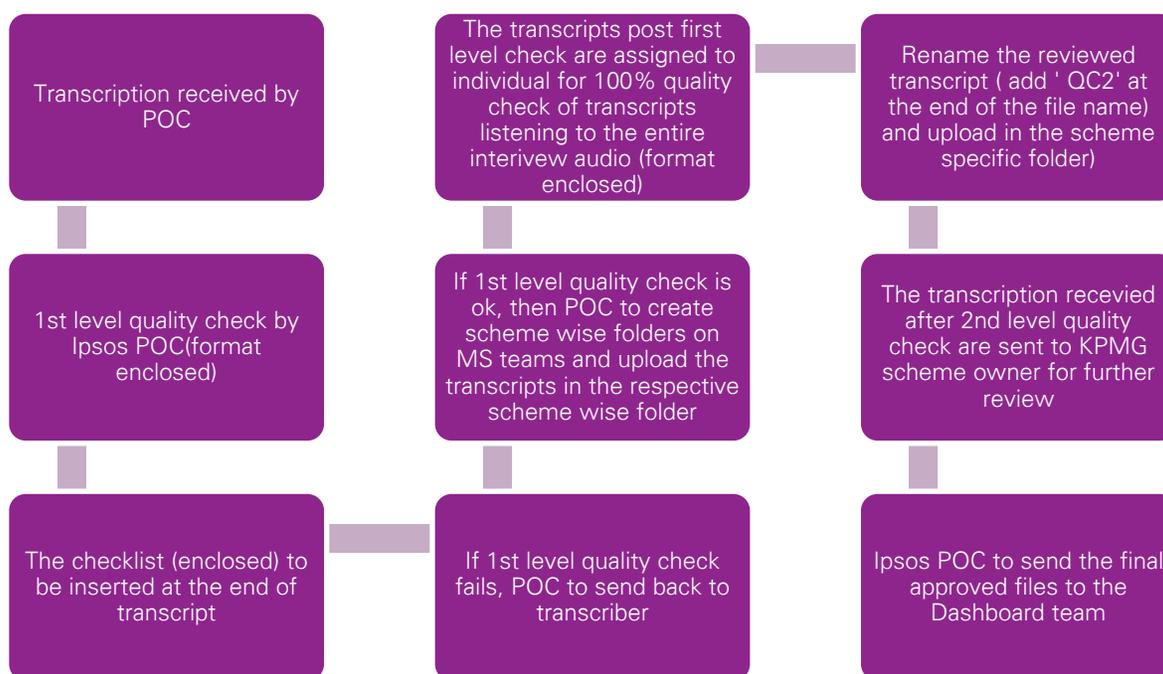


Question	Checking Method
Disaster and conflict resolution	Audio/TBC
Resources and livelihood	Audio/TBC
Livelihood	Audio/TBC
Animal Attack and conflict	Audio/TBC
Environment	Audio/TBC

### Quality Protocol for Qualitative Interview

For the two qualitative components of the evaluation - Key Informant interview with multilevel stakeholders and Focus Group Discussion with the farmers/ villagers etc. the key deliverable is the good quality transcript of the interview. In order to ensure the quality of the transcripts, each transcript has been reviewed at two levels before uploading in the dashboard. To ensure confidentiality of the participants, all personal information has been masked in the transcripts.

The entire process of transcription generation and quality check involve a certain set of activities, which is illustrated in the diagram below:



After receipt of the audio interview, the entire process of two-level quality check is completed in minimum of 3 days before the transcript is uploaded in the dashboard. The quality check template used is shown below:

<b>1<sup>st</sup> LEVEL QUALITY CHECK</b>				
<b>Parameters</b>	<b>Yes (Y) /No (N)</b>	<b>Remarks</b>	<b>Date of 1<sup>st</sup> level review</b>	
Naming format of the file correct or not				
Name of level, scheme, stakeholder designation in a table is mentioned at the beginning				
Time stamp included in the transcript				
Page number inserted				
Review and update Header & footer				
Run basic spell and grammar check				
Missing information – count of how many times (not audible portions, if any, mention in remarks column)				
If transcript is complete or not (e.g. mark no if abruptly ending)				
<b>2<sup>nd</sup> LEVEL QUALITY CHECK</b>				
<b>Parameters</b>	<b>Reviewed (Y/N)</b>	<b>Corrected (Y/N)</b>	<b>Remarks</b>	<b>Date of 2<sup>nd</sup> level review</b>
All the numerical values to be cross checked with audio if found inconsistent				
All incorrect abbreviations to be rectified				
Missing content to be included				

### **Monitoring through dashboard**



A dashboard was developed to update the details of KIIs, FGDs and household surveys, state wise as well as scheme wise and to monitor the progress against target. In addition to this, the dashboard was enabled with features to facilitate quality check.

A snapshot of the portal and dashboard created for monitoring of KIIs, FGDs and surveys is provided below.



Figure 13: Portal and dashboard created for monitoring of KIIs and surveys

### 3.5 Limitations of the study

While KPMG has attempted to undertake the study with requisite diligence on its part, the following can be considered some of the key limitations, which constrained the approach and methodology and/ or outcome planned for the evaluation study.

#### Non-availability of secondary data

One of the key methodologies to be adopted for this study was triangulation of the findings from the primary study (field study) with the findings from the secondary research (literature review). However, in sectors like water resources, for certain schemes or areas of investigation, secondary information is not available. Therefore, in such case, it becomes difficult to triangulate findings from primary studies with secondary sources.

#### Impact of COVID-19 on primary study

At the time when the primary study was being planned, there was prolonged lockdown on account of the COVID-19 pandemic. This impacted the overall planning of KIIs and surveys, resulting in delays and time constraints. As a consequence, interviews or KIIs were conducted



through video or audio conferencing. The overall timelines for the study was impacted on account of this.

### **Cultural and language differences**

Respondents' and interviewers' subjectivity are common issues in social research. The data collection activity covered a range of different contexts which differed widely in terms of social structure, livelihoods, attitudes and perceptions of education. Such differences may get reflected in the data collected through the interviews and the surveys, especially where respondents were asked about their feelings or aspirations. The demographic and geographic spread of the respondents may also lead to differences in the data collected.

Any such challenges were mitigated by enforcing rigorous quality controls and triangulating data from different sources. Additional efforts were also invested in relation to interpretation of outcome results since the states have different first languages and languages of instruction.

### **Time Constraints**

Social research requires adequate time. The time constraints impacted the evaluation timeline and other related activities. The time constraints were a direct result of the lockdown and travel restrictions imposed due to COVID-19 pandemic. As the evaluation study was time-bound, and coordination and other activities consumed more time than planned, some associated activities had to be expedited and might have led to less than desirable outcome.

### **Contextual challenges**

Contextual challenges like disrupted data collection schedule, political unrests at the local level, natural calamities like flooding, widespread demography across the country, accessibility challenges should also be considered. The study has mitigated the risks as far as possible by maintaining flexible data collection schedules and substituting inaccessible sampling points with more accessible ones.

### **Respondent bias**

The study involves many primary interactions with government officials, households, etc. and captures the views as expressed by the stakeholders. The findings may suffer from limitations owing to the respondent bias, which is inherent in any primary survey.

### **Poor Recall**



The respondents were often asked about their experience with the benefits/ provisions of the scheme. However, some of the respondents had poor recall of a few information sought. The information was marked as don't know/can't say and such cases were not reported in the analysis. This was also true for State KIIs conducted for the scheme, where several government officials interviewed lacked first-hand knowledge of the scheme, having been recently appointed into their respective positions. Hence, quality and veracity of data collected from such primary interactions was constrained.

### **Non-existent scientific control group**

This is one of the major limitations of the evaluation study. In the absence of an appropriate control group, it is not possible to establish causality between the intervention (scheme) and outcomes and calculate the effect size of the scheme interventions.

### **Attribution issue**

Especially in water resources sector, often in any village multiple CSS would be running simultaneously, all of which correspond to irrigation. It is usually difficult for a beneficiary to attribute an outcome or benefit to a project of a particular type of CSS and equally difficult for the researcher to comprehend it.

### **Restricted sample size**

Any inference drawn using a sample survey requires a certain sample size to provide a certain level of confidence. In case of this study, a higher sample size would have provided a higher confidence level. However, because of the time and cost involvement in undertaking such a complex evaluation with much higher sample size, the sample size has been maintained at a reasonable level.



# Appendices

## Appendix 1: Details of Key Informant Interviews

Table 16: KII completion details- Scheme wise

### Water Resources

Sl. No.	Level	State/District/Village	Scheme	Designation	Name & designation	Date of interview
1	National	National	Sector	India Officer, International Water Management Institute (IWMI)	Alok Sikka	30 July 2020
2	National	National	Sector	Independent Expert	Mr. Anish Bansal, World Bank Consultant (Independent Expert-Sector)	13 July 2020
3	National	National	Sector	Independent Expert	Hiralal Mendhigiri, Ex-Secretary- Water resources Department, Govt of Maharashtra (Reference received from Secretary MWRRA)	01 August 2020
4	National	National	Sector	Chief Engineer, Urban Water Supply	Pramod Kulkarni, Ex-Chief Engineer- Urban Water Supply (Referred by Secretary MWRRA)	04 August 2020
5	National	National	Sector	Chairman- National Mission for Clean Ganga	Mr. Rajiv Ranjan Mishra, Director General	17 August 2020
6	National	National	Sector	The World Bank Group (WRG 2030)	Mr Ajith Radhakrishnan	19 August 2020
7	National	National	Sector	Member- Water Planning and Projects- Central Water Commission	Sh. S K Halder	20 July 2020
8	National	National	Sector	Additional Secretary [Wing Head (River Development and Project Planning- RD&PP)] (Water Resources Department- Ministry of Jal Shakti)	Ms. Debashree Mukherjee	16 June 2020
9	National	National	Sector	Mission Director- National Water Mission	Sh G Asok Kumar	29 July 2020
10	National	National	Sector	Chairman, Central Ground Water Board (CGWB)	Shri G C Pati	24 July 2020
11	National	National	Sector	Namita Priyadarshree	Joint Secretary (Natural Resources Management and Policy), Department of Agriculture, Cooperation & Farmers Welfare, MoAFW	18 July 2020



Sl. No.	Level	State/District/Village	Scheme	Designation	Name & designation	Date of interview
12	National	National	Sector	Ex-member, Central Ground Water Board Currently Independent Consultant on Groundwater	Dr. Dipankar Saha	14 October 2020
13	State	Andhra Pradesh	Sector	Additional Director, Agriculture	Ramana	30 June 2020
14	State	Andhra Pradesh	Sector	Regional Director, Central Ground Water Board	Shri D Subba Rao, Regional Director, SOUTHERN REGION, Hyderabad	24 June 2020
15	State	Himachal Pradesh	Sector	Regional Director, Central Ground Water Board	Shri Vinod Sharma (Regional Director, Central Ground Water Board)	18 June 2020
16	State	Himachal Pradesh	Sector	Chief Engineer, Urban Water Supply Authority	Naveen Puri (Engineer in chief, Irrigation and Public Health Department), 4 chief engineers work with him	11 August 2020
17	State	Jharkhand	Sector	Addtl, Secretary Dept. of Agriculture-	Mr. Sunil kumar Sinha	25 June 2020
18	State	Jharkhand	Sector	Regional Director, Central Ground Water Board	Shri A.K Agarwal (Regional Director, CGWB, Bihar and Jharkhand)	05 August 2020
19	State	Karnataka	Sector	Regional Director, Central Ground Water Board	Shri Kunhambu, Regional Director (I/c), Central Ground Water Board	26 June 2020
20	State	Karnataka	Sector	Chief Engineer, Urban Water Supply Authority	Sri S. B. Siddanaik	30 June 2020
21	State	Maharashtra	Sector	Chairman, Maharashtra Water Resources Regulatory Authority (MWRRA)	Shri.K.P.Bakshi,Chairman, MWRRA	07 July 2020
22	State	Manipur	Sector	Chief Engineer, Irrigation Dept.	G Rabindro Sharma, Chief Engineer, Water Resource Department, formerly known as irrigation and flood control department	29 June 2020
23	State	Punjab	Sector	Sub divisional officer- Soil conservation Department.	Mr. Dhillon	03 June 2020
24	State	Punjab	Sector	Regional Director, Central Ground Water Board	Shri Anoop Nagar, Regional Director	24 July 2020
25	State	Uttar Pradesh	Sector	Secretary, Agriculture Department	Dr. Devesh Chaturvedi, Principal Secretary, Department of Agriculture	17 June 2020



Sl. No.	Level	State/District/Village	Scheme	Designation	Name & designation	Date of interview
26	State	Bihar	Sector	Chief Engineer, Water Resource Department	Sri Abhay Narayan	01 July 2020
27	State	Maharashtra	Sector	Secretary, Maharashtra Water Resources Regulatory Authority (MWRRA)	Dr. Ramnath Sonawane	09 July 2020
28	State	Andhra Pradesh	Sector	Chief Engineer, Irrigation Department	Dr. P. S. RAGHAVIAH, IFS- State Project Director and Special Commissioner, CADA	16 July 2020
29	State	Andhra Pradesh	Sector	Regional Director, Central Ground Water Board	A. Varaprasad Rao, Director, Ground Water Department, Government of Andhra Pradesh	21 July 2020
30	State	Assam-Bongaigaon	Sector	District Agriculture Officer	Sanjay Sengupta District Agriculture Officer, Bongaigaon Assam	29 July 2020
31	State	Andhra Pradesh	Sector	Chief Engineer, Rural Water Supply Department	1. M.Rajeswara Rao (FAC)- Chief Engineer-II- Chief Engineer-III, Project Director, SWSM 2. R.V.Krishna Reddy(FAC)	12 August 2020
32	State	Manipur	Sector	Joint Secretary, Department of Agriculture	Ms. Laltanpuii Vaanchhong	14 August 2020
33	State	Rajasthan	Sector	Chief Engineer -Urban Water Supply	C.M.Chauhan and Arun Srivastava, Chief Engineer -PHED and TA to CE	14 August 2020
34	State	Orissa	Sector	Chief Engineer -Urban Water Supply	Binod. K. Sahu, Project Director -OWSSB	14 August 2020
35	State	Sikkim	Sector	Chief Engineer-Urban Water Supply	C R Mishra, Chief Engineer, Water Security and PHE Department, Govt of Sikkim	20 August 2020
36	District	Bihar-Nalanda	Sector	District Agricultural Officer	Vighu Vidhyarathi, District Agriculture Officer, Nalanda	30 June 2020
37	District	Assam-Goalpara	Sector	District Agricultural Officer	Prasanjit Bora	03 July 2020
38	District	Punjab-Hoshiarpur	Sector	District Agricultural Officer	Ramesh Sharma	03 July 2020
39	District	Jharkhand-Khunti	Sector	District Agricultural Officer	Ashok Samrat	06 July 2020
40	District	Jharkhand-Ranchi	Sector	District Agricultural Officer	Ashok K Sinha	06 July 2020



Sl. No.	Level	State/District/Village	Scheme	Designation	Name & designation	Date of interview
41	District	Tamil Nadu-Vellore	Sector	District Agricultural Officer	Dixit	06 July 2020
42	District	Uttar Pradesh-Aligarh	Sector	District Agricultural Officer	Mr. N K Sahania	07 July 2020
43	District	Jharkhand-East Singhbhum	Sector	District Agricultural Officer	Mr. Kalindi	15 July 2020
44	District	Punjab-Barnala	Sector	District Agricultural Officer	Dr. Baldeo Singh	28 July 2020
45	District	Karnataka-Bidar	Sector	District Agricultural Officer	Mrutyunjay Patange, District Nodal Officer, Assitant Director, Land Development Officer (Karanja & Bhima)	29 July 2020
46	District	Madhya Pradesh-Damoh	Sector	District Agricultural Officer	R.S. Sharma, DAO	31 July 2020
47	District	Madhya Pradesh-Betul	Sector	District Agricultural Officer	K. P. Bhagat, DAO	31 July 2020
48	District	Assam-Chirang	Sector	District Agriculture Officer	Shri A Narzary District Agriculture Officer, Chirang	04 August 2020
49	District	Assam-Kokrajhar	Sector	District Agriculture Officer	Shri HariKumar Baro District Agriculture Officer, Kokrajhar  Shri Abdul Baten Assistant Director, Agriculture, Kokrajhar	05 August 2020
50	District	Maharashtra-Buldhana	Sector	District Agriculture Officer	Narender Naik, District Agriculture Officer	05 August 2020
51	District	Rajasthan-Tonk	Sector	District Agriculture Officer	Mahesh Kumar Sharma, District Agriculture Officer	05 August 2020
52	District	Manipur-Senapati	Sector	District Agriculture Officer	R. Thekho	07 August 2020
53	District	Assam-Kamrup	Sector	District Agriculture Officer	Mr. Bharat Rajbonshi, District Agriculture Officer, Kamrup District, Assam	07 August 2020
54	District	Maharashtra-Solapur	Sector	District Agriculture Officer	Mr Ravindra Mane, Deputy Director, Agriculture	13 August 2020
55	District	Telangana-Nizamabad	Sector	District Agriculture Officer	Wajid Ada, Assistant Director Agriculture	17 August 2020



Sl. No.	Level	State/District/Village	Scheme	Designation	Name & designation	Date of interview
56	District	Telangana-Narayanpet	Sector	District Agriculture Officer	Sudhakar, DAO- incharge	18 August 2020

## AIBP

Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
1	National	National	AIBP	India Officer, International Water Management Institute (IWMI)	Alok Sikka	30 July 2020
2	National	National	AIBP	Chief Engineer, PMO, Central Water Commission	Shri Yogesh Paithankar	05 August 2020
3	National	National	AIBP	Contractor	Shri Sanjay Daryapurkar Shri Abhijit Joshi	05 August 2020
4	National	National	AIBP	Assistant Professor, WALMI, Aurangabad	Prof Ajit Nirmale	23 August 2020
5	National	National	AIBP	Commissioner, SPR Wing	Shri K Vohra	25 August 2020
6	State	Jharkhand	AIBP	Chief Engineer, Subarnarekha Multipurpose Project, Icha Galudih Complex, WRD	Pradeep Narayan Singh	24 June 2020
7	State	Jharkhand	AIBP	Technical Secretary - Administrator, Subarnarekha Multipurpose Project	Manoj Kumar	24 June 2020
8	State	Karnataka	AIBP	Chief Engineer, Karnataka Neeravari Nigam, Irrigation – Belagavi	Arvind D Kanigal	20 June 2020
9	State	Karnataka	AIBP	Superintending Engineer	Shri K.G.Mahesh	24 June 2020
10	State	Karnataka	AIBP	Director, Monitoring, Central Water Commission Regional Office	Satish Seemakurti	03 June 2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
11	State	Maharashtra	AIBP	Chief Engineer & Joint Secretary, Water Resources Department	Dr Sanjay Belsare	13 June 2020
12	State	Manipur	AIBP	Chief Engineer, Irrigation (major & medium projects)	G Rabindro Sharma	29 June 2020
13	State	Manipur	AIBP	Superintending Engineer, WRD	Govind Sharma	29 June 2020
14	State	Rajasthan	AIBP	Assistant engineer	Ved Prakash (AIBP scheme )	04 June 2020
15	State	Rajasthan	AIBP	Chief Engineer, Water Resource Department	D.N. Sharma	09 June 2020
16	State	Rajasthan-Jalore	AIBP	Superintending/ Executive Engineer	J P Mathur	11 June 2020
17	State	Uttar Pradesh	AIBP	Chief Engineer of Madhya Ganga PMKSY-AIBP project	Mr Awadesh Kumar	19 August 2020
18	State	Uttar Pradesh	AIBP	Director, Monitoring, Central Water Commission Regional Office	Anupam Prasad	15 June 2020
19	State	Punjab	AIBP	Director, Monitoring, Central Water Commission Regional Office	Shri Shiv Kumar Sharma	05 June 2020
20	State	Andhra Pradesh	AIBP	Director Monitoring, CWC, Regional Office	M. K. Srinivas	12 June 2020
21	State	Assam	AIBP	Superintending Engineer/ Executive Engineer, WRD	Shri Tapan Saikia	13 June 2020
22	State	Assam	AIBP	Superintending Engineer/ Executive Engineer, WRD	Shri Maidul Islam Chowdhury	16 June 2020
23	State	Jharkhand	AIBP	Director, Monitoring, Ranchi office	Akhilesh Jha	12 June 2020
24	State	Rajasthan	AIBP	Director, Monitoring, Central Water Commission Regional Office	SD Sharma	15 June 2020
25	State	Punjab	AIBP	Superintending Engineer/ Executive Engineer	Sh. Narender Kumar Garg	01 July 2020
26	State	Andhra Pradesh	AIBP	Executive Engineer, WRD, Musurumulli & Pushkara	G. Srinivasulu Reddy	25 June 2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
27	State	Andhra Pradesh	AIBP	Superintending Engineer, TTPR Circle, Vizianagaram, Thotapalli & TRTS	K. Poleswara Rao	27 June 2020
28	State	Andhra Pradesh	AIBP	Superintending Engineer, TTPR Circle, Tadipudi	B.Veera Kumar	18 July 2020
29	State	Andhra Pradesh	AIBP	Superintending Engineer, Left Main canal, Musurumulli	Shri Srinivas Yadav	16 July 2020
30	State	Andhra Pradesh	AIBP	Superintending Engineer, Construction Circle, Projects, Gundlakamma	N. Nagesh	24 June 2020
31	State	Assam-Bongaigaon	AIBP	District Agriculture Officer, Bongaigaon Assam	Sanjay Sengupta	30 June 2020
32	State	Bihar	AIBP	Chief Engineer, Water Resource Department	Sri Om Prakash Singh	12 July 2020
33	State	Bihar	AIBP	Chief Engineer, Water Resource Department	Sri Abhay Narayan	01 July 2020
34	State	Bihar	AIBP	Superintending Engineer, Water Resource Department	Sri Ashok Kumar Chowdhury	01 July 2020
35	State	Assam+Manipur	AIBP	Director Monitoring, CWC Regional Office	Ankit Dudeja	01 July 2020
36	State	Maharashtra	AIBP	EE, Khadakpurna Project Division, Khadakpurna Project	Shri Mahadev Kadam	20 July 2020
37	State	Maharashtra	AIBP	EE, Dhombalkaawadi Project Division Satara	Mr. Hirey	10 July 2020
38	State	Jharkhand-East Singhbhum	AIBP	District Agriculture Officer	Mr. Mithilesh Kalindi	15 July 2020
39	State	Punjab	AIBP	District Agriculture Officer	Dr. Baldeo Singh	24 July 2020
40	State	Maharashtra	AIBP	Executive Engineer, Irrigation Project Construction Division (Chiplun), Gadnadi Project	Shri Ganesh Salgar	27 July 2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
41	State	Maharashtra	AIBP	Superintending Engineer, Ratnagiri Irrigation Circle (Kuarbav, Ratnagiri), Gadnadi Project	Smt Sau Vaishali Narkar	27 July 2020
42	State	Maharashtra	AIBP	Executive Engineer, Warna Canals Division No. 1, Islampur, Warna Project	Shri Vikas Patil	27 July 2020
43	State	Maharashtra	AIBP	Superintending Engineer, Yawatmal Irrigation Project Circle, Bembala Project	Shri H B Mendhe	27 July 2020
44	State	Maharashtra	AIBP	Executive Engineer, Bembala Canal Division, Yavatmal, Bembala project	Sri Kondawar	27 July 2020
45	State	Maharashtra	AIBP	Chief Engineer, TIDC Jalgaon, Waghur and Lower Panzara Projects	Shri Anand More	29 July 2020
46	State	Maharashtra	AIBP	Superintending Engineer, South Konkan Irrigation Project Circle, Tillari project	Shri Milind Naik	29 July 2020
47	State	Maharashtra	AIBP	Superintending Engineer Beed Irrigation Project Circle Parli (V), Upper Kundalika Medium Project	Shri I.M. Chishti	06 August 2020
48	State	Maharashtra	AIBP	Executive Engineer Beed Irrigation Project Circle Parli (V), Upper Kundalika Medium Project	Shri S.V.Jewalikar	06 August 2020
49	State	Maharashtra	AIBP	Executive Engineer, Sangola Branch Canal	Shri. Godbole	30 July 2020
50	State	Maharashtra	AIBP	Executive Engineer, Medium Project Divisional Unit, Ambadpal, Aruna project	Shri Rajan Davari	01 August 2020
51	State	Maharashtra	AIBP	Executive Engineer, Medium Project Division-Gondia, Bawanthadi Project	Shri Ankur Kapase	01 August 2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
52	State	Maharashtra	AIBP	CE Water Resources Dept, Konkan Region, Mumbai (Tillari, Nardave, Aruna, Gadnadi and Arjuna projects)	Shri Santosh Tirmanwar	03 August 2020
53	State	Maharashtra	AIBP	Superintending Engineer, DIPC Dhule, Lower Panzara Project	Shri Amle	03 August 2020
54	State	Maharashtra	AIBP	Superintending/ Executive Engineer	Shri Uppalwad	04 August 2020
55	State	Maharashtra	AIBP	Executive Engineer, Minor Irrigation Division (Oras Sindhudurgnagari), Naradave project	Shri Makarand Makal	06 August 2020
56	State	Karnataka	AIBP	Superintending Engineer, Karanja and Bhima project	Mr.Halinge	13 August 2020
57	State	Karnataka	AIBP	Superintending/ Executive Engineer	Sri Ramesh	14 August 2020
58	State	Madhya Pradesh	AIBP	, Superintending Engineer, WRD (Bariyaarpur & Singpur Projects)	Mr. R.S. Kuswah	17 August 2020
59	State	Gujarat	AIBP	Chief Engineer, Kutch Branch Canal, SSNNL	Shri S U Chauhan	15 August 2020
60	State	Uttar Pradesh	AIBP	Superintending Engineer, Madhya Ganga canal, Meerut	Shri K M Kansal	19 August 2020
61	State	Gujarat	AIBP	Superintending Engineer, Circle 1 Gandhidham, Sardar Sarovar (Kutch branch)	Shri G M Bhagat	19 August 2020
62	State	Uttar Pradesh	AIBP	Superintending Engineer, Madhya Ganga canal, Roorkee	Sri Bhartendu Gaud	21 August 2020
63	State	Gujarat	AIBP	Executive Engineer, Sardar Sarovar Canal	Mr. Kirit Soni	25 August 2020
64	District	Karnataka-Belgaum	AIBP	,Executive Engineer, Sri Rameswara Project	Sh BS Patil	02 July 2020
65	District	Jharkhand-Saraikela-Kharswan	AIBP	Superintending Engineer/ Executive Engineer	Sh Kumar Arvind	02 July 2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
66	District	Maharashtra-Satara-Kudali	AIBP	Executive Engineer, Dhom Canal Dn.2 Satara, Kudali Project	Shri. Chavare	04 August 2020
67	District	Maharashtra	AIBP	Superintending Engineer, Amravati Irrigation Project Circle, Lower Pedhi Project	Mr. A.T.Deogade	05 August 2020
68	District	Maharashtra	AIBP	Executive Engineer, Waghur Dam Dvn Jalgaon, Waghur project	Mr. Varhade	05 August 2020
69	District	Assam-Chirang	AIBP	District Agriculture Officer	Shri A Narzary	04 August 2020
70	District	Assam-Kokrajhar	AIBP	District Agriculture Officer	Shri HariKumar Baro	05 August 2020
71	District	Rajasthan-Barmer	AIBP	Agriculture Officer	Shri Padam Singh Bhati	06 August 2020
72	District	Maharashtra-Jalgaon	AIBP	District Agriculture Officer	Shri Sambhaji Thakur	08 August 2020
73	District	Rajasthan-Sri Ganganagar	AIBP	District Agriculture Officer	Shri G R Matoriya	10 August 2020
74	District	Manipur-Imphal East	AIBP	District Agriculture Officer, Imphal East (Dolaithabi project)	Shri Laltinmang DOUNGEL	10 August 2020
75	Village	Punjab-Mansa-Bajewala	AIBP	Gram Panchayat Member	Sri Rawal Singh	10 August 2020
76	Village	Punjab-Mansa-Bajewala	AIBP	Gram Panchayat Sarpanch	Sri Bhagwan Singh	11 August 2020
77	Village	Andhra Pradesh-East Godavri	AIBP	Sarpanch	Sri Ammaji	17 August 2020
78	Village	Karnataka - Belgaum - Babujikoappa ( Kaujangi)	AIBP	Shav	Mahadevappa	18 August 2020
79	Village	Karnataka - Belgaum - Rameshwara canal - hulkund village	AIBP	GP president	Benakappa	18 August 2020
80	Village	Assam-Kokrajhar-DakhinkiriGaon	AIBP	Sarpanch	Istifan Murmu	19 August 2020
81	Village	Andhra Pradesh-East Godavari-Talluru	AIBP	Sarpanch	Dora Babu	30 August 2020
82	Village	Maharashtra-Satara-Katarkhatav	AIBP	Sarpanch	Bagal	03 September 2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
83	District	Madhya Pradesh-Chhatarpur	AIBP	Superintending Engineer, WRD (Bariyaarpur & Singpur Projects)	Mr. R.S. Kuswah	17 August 2020
84	State	Uttar Pradesh	AIBP	Superintending Engineer, Madhya Ganga Canal, Roorkee	Mr. Bhartendu Gaud	19 August 2020

## CADWM

Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
1	National	National	CADWM	Member- Water Planning and Projects- Central Water Commission	Mr. S. K. Halder, Member- Water Planning and Projects- Central Water Commission	21 July 2020
2	State	Manipur	CADWM	Additional Chief Engineer, CAD department	Shri Suresh Singh	29 June 2020
3	State	Uttar Pradesh	CADWM	Director, Monitoring, Central Water Commission Regional Office	Anupam Prasad, Chief Engineer Upper Ganga Basin Organization, Lucknow	15 June 2020
4	State	Assam	CADWM	Superintending Engineer/ Executive Engineer, WRD	Shri Tapan Saikia, Executive Engineer (WRD), Borolia project	13 June 2020
5	State	Assam	CADWM	Superintending Engineer/ Executive Engineer, WRD	Shri Maidul Islam Chowdhury, Assistant Engineer (WRD), Champamati project	16 June 2020
6	State	Andhra Pradesh	CADWM	Commissioner/ Director [Department: Command Area Development Authority]/ Chief Engineer [Respective line department]	Anam Naidu	09 June 2020
7	State	Assam	CADWM	Commissioner/ Director [Department: Command Area Development Authority]/ Chief Engineer [Respective line department]	Sri Brajen Malakar, Chief Engineer, Minor Irrigation, Assam	20/06/2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
8	State	Bihar	CADWM	Commissioner/ Director [Department: Command Area Development Authority]/ Chief Engineer [Respective line department]	RAKESH KUMAR, S.E., COMMAND AREA DEVELOPMENT DIRECTORATE, PATNA	08 July 2020
9	State	Karnataka	CADWM	Commissioner/ Director [Department: Command Area Development Authority]/ Chief Engineer	Sri Suresh-Administrator CADA, Sri Rameswara LIS	16 June 2020
10	State	Karnataka	CADWM	Assistant Engineer, Upper Bhadra Project	Ms. Harshita	06 July 2020
11	State	Rajasthan	CADWM	Superintending Engineer, Gang canal, Rajasthan	Gopal Bharti	23 June 2020
12	State	Rajasthan	CADWM	Director, Monitoring, Central Water Commission Regional Office	SD Sharma, Director Monitoring, CWC	15 June 2020
13	State	Assam+Manipur	CADWM	Director Monitoring, CWC Regional Office	Ankit Dudeja, Deputy Director, CWC Regional Office	01 July 2020
14	State	Karnataka	CADWM	Superintending Engineer	Shri Halinge, SE Karanga and Bheema project	20 July 2020
15	State	Maharashtra	CADWM	Superintending/ Executive Engineer	Mr. Kapse, Executive Engineer, BHAWANTHADI	10 July 2020
16	State	Maharashtra	CADWM	Superintending/ Executive Engineer	Mr. GAYEKWAD, Executive Engineer, TILLARI,	10 July 2020
17	State	Maharashtra	CADWM	Superintending/ Executive Engineer	Mr. MISAL, Superintending Engineer, TARALI + DHOM BAKAWADI + MORNA + KUDALI	10 July 2020
18	State	Maharashtra	CADWM	Chief Engineer/ Commissioner	Mr. TAWAR, Chief Engineer, LOWER DUDHNA & NADUR MADHMESWAR PH 2 & UPPER PEN GANGA	10 July 2020
19	State	Maharashtra	CADWM	Chief Engineer/ Commissioner	Mr. RAJPUT, Chief Engineer, TARALI + DHOM BAKAWADI	13-07-2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
20	State	Maharashtra	CADWM	Superintending/ Executive Engineer	Mr. Pravin Kohle Executive Engineer, Tillari Projects	14 July 2020
21	State	Maharashtra	CADWM	Superintending/ Executive Engineer	Shri Sanjay Chopade, SE, Tillari (water management)	13 July 2020
22	State	Maharashtra	CADWM	Superintending/ Executive Engineer	Sri Prasad Lamb/ EE/ Lower Dudhna	15 July 2020
23	State	Maharashtra	CADWM	Superintending/ Executive Engineer	Shri Sabbinwar/ SE/ Upper penganga/ Management of CADWM	15 July 2020
24	State	Maharashtra	CADWM	Executive Engineer	Vijay Ladh, EE, Nandur Madhmeshwar Ph-II	09 July 2020
25	State	Karnataka	CADWM	Commissioner, CADA	Shanta Kumar Administrator (CE) Cauveri Basin	20 July 2020
26	State	Bihar	CADWM	Superintending Engineer	Raju Kumar Sinha , SE Command Area Development Circle	21 July 2020
27	State	Bihar	CADWM	Executive Engineer	Brinda Prasad , EE, Command Area Development	21 July 2020
28	State	Bihar	CADWM	Superintending Engineer	Ishwar Chandra Thakur, Director(CE) WALMI	20 July 2020
29	State	Karnataka	CADWM	District Agriculture Officer	Ms Jayabharathi, Assistant Director, Agriculture, CADA, Cauvery basin projects	20 July 2020
30	State	Karnataka	CADWM	Asssitant Director, Land Development Officer (Karanja & Bhima)	Mrutyunjay Patange	23 July 2020
31	State	Maharashtra	CADWM	Superintending/ Executive Engineer	Mr. Kahalekar Executive Engineer, Upper Pen Ganga project	29 July 2020
32	State	National	CADWM	Ex-Secretary- Water resources Department, Govt of Maharashtra (Reference received from Secretary MWRRA)	Shri Hiralal Mendhigiri (Retd.) Secretary, Water resources Department, Maharashtra	01 August 2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
33	State	Maharashtra	CADWM	Superintending/ Executive Engineer	Shri Amle Superintending Engineer, DIPC Dhule, Lower Panzara Project	03 August 2020
34	State	Punjab	CADWM	Superintending/ Executive Engineer	Shri Shami Kumar Singla Superintending Engineer, PWRMDC	06 August 2020
35	State	Madhya Pradesh	CADWM	Superintending/ Executive Engineer	Shri Indu Bhusan Nayak Executive Engineer, Water Resources Dept., Barriyarpur and Singhpur Projects	11 August 2020
36	State	Madhya Pradesh	CADWM	Superintending/ Executive Engineer	Shri RD Retmele Executive Engineer, Sindh Phase 2 project	20 August 2020
37	State	Madhya Pradesh	CADWM	Superintending/ Executive Engineer	Shri Ashutosh Bhagat Executive Engineer, Sindh Phase 2 project	13 August 2020
38	State	Madhya Pradesh	CADWM	Superintending/ Executive Engineer	Shri Manoj Tiwari Executive Engineer, Bansagar project	14 August 2020
39	State	Madhya Pradesh	CADWM	CADA Administrator	Shri Y R Patil, SE, Project Administrator & SE, CADWM Bhopal, (Sagad and Sanjay Sagar Projects)	14 August 2020
40	State	Gujarat	CADWM	Chief Engineer	Shri S U Chauhan Chief Engineer, Kutch Branch Canal, SSNNL	15 August 2020
41	State	Madhya Pradesh	CADWM	Superintending Engineer	Sri Tripathi Superintending Engineer, Bansagar canal	19 August 2020
42	State	Madhya Pradesh	CADWM	Chief Engineer	M R Mittal Project Administrator Datia, Sindh Ph-II	20 August 2020
43	State	Madhya Pradesh	CADWM	Assistant Engineer	Dinesh Dhody	20 August 2020
44	District	Karnataka- Chitra Durga	CADWM	Executive Engineer (Ranne Bennur)	M.V.Narayanaswami	01 July 2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
45	District	Assam-Udalguri	CADWM	Superintending Engineer/ Executive Engineer	Sh Joynal Abedin + Sh Nabakumar Bayan Executive Engineer, Dhansiri Project, Canal -II and Canal I Division + Sh Bijay Kumar, Dhansiri Project Weir division	03 July 2020
46	District	Assam-Udalguri	CADWM	District Agricultural Officer	Sri Deepak Meedhi, District Agriculture Officer	06 July 2020
47	District	Madhya Pradesh-Chhatarpur	CADWM	District Agriculture Officer	Dr. Suresh Kumar Patel SDAO, Chhatarpur district	13 August 2020
48	Village	Madhya Pradesh-Chhatarpur	CADWM	WUA President	Sri Prakash Chandra Yadav WUA President, Bachhaun village, Chhatarpur district, (Barriyarpur project)	13 August 2020
49	Village	Madhya Pradesh-Chhatarpur	CADWM	WUA President	Sri Ramratan Patel WUA President Dumkheda village, Chhatarpur (Barriyarpur project)	13 August 2020
50	Village	Madhya Pradesh-Chhatarpur	CADWM	WUA President	Sri Kapoor Singh WUA President Basantpur (Chandla), Chhatarpur (Singhpur project)	13 August 2020
51	Village	Assam-Kokrajhar-Kakargoan	CADWM	Sarpanch	Sri Bhanu Ram Basumatary	16 August 2020
52	Village	Karnataka-Belgaum	CADWM	Vice president of water users association	Sri Keshav	25 August 2020
53	Village	Maharashtra-Satara-Wakhri	CADWM	sarpanch	Sri Dadaso Garad	26 August 2020
54	Village	Maharashtra-Satara-Mayni	CADWM	sarpanch	Sri Sachin Gudage	3 September 2020



## SMI

Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
1	National	National	SMI	Chief Engineer, Project Monitoring Organisation, CWC	Anant Kumar Jha, Economics Directorate, Preparatory Organization (PPO) [Central Water Commission]	16 June 2020
2	National	National	SMI	Senior Joint Commissioner, DoWR, RD and Ganga Rejuvenation	Rahul Kumar Singh, Senior Joint Commissioner, MI	16-07-2020
3	State	Manipur	SMI	Secretary, Water Resources and Minor Irrigation	Mrs. Jacintha Larzarus	06 June 2020
4	State	Assam	SMI	Chief Engineer, Minor Irrigation	Sri Brajen Malakar, Chief Engineer, Minor Irrigation, Assam	30 May 2020
5	State	Himachal Pradesh	SMI	Director, Monitoring, Central Water Commission Regional Office	Mr. O.P. Gupta	17-Jul-2020
6	State	Jharkhand	SMI	Director, Monitoring, Central Water Commission Regional Office	Mr. Akhilesh Jha, Director, CWC Monitoring Regional Office	15 June 2020
7	State	Karnataka	SMI	Secretary: Irrigation and Water Resources Department	Sri Mrithyunjaya Swamy, Secretary, Minor Irrigation	15 June 2020
8	State	Manipur	SMI	Chief Engineer, Minor Irrigation	Mr. Brajendra, Chief Engineer, Minor Irrigation and S. Dayanand, Executive Engineer	06 June 2020
9	State	Assam	SMI	Director Monitoring, CWC, Regional Office	Ankit Dudeja, Deputy Director, CWC Regional Office	27-06-2020
10	State	Madhya Pradesh	SMI	Supreintending Engineer, PMKSY	Mr. Parihar	10 August 2020
11	State	Uttarakhand	SMI	Chief Engineer, Minor Irrigation	Mr. Tiwari, Chief Engineer, Minor Irrigation	31 July 2020
12	State	Manipur	SMI	Director, Watershed Department	Ms. LaltanPuii Vanchhong, Director, PMKSY Agriculture	30 July 2020
13	State	Uttarakhand	SMI	Director, CWC Regional Office	Mr. G.L Bansal	30 July 2020
14	State	Madhya Pradesh	SMI	State Additional Director- PMKSY Nodal Officer	Suman Prasad	04 August 2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
15	State	Himachal Pradesh	SMI	PMKSY Nodal Officer	Mr. Ashwini	03 August 2020
16	State	Jammu & Kashmir	SMI	Chief Engineer	Mr. Iftkar	10 August 2020
17	State	Meghalaya	SMI	Chief Engineer, Minor Irrigation	Mr. W.M.M Law, Chief Engineer, Water Resources	14 August 2020
18	State	Bihar	SMI	Supreintending Engineer, Monitoring	Mr. Ravinder Kumar Sinigh	16 June 2020
19	State	Himachal Pradesh	SMI	Supreintending Engineer, Minor Irrigation, Himachal Pradesh	Mr. Hemant Tanwar	01 July 2020
20	State	Madhya Pradesh	SMI	Deputy Director, CWC Regional Office	Mr. Mahesh Gupta	22 July 2020
21	State	Bihar	SMI	Director, CWC Regional Office, Bihar	Sanjiv Kumar	27 July 2020
22	District	Assam-Baska	SMI	Executive Engineer	Tapan Saikia, EE, Borolia Division, Baska District	08 June 2020
23	District	Assam-Kamrup	SMI	Executive Engineer	Kamal Goswami, EE, Guwahati West Division, Kamrup District	10 June 2020
24	District	Assam-Baska	SMI	District Agriculture Officer	Mr. Swargiary, District Agriculture Officer	13 June 2020
25	District	Manipur-Senapati, Tamenglong, Ukhrul,	SMI	Executive Engineer	Mr. L Chetan, Executive Engineer, Manipur	24-06-2020
26	District	Manipur-Thoubal	SMI	Executive Engineer	Mr. Dayanan, Executive Engineer, Thoubal, Manipur	27-06-2020
27	District	Assam-Kamrup	SMI	1. District Agriculture Officer 2. Agriculture Engineer	1. Mr. Bharat Rajbonshi, District Agriculture Officer, Kamrup District, Assam 2. Dilip Barua	07 August 2020
28	District	Bihar-Kaimur	SMI	Executive Engineer, Minor Irrigation	Mr. Ramanuj Prashad	07 July 2020
29	District	Bihar-Patna	SMI	Executive Engineer, Irrigation	Mr. Sarvesh Kumar Chaudhary	09 July 2020
30	District	Himachal Pradesh-Solan	SMI	District Executive Engineer, Irrigation	Punnet Sharma	28 July 2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
31	District	Uttarakand-Chamoli	SMI	Executive Engineer, Minor Irrigation	Dipankar Bharti, Executive Engineer, Minor Irrigation	29 July 2020
32	District	Uttarakand-Nainital	SMI	Executive Engineer, Minor Irrigation	Mr. Govardhan Singh, Executive Engineer, Minor Irrigation	29 July 2020
33	District	Uttarakhand-Chamoli	SMI	District Agriculture Officer	Mr. R.K. Bohray, DAO, Chamoli	31 July 2020
34	District	Uttarakhand-Nanital	SMI	District Agriculture Officer	Dhanpat Kumar	04 August 2020
35	District	Madhya Pradesh-Rajgarh	SMI	DAO& Horticulture Director	Mr. Harish Malvia	06 August 2020
36	District	Madhya Pradesh-Betul	SMI	Executive Engineer	Mr. A. K. Daheria	07 August 2020
37	District	Manipur-Senapati	SMI	DAO	R. Thekho	07 August 2020
38	District	Himachal Pradesh	SMI	1. District Agriculture Officer 2. Sub Divisional officer of Soil Conservation	1. Mr. Atul Dogra 2. AMit Kumar	08 August 2020
39	District	Meghalaya-West Garo Hills	SMI	Executive Engineer	Mr. T.L.R. Marak, Executive Engineer, West Garo Hills	14 August 2020
40	District	Himachal Pradesh-Solan	SMI	DAO	Dr. Rajesh Kousik	18 August 2020
41	District	Meghalaya-West Khasi Hill	SMI	EE	Mr. Nadol Shanbornand	20 August 2020
42	District	Manipur-Thoubal	SMI	District Agriculture Officer, Thoubal, Manipur	Mr. Jay Kumar	09 July 2020
43	District	Himachal Pradesh-Una	SMI	Executive Engineer, Una	Dr. Shyam Sharma	28 July 2020
44	District	Madhya Pradesh-Betul	SMI	District Agriculture Officer, Betul, Madhya Pradesh	Mr. K.P Bhagat	31 July 2020
45	District	Madhya Pradesh-Raigarh	SMI	Executive Engineer, Raigarh, Madhya Pradesh	Mr. A. K Pandey	04 August 2020
46	District	Assam-Bongaigaon	SMI	Sarpanch		08 August 2020
47	District	Meghalaya-South West Garo Hills	SMI	Executive Engineer	Mr. Rajiv Armora	20 August 2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
48	District	Meghalaya-South Garo Hills	SMI	Executive Engineer	Mr. K Lamare	20 August 2020
49	District	Meghalaya-East Garo Hills	SMI	Executive Engineer	Mr. Pradeep Kumar Halden	20 August 2020
50	District	Meghalaya-East Garo Hills	SMI	District Agriculture Officer	Mr. S. N. Mark	21 August 2020
51	District	Meghalaya-South West Garo Hills	SMI	District Agriculture Officer	Mr. A.Mondal	21 August 2020
52	Village	Assam-Kamrup-Kukurmara Village	SMI	Sarpanch	Joyonta Bora	06 August 2020
53	Village	Assam-Bongaigaon-Bagar gaon	SMI	Sarpanch	Suran Ch Rai	07 August 2020
54	Village	Himachal Pradesh-UNA-Village Polian	SMI	Sarpanch	Raj Kumari	11 August 2020
55	Village	Madhya Pradesh-Betul-Ranipur Dam - Kaiya Koiral village	SMI	Ex WUA member	Umesh Kumar	11 August 2020
56	Village	Bihar-Kaimur-Dihra Village-Sondera Payen	SMI	Mukhiya	Dhanoj Kumar	11 August 2020
57	Village	Madhya Pradesh-Rajgarh - Amrutpura Village-Mundla Tank	SMI	Sarpanch	Hemraj Rahaliya	11 August 2020
58	Village	Uttarakhand-Chamoli - Jakhadi Village	SMI	Village representative, Jakhadi Gram Panchayat	Chandra Mohan	12 August 2020
59	Village	Uttarakhand - Nainital-Gouriyadev village	SMI	Sarpanch	Ram Singh Negi	12 August 2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
60	Village	Himachal Pradesh-Solan-Kashmirpur	SMI	Sarpanch	Gurmukh Singh	18 August 2020

## RRR

Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
1	National	National	RRR	Chief Engineer, Project Monitoring Organisation, CWC	Anant Kumar Jha, Economics Directorate, Preparatory Organization (PPO) [Central Water Commission]	17 June 2020
2	National	National	RRR	Senior Joint Comissioner, DoWR, RD and Ganga Rejuvenation	Rahul Kumar Singh, Senior Joint Commissioner, MI	16 June 2020
3	State	Andhra Pradesh	RRR	Chief Engineer (Irrigation and Water Resources department)	Mr. Malikarjuna Reddy and Mr. Shiv Prasad Reddy, Chief Engineer, MI and Additional CE	10 June 2020
4	State	Manipur	RRR	Chief Engineer, Irrigation and Water Resources Department	S. Albert, Chief Engineer, Water Resources and Irom Rohit, Executive Engineer	06 June 2020
5	State	Rajasthan	RRR	Director, Monitoring, Central Water Commission Regional Office	SD Sharma, Director Monitoring, CWC	04 June 2020
6	State	Rajasthan	RRR	Chief Engineer, Irrigation and Water Resources Department	Mr. Aseem Markande, Chief Engineer, Water Resources, Rajasthan, Jaipur	23 June 2020
7	State	Rajasthan	RRR	Chief Engineer	Shri Rajiv Cowdhary, Shri Rajesh Tepan, Shri Bhuvan Bhaskar Agrawal, Chief Engineer, WR Zone Kota, Jodhpur and Updaipur	23 June 2020
8	State	Bihar	RRR	Superintending Engineer, Monitoring	Sri Ravinder	01 July 2020
9	State	Manipur	RRR	Director, State Watershed Department	Mr. Abhishek Sinha, PMKSY Nodal Officer	14 July 2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
10	State	Manipur	RRR	Secretary, Agriculture Department	Ms. LaltanPuii Vanchhong, Director, PMKSY, Agriculture	30 July 2020
11	State	Madhya Pradesh	RRR	State Additional Director- PMKSY Nodal Officer	Suman Prasad	04 August 2020
12	State	Telangana	RRR	Cheif Engineer	Mr. Kodimala Veraiah	12 August 2020
13	State	Madhya Pradesh	RRR	Chief Engineer	Mr. Shishir Kushwaha, Superintending Engineer, RRR	13 August 2020
14	State	Meghalaya	RRR	Chief Engineer	Mr. W.M.M Law, Chief Engineer, Water Resources	14 August 2020
15	State	Telangana	RRR	Regional Director, CWC Regional Office	Mr. Raghuram, Regional Director, CWC Regional Office	14 August 2020
16	State	Tamil Nadu	RRR	Deputy Director, Agriculture	Tmt Jeyalakshmi	24 July 2020
17	District	Andhra Pradesh-Prakasam	RRR	District Level Implementation Agency	Sri Lakshmi Reddy, Executive Engineer, Ongole, Prakasam district.	19 June 2020
18	District	Rajasthan-Sirohi	RRR	District Level Implementation Agency	Sh. Prakash Chand Raigar, Executive Engineer, Sirohi District.	21 June 2020
19	District	Rajasthan-Bhilwara	RRR	District Level Implementation Agency	Sh. Akhtar Jamil, Executive Engineer, Bhilwara District	20 June 2020
20	District	Manipur-Imphal East	RRR	District Level Implementation Agency	Iram Royal, Executive Engineer, RRR	20 June 2020
21	District	Tamil Nadu-Vellore	RRR	CEO, Zila Parishad	Mr. M. Shanmugam, Executive Engineer, Upper Palar Basin Division Vellore, Tamil Nadu	22 July 2020
22	District	Tamil Nadu-Virudhunagar	RRR	CEO, Zila Parishad	Mr. K. Guruswamy, Executive Engineer, Vaipar Basin Division Virudhunagar, Tamil Nadu	29 June 2020
23	District	Bihar-Nalanda	RRR	CEO, Zila Parishad	Mr. Rajesh Kumar, Executive Engineer, Nalanda, Bihar	02 July 2020
24	District	Bihar-Patna	RRR	CEO, Zila Parishad	Mr. Sarvesh Kumar Chaudhary, Executive Engineer, Patna, Bihar	26 June 2020
25	District	Bihar-Nalanda	RRR	District Level Implementation Agency	Vighu Vidhyarathi, District Agriculture Officer, Nalanda	30 June 2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
26	District	Tamil Nadu-Vellore	RRR	District Level Implementation Agency	Mr. M.P Dixit, District Agriculture Officer, Vellore, Tamil Nadu	03 July 2020
27	District	Bihar-Patna	RRR	CWC Director	Sanjiv Kumar	27 July 2020
28	District	Madhya Pradesh-Bhopal	RRR	CWC Deputy Director	Mahesh Gupta	23 July 2020
29	District	Madhya Pradesh-Betul	RRR	District Agriculture Officer, Betul, Madhya Pradesh	Mr. K. P. Bhagat, DAO, Betul	31 July 2020
30	District	Madhya Pradesh-Damoh	RRR	District Agriculture Officer, Damoh, Madhya Pradesh	Mr. R.S. Sharma, DAO, Damoh	31 July 2020
31	District	Rajasthan-Tonk	RRR	Executive Engineer	Mr. Gajanand Samaria, Executive Engineer, Tonk	31 July 2020
32	District	Manipur-Imphal East	RRR	DAO	Laltimang	03 August 2020
33	District	Rajasthan-Tonk	RRR	DAO	Mahesh Kumar Sharma	05 August 2020
34	District	Madhya Pradesh-Betul	RRR	Executive Engineer	Mr. A. K. Daheria	07 August 2020
35	District	Madhya Pradesh	RRR	District Agriculture Officer	Mr. S.K Jatav	12 August 2020
36	District	Meghalaya-West Garo Hills	RRR	Executive Engineer	Mr. T.L.R. Marak, Executive Engineer, West Garo Hills	13 August 2020
37	District	Telangana-Khammam	RRR	Executive Engineer	EE Narsimah Rao	14 August 2020
38	District	Telangana - Bhadradi kothagudem	RRR	DAO	MR.Abhimanudu	18 August 2020
39	District	Telangana - Siddipet	RRR	District Executive Engineer	Mr. Srinivas	18 August 2020
40	District	Meghalaya-South West Garo Hill	RRR	EE	Mr.Rajiv Armora	20 August 2020
41	District	Meghalaya-South Garo Hill	RRR	EE	Mr K. Lamare	20 August 2020
42	District	Meghalaya-East Garo Hill Division-Williammgar	RRR	District EE	Mr. Pradip Kumar Halden	20 August 2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
43	District	Meghalaya-South West Garo Hill	RRR	DAO	Mr. A.Mondal	21 August 2020
44	District	Meghalaya East Garo Hill	RRR	DAO	S.N Mark	21 August 2020
45	District	Telangana-Khamman	RRR	District Agriculture Officer	Mrs. JD	20 August 2020
46	Village	Bihar-Patna-Deorae	RRR	Sarpanch	Sidhi Kumar	05 August 2020
47	Village	Bihar-Nalanda-Gulni Village	RRR	Sarpanch	Laxman Pal	06 August 2020
48	Village	Rajasthan-Tonk-Parana	RRR	Sarpanch	Girraji Buri	08 August 2020
49	Village	Madhya Pradesh- Betul	RRR	Kosmi Dam Water User Association Chairman	Dilip Barskar	08 August 2020
50	Village	Rajasthan-Sirohi	RRR	Sarpanj, Chandela Gram Panchayat	Mr. Ganesh Rana	04 August 2020
51	Village	Meghalaya-West Garo Hills	RRR	Project Beneficiary	Mr. Banjeng R. Marak	27 August 2020
52	Village	Telangana-Siddipet-Vechareni	RRR	Sarpanch	Durgaiah	27 August 2020

## GWJ

Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
1	National	National	GWJ	Director, HKKP (GWJ), DoWR, RD&GR	Ashish Kumar, Director, HKKP (GWJ), DoWR, RD&GR	24 August 2020
2	National	National	GWJ	Regional Director, CGWB (HQ)	Sanjay Marwah, Regional Director, CGWB (HQ)	31 July 2020
3	State	Arunachal Pradesh	GWJ	Chief Engineer, WRD	Er. L Angu	25 August 2020
4	State	Assam	GWJ	Chief Engineer, Irrigation	Dipak Mahanta	10 July 2020



## PDMC

Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
1	National	National	PDMC	Director, RFS, MoAFW	Pankaj Tyagi, Director, RFS, MoAFW	21-05-20
2	National	National	PDMC	The World Bank Group (WRG 2030)	Mr Ajith Radhakrishnan	19-08-20
3	State	Andhra Pradesh	PDMC	Additional Director, Agriculture	Ramana	30-06-20
4	State	Andhra Pradesh	PDMC	Nodal Officer, Department of Horticulture (for all selected states)	Dr. C.B. Harinatha Reddy, Project Officer	03-06-20
5	State	Assam	PDMC	Nodal Officer- Micro-irrigation	Tridip Deka	08-06-20
6	State	Bihar	PDMC	Nodal Officer, Department of Horticulture (for all selected states)	Sunil Kumar Pankaj, Joint Director, Horticulture - cum- Nodal Officer, Micro Irrigation	26-05-20
7	State	Himachal Pradesh	PDMC	SMS (Hort.) cum Nodal Officer PMKSY-PDMC	Devendra Thakur	01-07-20
8	State	Himachal Pradesh	PDMC	Divisional Engineer, Soil Conservation	Ashwani Bharadwaj	17-06-20
9	State	Jharkhand	PDMC	Deputy Director, Agriculture cum Nodal Officer, MI	Vikas Kumar	20-06-20
10	State	Karnataka	PDMC	Nodal Officer, Department of Horticulture (for all selected states)	Kadire Gowda, Joint Dir (Drip), Horticulture	05-06-20
11	State	Maharashtra	PDMC	Director Horticulture	Sirish Jamdade,	19-06-20
12	State	Manipur	PDMC	Nodal Officer- Micro-irrigation, Horticulture	Ramu Sunee	10-06-20
13	State	Manipur	PDMC	Nodal Officer- Micro-irrigation, Agriculture	Bowjit Singh	10-06-20
14	State	Punjab	PDMC	Divisional Soil Conservation Officer (Engg.)	Gulpreet Singh Aulakh	10-06-20
15	State	Rajasthan	PDMC	Deputy Director, Horticulture	Rajendra Singh Khichar	11-06-20
16	State	Rajasthan	PDMC	Joint Director, Water Utilization Cell	Ishwar Lal yadav	05-06-20
17	State	Tamil Nadu	PDMC	Nodal Officer, Department of Horticulture (for all selected states)	Dr N.Subbaiyan, Director, Commissionerate of Horticulture & Plantation Crops	25-06-20



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
18	State	Uttar Pradesh	PDMC	Nodal Officer, Department of Horticulture (for all selected states)	Dr. S.B. Sharma, Director Horticulture	24-06-20
19	State	Maharashtra	PDMC	MI Company	Sandeep Jawalekar, Manager, Mahindra EPC Irrigation Ltd.	05-08-20
20	State	Maharashtra	PDMC	MI Company	Ravi Gadiwan, Jain Irrigation	06-08-20
21	State	Maharashtra	PDMC	MI Company	K Mahamulkar, Business Head, Central & North India, Netafim	06-08-20
22	State	Maharashtra	PDMC	MI Company	Satish shekade, MD, Green India Irrigation	06-08-20
23	State	Assam	PDMC	MI Company	Bitan Sarkar, Hallmark Aquaequipment	06-08-20
24	State	Assam	PDMC	MI Company	Hare Krishna Barua, Regional Manager, NE, Jain Irrigation	06-08-20
25	State	Assam	PDMC	MI Company	Subhash Chatterjee, Premier Irrigation Adritec	06-08-20
26	State	Punjab	PDMC	MI Company	Ajit Mishra, EPC Mahindra	06-08-20
27	State	Punjab	PDMC	MI Company	Shiv Kumar, Netafim	06-08-20
28	State	Punjab	PDMC	MI Company	AP Singh, Finolex Plasson Industries Pvt. Ltd.	07-08-20
29	State	Punjab	PDMC	MI Company	NK Bharti, Harvel Aqua India Pvt. Ltd.	07-08-20
30	State	Karnataka	PDMC	MI Company	Vasant Nikam, Jain Irrigation	07-08-20
31	State	Manipur	PDMC	MI Company	Jadumani singh, Wahengbam Irrigation	07-08-20
32	State	Tamil Nadu	PDMC	MI Company	Ravichandran Ramasamy, State Head, Rivulis Irrigation	08-08-20
33	State	Uttar Pradesh	PDMC	MI Company	Maneesh Shinde, Netafim	07-08-20
34	State	Uttar Pradesh	PDMC	MI Company	Rajesh Yadav, MI Engineer, Jain Irrigation	08-08-20
35	State	Andhra Pradesh	PDMC	MI Company	Veerender Reddy, Godavari Polymers Pvt. Ltd	10-08-20
36	State	Andhra Pradesh	PDMC	MI Company	Udaya Bhaskar, Kothari Agritech Pvt. Ltd	10-08-20
37	State	Andhra Pradesh	PDMC	MI Company	Vasath Patil, Finolex Plasson	10-08-20
38	State	Andhra Pradesh	PDMC	MI Company	Mr. Dayakar, Mahindra EPC	10-08-20



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
39	State	Andhra Pradesh	PDMC	MI Company	Ravikumar Naidu, Netafim Prateek Sah, Netafim M Saravanakumar, Netafim Sanket Belgudri, Netafim	11-08-20
40	District	Assam-Goalpara	PDMC	District Agriculture Officer	Prasantajit Bora, DAO	03-07-20
41	District	Assam-Golaghat	PDMC	District Agriculture Officer	Ranjan Barua, Nodal Officer, PDMC	19-06-20
42	District	Assam-Hojai	PDMC	District Agriculture Officer	Jumur Goswami	18-06-20
43	District	Punjab-Hoshiarpur	PDMC	SDSCO	Mr Rajesh Sharma	01-07-20
44	District	Punjab-Gurdaspur and Pathankot	PDMC	District Agriculture Officer	Mr. Sukhwinder Singh, DSCO	23-06-20
45	District	Punjab-Barnala	PDMC	District Agriculture Officer	Mr. Dalvir Singh, DSCO	22-06-20
46	District	Andhra Pradesh-Visakhapatnam	PDMC	District Agriculture Officer	K.Gopi Kumar, Project Director	15-06-20
47	District	Karnataka-Kolar	PDMC	District Agriculture Officer	Gayatri, Deputy director, cum District Unit Officer (Horticulture)	28-07-20
48	District	Karnataka-Koppal	PDMC	District Agriculture Officer	Krishna Ukkund, Deputy director, cum District Unit Officer (Horticulture)	20-06-20
49	District	Karnataka-Udupi	PDMC	District Agriculture Officer	Bhubaneswari, Deputy director, cum District Unit Officer (Horticulture)	17-06-20
50	District	Karnataka-Dharwad	PDMC	District Agriculture Officer	NA even in IDI	31-07-20
51	District	Manipur-West Imphal	PDMC	District Agriculture Officer	Karam Kulabidhu Singh	23-06-20
52	District	Bihar-West Champaran	PDMC	District Agriculture Officer	Vivek Bharti, DHO	30-06-20
53	District	Bihar-Patna	PDMC	District Agriculture Officer	Bijay Kumar Pandit, DHO	02-07-20
54	District	Bihar-Kishanganj	PDMC	District Agriculture Officer	Neeraj Srivastava, Block Officer	06-07-20
55	District	Tamil Nadu-Dharmapuri	PDMC	District Agriculture Officer	Malini G, Deputy Director, Horticulture	28-07-20
56	District	Tamil Nadu-Krishnagiri	PDMC	District Agriculture Officer	Mr. Mohan Ram, Joint Director, Horticulture	08-07-20
57	District	Tamil Nadu-Nagapattinam	PDMC	District Agriculture Officer	Mrs Divya, Deputy Director, Horticulture	31-07-20
58	District	Maharashtra-Buldhana	PDMC	District Agriculture Officer	Mr Naik, DSAO	05-08-20



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
59	District	Maharashtra-Solapur	PDMC	District Agriculture Officer	Mr Ravindra Mane, Deputy Director, Agriculture	13-08-20
60	District	Jharkhand-Ranchi	PDMC	District Agriculture Officer	Ashok Kumar Sinha, DAO	06-07-20
61	District	Jharkhand-Khunti	PDMC	District Agriculture Officer	Ashok Samrat, DAO	06-07-20
62	District	Uttar Pradesh-Aligarh	PDMC	District Agriculture Officer	N K Sahania, DHO	07-07-20
63	District	Uttar Pradesh-Chandauli	PDMC	District Agriculture Officer	Mr. Nanhe Lal verma, DHO	26-06-20
64	District	Uttar Pradesh-Meerut	PDMC	District Agriculture Officer	Mr Ramveer Rathore	13-07-20
65	District	Himachal Pradesh-Shimla	PDMC	District Agriculture Officer	Dr D Sharma	31-07-20
66	District	Rajasthan-Ganganagar	PDMC	District Agriculture Officer	Preeti, Horticulture Officer	25-06-20
67	District	Rajasthan-Jalore	PDMC	District Agriculture Officer	Surendra Singh, Assistant Director, Horticulture Department	30-06-20
68	District	Andhra Pradesh-Kurnool	PDMC	Project Director	D.Umadevi	23-07-20
69	District	Andhra Pradesh-Chittoor	PDMC	Project Director	K.Jayachandra Reddy	29-07-20
70	District	Andhra Pradesh-Nellore	PDMC	Project Director	P.Subhani	24-07-20
71	District	Jharkhand-Gumla	PDMC	DAO, agriculture	Ramesh Kumar Sinha	28-07-20
72	District	Uttar Pradesh-Meerut	PDMC	MI Company	Vimal Sharma, Agronomist, Netafim	04-08-20
73	District	Uttar Pradesh-Meerut	PDMC	MI Company	Vijender Singh, MI Engineer, Netafim	05-08-20
74	District	Himachal Pradesh-Hamirpur	PDMC	DHO, Horti	Ms Rajni Bala	24-07-20
75	Village	Rajasthan-Sri Ganganagar	PDMC	Village representative	Mr Ram Chandra Sharma	05-08-20
76	Village	Rajasthan-Sri Ganganagar	PDMC	Village representative	Satpal Saharan, Agriculture Supervision, Anupgarh Division	05-08-20



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
77	Village	Uttar Pradesh-Aligarh	PDMC	Village representative	Rakesh Pal Singh, Village Representative, Bichaula village	05-08-20
78	Village	Uttar Pradesh-Aligarh	PDMC	Village representative	Krishna Kumar Sharma, Village Representative, Karash village	05-08-20
79	Village	Himachal Pradesh-Hamirpur	PDMC	Village representative	Gian Singh, Village Representative, Gasota Village, Block Bamson	06-08-20
80	Village	Himachal Pradesh-Hamirpur	PDMC	Village representative	Amarjeet Singh, Panchayat Member, Bhagwara village	07-08-20
81	Village	Uttar Pradesh-Meerut	PDMC	Village representative	Mukesh, Sarpanch, Hassanpur Village	07-08-20
82	Village	Uttar Pradesh-Meerut	PDMC	Village representative	Gaganbeer, Sarpanch, Baisha Village	07-08-20
83	Village	Assam-Hojai-Pub Lumding	PDMC	Village representative	MANARANJAN DAS, Sarpanch, Assam-Hojai-Pub Lumding	08-08-20
84	Village	Uttar Pradesh-Meerut	PDMC	Village representative	Umesh Dev, Sarpanch, Macchra Village	07-08-20
85	Village	Jharkhand-Khunti	PDMC	Village representative	Jagmohan Mahto, Sarpanch, Sundri Village	11-08-20
86	Village	Bihar-Patna	PDMC	Village representative	Dilip Kumar, SHG Leader, Fatua village	12-08-20
87	Village	Assam-Goalpara-Damarapara	PDMC	Sarpanch	Sachin Padgiri	18-08-20
88	Village	Karnataka-Koppal-Chilakamuhki	PDMC	GP president	Sharannappa	18-08-20
89	Village	Assam-Hojai	PDMC	Sarpanch		08-08-20

## WDC

Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
1	State	Andhra Pradesh	WDC	Director, SLNA	Dr. Venkat Reddy	04 June 2020
2	State	Assam	WDC	Shri Nitin Khade IAS	CEO, SLNA	24 June 2020
3	State	Bihar	WDC	CEO, SLNA	CEO Bihar Watershed Development Society (BWDS)	16 June 2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
4	State	Himachal Pradesh	WDC	Project Director (Watersheds)	Shri Prem Prakash	23 June 2020
5	State	Jharkhand	WDC	CEO, State Level Nodal Agency	Shri R. Thanga Pandiyan, IFS Chief Executive Officer cum Special Secretary, Jharkhand State Watershed Mission – SLNA	17 June 2020
6	State	Karnataka	WDC	CEO, SLNA	Shri Prabhash Chandra Ray, IFS CEO, SLNA & Commissioner, Watershed Development Department	03 June 2020
7	State	Maharashtra	WDC	CEO, SLNA	Dr. K P Mote, Additional CEO, VSLNA	03 June 2020
8	State	Manipur	WDC	CEO, State Level Nodal Agency	Ms. N. Kulkarani Devi CEO, SLNA	22 June 2020
9	State	National	WDC	National Rainfed Area Authority	B Rath, Technical Expert(WM) National Rainfed Area Authority	13 June 2020
10	State	National	WDC	Scientist, DoLR	Dr. C.P. Reddy, Scientist, DoLR	Sent reply to questionnaire by email
11	State	Punjab	WDC	Soil Conservation, GIS Expert (Watersheds)	Shri Dhillon, Aman Kaur, Shri Neeraj Pandit, Neetu Kanwar	24 June 2020
12	State	Rajasthan	WDC	CEO, SLNA	Shri Sitaram Banjara, Commissioner, Watershed Development & Soil Conservation and Chief Executive Officer, SLNA	01 June 2020
13	State	Tamil Nadu	WDC	CEO, SLNA	Shri Shunchonngam jatak Chiru	10 June 2020
14	State	Uttar Pradesh	WDC	CEO, State Level Nodal Agency	Sri Samuel Paul N, CEO	10 June 2020
15	State	Odisha	WDC	CEO, State Level Nodal Agency	Shri Hemanta Kumar Panda Director and CEO, SLNA	06 August 2020
16	State	Nagaland	WDC	CEO, State Level Nodal Agency	Shri T. Renben Lotha CEO, SLNA and DoLR	07 August 2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
17	District	Karnataka-Kolar	WDC	Joint Director of Agriculture	Sri. Shivakumar .H.K	20-06-2020
18	District	Karnataka-Davanagere	WDC	Joint Director of Agriculture	Sri. Sharanappa .B. Mudagal	23-06-2020
19	District	Tamil Nadu-Tiruchirapalli	WDC	Deputy Director of Agriculture Assistant Director of Agriculture	Thiru.N.Kannan Tmt.B.Vasantha	17-06-2020
20	District	Tamil Nadu-Madurai	WDC	Deputy Director of Agriculture Assistant Director of Agriculture	Tmt.R.Rani Tmt.R.Valarmathi	18-06-2020
21	District	Tamil Nadu-Coimbatore	WDC	Deputy Director of Agriculture Assistant Director of Agriculture	Thiru.M.Shaffe Ahamed Tmt. Meenambigai	22 June 2020
22	District	Andhra Pradesh-Chittoor	WDC	Additional Project Director (Watersheds)	C.V. Srinivasa Prasad	19-06-2020
23	District	Andhra Pradesh-Srikakulam	WDC	Project Director (Watersheds)	H. Kurma Rao	19-06-2020
24	District	Andhra Pradesh-Vishakhapatnam	WDC	Additional Project Director (Watersheds)	Shri C H Latchanna	5th August 2020
25	District	Andhra Pradesh-Guntur,	WDC	Additional Project Director (Watersheds)	Shri Joseaph Kumar	06 August 2020
26	District	Rajasthan-Bikaner	WDC	Project Manager (Watersheds)	Bhagirath Bishnoi	23-06-2020
27	District	Rajasthan-Pali	WDC	Project Manager (Watersheds)	Hiralal Aheer	22 June 2020
28	District	Rajasthan-Tonk	WDC	Project Manager (Watersheds)	Shri Sunil Singh	18th August 2020
29	District	Bihar-Banka	WDC	Deputy Director (Agri Engg.) Soil Conservation	Baleshwar Pd Singh	27-06-2020
30	District	Bihar-Kaimur	WDC	Deputy Director (Agri Engg.) Soil Conservation	Avinash Chandra	23-06-2020
31	District	Jharkhand-Koderma	WDC	Deputy Director, Soil Conservation	Alok Trivedi	26-06-2020
32	District	Jharkhand-Latehar	WDC	Deputy Director, Soil Conservation	TE Latehar Pali	26-06-2020
33	District	Uttar Pradesh-Barabanki	WDC	Bhumi Sanrakshan Adhikarik	Rishabh Gupta	01 July 2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
34	District	Uttar Pradesh-Bahraich	WDC	Bhumi Sanrakshan Adhikarik	S.P Saraswat	29-06-2020
35	District	Himachal Pradesh-Kullu	WDC	Project Officer, District Rural Development Agency (DRDA)	Sh. Surjeet Singh	25-06-2020
36	District	Himachal Pradesh-Hamirpur	WDC	Project Officer, District Rural Development Agency (DRDA)	Sh. Kamal	29-06-2020
37	District	Himachal Pradesh-Shimla	WDC	Project Officer, District Rural Development Agency (DRDA)	Shri Sanjay Bhagwati	6th August 2020
38	District	Maharashtra-Solapur	WDC	District Superintendent of Agriculture	Dattatray Kulkarni	18-07-2020
39	District	Maharashtra-Ratnagiri	WDC	District Superintendant of Agriculture	Mr. Shivraj Ghorpade	30-06-2020
40	District	Manipur-Imphal West	WDC	Project Officer, DRDA WDT (watershed development team)	Smt. Vareichan Asaiwo Shimray, Smt. Somita Rajkumari,	25-06-2020
41	District	Manipur-Imphal East	WDC	Project Officer, DRDA WDT	Shri. R.K. Romen Singh Shri. Sunil Kanta Sharma	26-06-2020
42	District	Manipur-Thoubal	WDC	Project Officer, DRDA TE (I/C), WCDC	Shri. Y Kumar Shri. Asem Sunil Kumar	Monday, June 29, 2020
43	District	Punjab-Ludhiana	WDC	Project Officer, Watersheds	Shri Bhagwant Singh	01 July 2020
44	District	Punjab-Hoshiarpur	WDC	Project Officer, Watersheds	Shri Naresh Kumar Gupta	14 July 2020
45	District	Assam-Barpeta	WDC	Divisional Officer	Pradip Dutta	07 July 2020
46	District	Assam-Cachar	WDC	Divisional Officer	Siddhartha Sankar Chaliha	26-06-2020
47	District	Assam-Bongaigaon	WDC	Project Officer, Watersheds	Shri Dinanath Bora	06 August 2020
48	District	Odisha-Koraput	WDC	Project Officer, Watersheds	Shri Bhabani	13 August 2020
49	District	Odisha-Sundargarh	WDC	Project Officer, Watersheds	Pitabash Sahu	13 August 2020
50	District	Nagaland-Dimapur	WDC	PIA, Dimapur District	Acato Chisi, PIA	14 August 2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
51	District	Nagaland-Wokha	WDC	PIA, Wokha District	Tepunol Yore, PIA	14 August 2020
52	Village	Punjab-Pathankot	WDC	Village level PIA	Gurpreet, DSCO	18 August 2020
53	Village	Odisha-Panposh-Sundargarh	WDC	Village level PIA	Rutuparna Jena, Asst. Soil Conservation Officer	17 August 2020
54	Village	Bihar-Mayari Block- Fatehpur-Banka	WDC	Village level PIA	Rajesh Kumar, PIA	18 August 2020
55	Village	Uttar Pradesh-Gangapur-Bahraich	WDC	Village level PIA	Rami Ekbal, Secretary, Gagapur Watershed Committee IWMP 2&3	20 August 2020
56	Village	Andhra Pradesh-Chintapalli-Vishakhapatnam	WDC	Village level PIA	Srikanth, WPO, Chintapalli WCC	25th August 2020
57	Village	Rajasthan-Himmatsar-Bikaner	WDC	Village level PIA	Shri Danaram Chowdhury, Himmatsar Watershed Committee	22nd August 2020
58	Village	Assam-Dompara-Bongaigaon	WDC	Village level PIA	Shri Niful Rajbanshi, President, Dompara Watershed Committee	24th August 2020
59	Village	Jharkhand-Lukfichi Nala-Latehar	WDC	Village level PIA	Shri Sunil Prasad, DFO Territorial Division, Lukfichi Nala	25th August 2020
60	Village	Tamil Nadu-Madurai-Kottampatti	WDC	Chairman, Agricultural Advisory Committee	Chinnathambi	30 August 2020
61	Village	Karnatka-Devengere-Hebbal	WDC	Gram panchayat president	Prabhudeva	29 August 2020
62	Village	Karnatka-Kolar-Mulugablu	WDC	agricultural Divisional assistant officer	Aramana Reddy	31 August 2020



## FMBAP

Sl. No.	Scheme	Level	State/District/Village	Designation	Name	Date of interview
1	National	National	FMBAP	Sr. Jt. Commissioner	Shri Rakesh Toteja, Senior Joint Commissioner - II (FM)	17 June 2020
2	Regional	Regional	FMBAP	Chief Engineer, FMO, Central Water Commission (CWC)	Shri B.K. Karjee	23 June 2020
3	Regional	Regional	FMBAP	The Chief Engineer, Brahmaputra & Barak Basin, Central Water Commission, 'Rebekka Ville', Near Bank Point, Temple Road, Lower Lachumiere, Shillong 793001 (Meghalaya)	Shri P.M. Scott	18 June 2020
4	Regional	Regional	FMBAP	Member, Ganga Flood Control Commission (GFCC)	Shri C.K.L. Das	25 June 2020
5	State	Bihar	FMBAP	Nodal Officer	Shri Ajay Kumar	12 June 2020
6	State	Uttar Pradesh	FMBAP	Nodal Officer	Shri Abhay Kumar Singh, Director, GFCC	20 June 2020
7	State	Himachal Pradesh	FMBAP	State Nodal Officer	Mr. Saini; Chief Engineer, Irrigation Dept	30 June 2020
8	State	Uttar Pradesh	FMBAP	Engineer-in-Chief	Mr. Ashok Kr. Singh	04 September 2020
9	State	Jammu & Kashmir	FMBAP	Chief Engineer	Mr. Iftikar Kakroo	30 July 2020
10	State	West Bengal	FMBAP	Deputy Secretary	Biplab Mukherjee	10 August 2020
11	State	Uttarakhand	FMBAP	SSO, Dept of Irrigation & Flood Control	Subhash Pandey	13 August 2020
12	District	Himachal Pradesh-Sirmaur	FMBAP	Superintending Engineer, State Nodal Officer	Mr. Joginder Chauhan, Mr. Saini	31 July 2020
13	District	Assam-Kokrajhar	FMBAP	EE	NAGENDRA KARMAKAR	05 August 2020
14	District	Assam-Goalpara	FMBAP	EE	SIDDHANTA SARMA	08 August 2020
15	District	Jammu & Kashmir-Srinagar	FMBAP	District Nodal Officer	Mr. Ajaz Keen; Executive Engineer; Dept. of	20 August 2020



Sl. No.	Scheme	Level	State/District/Village	Designation	Name	Date of interview
					Irrigation & Flood Control; Srinagar	

## IC

Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
1	National	National	IC	Nandakumar, Deputy Director general, Minor Irrigation, statistics wing, MoW	Nandakumar, Deputy Director general, Minor Irrigation, statistics wing, MoWR	9-Jun-2020
2	State	Jharkhand	IC	Chief Engineer, Irrigation (major & medium projects), Census Commissioner	Shri Surendra Kumar (Chief Engineer, Minor Irrigation, Ranchi)	15 July 2020
3	State	Andhra Pradesh	IC	Nodal Officer - State Statistical Cell	Smt. V. Prathima, Director, Directorate of Economics & Statistics	19 June 2020
4	State	Assam	IC	Census Commissioner, Irrigation Census	Shri B.Malakar Chief Engineer & Census Commissioner (MI) Government of Assam Minor Irrigation, Chandmari, Guwahati-3	19 June 2020
5	State	Assam	IC	Nodal Officer, Irrigation Census	Mina Deka Senior Research Officer(I/C) & Nodal Officer	16 June 2020
6	State	Bihar	IC	Nodal Officer - State Statistical Cell	Shri Ravindra Kumar Singh, SE Monitoring Cell H.Q., Minor Water Resources Dept.	16 June 2020
7	State	Bihar	IC	Nodal Officer, Irrigation Census	Shri. Rajeshwar Prasad Singh, IAS, Director & Nodal Officer	17 June 2020
8	State	Gujarat	IC	Nodal Officer	Sh. V. Patel, Chief Engineer Executive Engineer & Nodal Officer.	20 June 2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
9	State	Gujarat	IC	Census Commissioner – State Steering Committee	Shri D.B Vyas Chief Engineer(P) & Additional Secretary & Census Commissioner (MI)	20 June 2020
10	State	Jharkhand	IC	IC Nodal Officer	Ajay Kumar	15 July 2020
11	State	Karnataka	IC	Joint Director-Minor Irrigation	D Guru Prasad	24 August 2020
12	State	Maharashtra	IC	Nodal Officer, Irrigation Census	Sh. S.G Wagh Asstt. Commissioner	03 July 2020
13	State	Manipur	IC	Nodal Officer, Irrigation Census	Shri Rajendro Singh, Assistant Director & Nodal Officer	15 June 2020
14	State	Punjab	IC	Nodal officer of Minor IC (Also in charge of joint director of agri. & Farmer welfare dept.)	Mr. Major Singh	13-Jul-2020
15	State	Rajasthan	IC	Nodal Officer - State Statistical Cell	Shri Shyam Singh Meena, Director (Agriculture Census) & Nodal Officer (MI)	12-Jun-2020
16	State	Tamil Nadu	IC	DDRMIS, deputy director, Minor irrigation department	Ms. Ranjini	05 August 2020
17	State	Uttar Pradesh	IC	Assistant Engineer	Ajay Kesav	10 July 2020
18	State	Uttar Pradesh	IC	Asst Engineer	S.P.Srivastava	07-06-2020
19	State	Goa	IC	Director & Census Commissioner (MI),  Directorate of Planning, Statistics & Evaluation,  Government of Goa, Pt. Deendayal Upadhyay Bhavan, Opp. Pundalik	Shri Durga Prasad,	05 August 2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
				Devasthan, Pundalik Nagar,  Alto Porvorim, Bardez-Goa- 403521"		
20	State	Haryana	IC	Assistant Director	Nirmal Singh	07 August 2020
21	State	Jammu & Kashmir	IC	Director (Planning)  O/o Financial Commissioner (Revenue), Government of J & K, Jammu	Z.A.Bandey	05 August 2020
22	State	Kerala	IC	Joint Director & Nodal Officer "	Shri P.D. Santosh Kumar,	11 August 2020
23	State	Nagaland	IC	Chief Engineer "	Er. Hotovi Ayemi,	12 August 2020
24	State	Sikkim	IC	Additional Chief Engineer & Nodal Officer	Sh. B.S. Nirola	31 July 2020
25	State	Sikkim	IC	Chief Engineer & Census Commissioner Water Resources Department, Government of Sikkim  Gangtok	Sh. Gozin Lachenpa	08 August 2020
26	State	Telangana	IC	Joint Director & Nodal Officer (MI)"	Shri Dayanandam,	03 August 2020
27	State	Tripura	IC	Nodal Officer & Executive Engineer	Shri Dilip Deb Nath	13 August 2020
28	State	Uttarakhand	IC	Executive Engineer & Nodal officer"	Shri Alok Kumar Srivastava,	13 August 2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
29	State	Uttarakhand	IC	Chief Engineer & Census Commissioner (MI), Government of Uttarakhand  Minor Irrigation, Kotda santoor Road,  Near Subharti Hospital, Nanda ki Chowki, Prem Nagar, Dehradun-248001"	Sh. Mohd. Umar	13 August 2020
30	State	West Bengal	IC	Director (SWID) & Nodal Officer (MI)	Shri Hirak Dey,	06 August 2020
31	State	West Bengal	IC	Principal Secretary & Census Commissioner (MI), Water Resources Investigation & Development Department, Government of West Bengal, Khadya Bhavan, Block-A, 5th Floor, 11-A, Mirza Ghalib Street, Kolkata – 700087"	Sh. Prabhat Kumar Mishra	06 August 2020
32	District	Assam-Bongaigaon	IC	Executive Engineer	Raben Talukdar; Executive Engineer; Bongaigaon Division	02 July 2020
33	District	Andhra Pradesh-Kurnool	IC	Nodal Officer	Dr. Nagraj; District Statistical Officer	01 July 2020
34	District	Andhra Pradesh-Srikakulam	IC	Nodal Officer	Mr. Mohan Rao; District Statistical Officer	22 July 2020
35	District	Uttar Pradesh-Siddharth Nagar	IC	Assistant Engineer, State Level	SP Srivastav	06 July 2020
36	District	Jharkhand-Saraikela	IC	Executive engineer, Minor Irrigation division	Phani Bhusan	29 June 2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
37	District	Punjab- Taran	IC	C.A.O	Kuljit Singh Saini, C.A.O	28 July 2020
38	District	Punjab- Patiala	IC	AE	Sarjit Singh	21 July 2020
39	District	Uttar Pradesh- Jalaun	IC	AE	Mr. Sandeep Saxena	23 July 2020
40	District	Jharkhand- Jamshedpur	IC	Executive engineer	Madan Mohan Singh	21 July 2020
41	District	Assam- Goalpara	IC	Nodal Officer	Muhibur Rahman	23 July 2020
42	District	Tamilnadu- Vellore	IC	DRO	Thiru. Parthiban	27 July 2020
43	District	Gujarat-Surat	IC	Assistant-Executive Engineer	Mr. Panchauli	08 June 2020
44	District	Maharashtra- Dhule	IC	District Water Conservation Officer	Shri Ramesh Gavit	04 August 2020
45	District	Goa- North Goa	IC	Deputy Director	T.T. Furtado	24 August 2020
46	District	Goa-South Goa	IC	Deputy Director	Digamber Kalapurkar	24 August 2020
47	District	Tripura-West Tripura	IC	Executive Engineer	Pankaj Kumar Raha	20 August 2020
48	District	Tripura- Sepahijala	IC	Executive Engineer	Khokon Das	27 August 2020
49	District	Sikkim-South District Sikkim	IC	Divisional Engineer	Mr. Biren Bhujel	25 August 2020
50	District	Nagaland- Wokha	IC	Nodal Officer	Mr. Benrie Lotha	19 August 2020
51	District	Kerala- Kozhikode	IC	Superintending Engineer, Minor Irrigation Circle	Sivadasan M	27 August 2020
52	District	Kerala- Ernakulam	IC	Executive Engineer Minor Irrigation Division	Bajichandran R	25 August 2020
53	District	Bihar-Araria	IC	DSO, District Nodal Officer	1. Sri Kishore Krishan, DSO (District Statistical officer) 2. Mr. Nitish	25 July 2020
54	District	Bihar-Jamui	IC	DSO	Sri Bhim Sharma, DSO	26 June 2020



## SPFM

Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
1	National	National	SPFM	Commissioner, SPR, DoWR, RD&GR	Kushvinder Vohra, Commissioner, SPR, DoWR, RD&GR	25-Aug-2020
2	National	National	SPFM	Director, Monitoring (Central), CWC	R D Deshpande, Director, Monitoring (Central), CWC	27-May-2020
3	State	Maharashtra	SPFM	Chief Engineer & Joint Secretary, Water Resources Department	Dr. Sanjay Belsare, Chief Engineer & Joint Secretary, Water Resources Department, GoM - State Nodal Officer	13-Jun-2020
4	State	Maharashtra-Amravati	SPFM	Superintending Engineer, Amravati Irrigation Project Circle, Amravati	Shri. A. T. Deogade, SE, Amravati Irrigation Project Circle, Amravati	16-Jul-2020
5	State	Maharashtra-Amravati	SPFM	Superintending Engineer, Upper Wardha Irrigation Circle, Amravati	Shri. R. K. Dhawale, SE, Upper Wardha Irrigation Circle, Amravati	16-Jul-2020

## LTIF

Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
1	National	National	LTIF	Joint Secretary & Financial Advisor, DoWR, RD&GR	Shri Jagmohan Gupta, Joint Secretary & Financial Advisor, DoWR, RD&GR	30-07-2020

## IAS

Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
1	National	National	IAS	Commissioner, SPR Wing	Shri K Vohra Commissioner SPR Wing, DoWR, RD&GR	25 August 2020



## NRCP

Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
1	National	National	NRCP	Advisor, National River Conservation Directorate	Mr. Bidhu Bhusan Barman Advisor, National River Conservation Directorate	12 June 2020
2	National	National	NRCP	Divisional Head- Water Quality Monitoring Division, CPCB	Shri A. Sudhakar	19 June 2020
3	National	National	NRCP	Director General, National Mission for Clean Ganga	Rajiv Ranjan Mishra	17 August 2020
4	State	Andhra Pradesh	NRCP	Water Resources Department, Andhra Pradesh	Swaroop Kumar, Krishna River Conservator	02 July 2020
5	State	Andhra Pradesh	NRCP	Water Resources Department, Andhra Pradesh	Mohan Rao Godavari River Conservator	02 July 2020
6	State	Andhra Pradesh	NRCP	Member Secretary, Andhra Pradesh State Pollution Control Board	Sri Vivek Yadav, IAS Member Secretary	01 July 2020
7	State	Andhra Pradesh	NRCP	Superintending Engineer	Shri G R T Om Prakash	24 July 2020
8	State	Jharkhand	NRCP	Ranchi Municipal Corporation	Rajnish Kumar Deputy Municipal Commissioner	07 August 2020
9	State	Jharkhand	NRCP	Chief Secretary, Jharkhand State Pollution Control Board	Kumar Gourav Jain, Environmental Officer	04 August 2020
10	State	Karnataka	NRCP	Additional Chief Engineer, Bangalore Water Supply and Sewerage Board	Shri Rajiv KN	29 June 2020
11	State	Karnataka	NRCP	Scientific Officer, KSPCB	Dr. Roopa Devi	06 July 2020
12	State	Maharashtra	NRCP	SE, Nasik Municipal Corporation	Shivkumar Nitin Vanjari	18 June 2020
13	State	Maharashtra	NRCP	Environmental Officer, Kolhapur Municipal Corporation	Shri Sameer Vyaghrambare	14 August 2020
14	State	Maharashtra	NRCP	Joint Director, Water, Maharashtra Pollution Control Board	Shri Y B Sontakke	07 July 2020
15	State	Maharashtra	NRCP	Executive Engineer, Mula Mutha River Project	Shri Sanjay Gaikwad	06 July 2020
16	State	Manipur	NRCP	Directorate of Environment Government of Manipur	Dr. L. Bijen Laishram Development Officer	07 July 2020



Sl. No.	Level	State-District-Village	Scheme	Designation	Name & designation	Date of interview
17	State	Punjab	NRCP	Junior Engineering, PWSSB	Shri Vikas Dhawan	07 July 2020
18	State	Punjab	NRCP	Chairman/ Member Secretary, Punjab Pollution Control Board	Krunesh Garg Member Secretary	03 July 2020
19	State	Tamil Nadu	NRCP	Junior Engineer, Water Resources Department, Trichy	Raja Gopal	03 July 2020
20	State	Tamil Nadu	NRCP	Chief Environmental Engineer, Tamil Nadu Pollution Control Board	Dr. S. Selvan	02 July 2020
21	State	Tamil Nadu	NRCP	Chennai Metropolitan Water Supply and Sewerage Board	Thiru. K.Madurainayagam, Engineering Director, CMWSSB	04 August 2020
22	State	Gujarat	NRCP	Additional City Engineer, NRCP Dept, Ahmedabad Municipal Corporation	Rakhi Trivedi	15 August 2020
23	State	Gujarat	NRCP	Surat Municipal Corporation	Shri E H Pathan Executive Engineer (Drainage)	04 August 2020
24	State	Gujarat	NRCP	Gujarat Water Supply and Sewerage Board	Shri Solanki, Superintending Engineer	05 August 2020
25	State	Sikkim	NRCP	Superintending Engineer	Dibya Gurung	23 July 2020
26	State	Sikkim	NRCP	Sikkim State Pollution Control Board	Gopal Pradhan	20 August 2020
27	State	Odisha	NRCP	Project Director	Binod K Sahu,	05 August 2020
28	State	Odisha	NRCP	Environmental Scientist, Odisha Pollution Control Board	Smt. U.R Patnaik	10 August 2020
29	State	Jammu and Kashmir	NRCP	Urban Environmental Engineering Department (UEED), Govt. of Jammu & Kashmir	Dr. Ravi Shankar, Additional Secretary, UDD	11 August 2020
30	State	Jammu and Kashmir	NRCP	Urban Environmental Engineering Department (UEED), Govt. of Jammu & Kashmir	Shri Ashwani Seth, Chief Engineer, UEDD	08 August 2020
31	State	Nagaland	NRCP	Chief Engineer, S&WSSO	T. Sangtam	19 August 2020



## Environment and Forest

### CNRE

Sl. No.	State-District-Village	Scheme	Designation	Name & designation	Date of interview
1	Andhra Pradesh	CNRE (NPCA)	Principal Chief Conservator of Forests (Wildlife) & Chief Wildlife Warden, Aranya Bhavan	Nalini Mohan	19 June 2020
2	Andhra Pradesh	CNRE (BR)	Principal Chief Conservator of Forests (Wildlife) & Chief Wildlife Warden, Aranya Bhavan	Nalini Mohan	19 June 2020
3	Andhra Pradesh	CNRE	DFO, Triputi	M Nagarjuna Reddy	06 August 2020
4	Andhra Pradesh	CNRE	FRO, Chittor	P. Subash	10 August 2020
5	Andhra Pradesh	CNRE	FRO, Chamula	Mr. Pattabhi	10 August 2020
6	Andhra Pradesh	CNRE	FRO, Triputi	AC Subaridu	10 August 2020
7	Andhra Pradesh	CNRE	FRO, Balapalli	Mr. Srinivasan Reddi	10 August 2020
8	Andhra Pradesh	CNRE	DFO, Rajanivet	NA	11 August 2020
9	Assam	CNRE	Feild Director	Amul Sarma	16 June 2020
10	Assam	CNRE	APCCF	MK Yadav	08 August 2020
11	Assam	CNRE	DFO Dibru Saikhowa	Rajindra Bharti	06 August 2020
12	Assam	CNRE	FRO, Mannas	Bablu Bharna	10 August 2020
13	Kerala	CNRE	PCCF	John Mathew Swak	23 June 2020
14	Madhya Pradesh	CNRE	Cheif Scientific Officer	DR sanjive Sachdeva	15 June 2020
15	Madhya Pradesh	CNRE	Cheif Scientific Officer	Dr Vinita	17 June 2020
16	Madhya Pradesh	CNRE	DFO	Mr Prayar	25 June 2020
17	Madhya Pradesh	CNRE	District Planning Officer	Mr Kopi Sire	29 June 2020
18	Madhya Pradesh	CNRE	DFO North	Sanjive Jha	29 July 2020
19	Madhya Pradesh	CNRE	Assistant Director. sericulture Panchwari BR	A.K Patal	18 August 2020
20	Mizoram	CNRE	Chief Wildlife Warden	Liandawla	17 June 2020
21	Mizoram	CNRE	District Council Conservator of Forest	Mr Thaly T Azyu	22 June 2020
22	Mizoram	CNRE	Tamdil Lake DFO	Mr. Lian Zuala	07 August 2020



Sl. No.	State-District-Village	Scheme	Designation	Name & designation	Date of interview
23	National	CNRE	Lecturer Coco-Cola Department of Regional Water Studies	Ms. Ranjana Ray Chaudhuri	24 June 2020 10:30
24	National	CNRE	Advisor & Member, Indian National MAB Committee, Ministry of Environment, Forest & Climate Change	Mr. Lalit Kapur	26 June 2020
25	National	CNRE	PHD DEPARTMENT OF ENVIRONMENTAL STUDIES	SHAILENDER KUMAR	06 July 2020
26	National	CNRE	CEPT University, Ahmedabad	Neeru BANSAL	15 July 2020
27	National	CNRE	Programme Coordinator (Biodiversity) at ICLEI-Local Governments for Sustainability, South Asia	Monalisa Sen	09 July 2020
28	National	CNRE	NPCA, Ministry of Environment, Forest and Climate Change	Rita Khanna, Chandan Singh, MANJU PANDEY	21 August 2020
29	Odisha	CNRE	Director Environment	Dr Murugesan	27 June 2020
30	Odisha	CNRE	DFO	DFO, Ghumsur	18 July 2020
31	Odisha	CNRE	Deputy Director South	Dr Jagyantdatt Pati	16 July 2020
32	Odisha	CNRE	Deputy Director North	Sai Kiran D.N	24 July 2020
33	Odisha	CNRE	DFO Karanjia	Prasanna Kumar Behera	24 July 2020
34	Odisha	CNRE	DFO, Sambalpur	Sanjit Kumar	05 August 2020
35	Tamil Nadu	CNRE	PCCF & CWLW	Shri. P.C. Tyagi	23 June 2020
36	Tamil Nadu	CNRE	FD, Mannas	KK Kushal	11 August 2020
37	Tamil Nadu	CNRE	DFO, Coimbatore	D Venkatesh	13 August 2020
38	Tamil Nadu	CNRE	Assistant Conservator of Forest, Coimbatore	Sanjay Kumar	13 August 2020
39	Tamil Nadu	CNRE	DFO	Guruswami	18 August 2020
40	Tamil Nadu	CNRE	DFO, Gudalur	Sumesh Soman	19 August 2020
41	Tamil Nadu- Nilgiris-Goodalur	CNRE	Forest Officer	Ganesan	26 August 2020
42	Tamil Nadu- Nilgiris-Goodalur	CNRE	Forest Officer	Chinnathambi	26 August 2020
43	Tamil Nadu- Nilgiris-Goodalur	CNRE	Forest Officer	Manoharan	27 August 2020



Sl. No.	State-District-Village	Scheme	Designation	Name & designation	Date of interview
44	Tamil Nadu- Nilgiris-Goodalur	CNRE	Forest Officer	Ramakrishnan	27 August 2020
45	Uttar Pradesh	CNRE	APCCF	Sanjay Srivastava	27 June2020
46	Uttar Pradesh	CNRE	Conservator of forest, Nawabganj	Neeraj, Nawabjang	05 August 2020
47	Uttar Pradesh	CNRE	DFO Chambal	Manisha Mittal	31 July 2020
48	Uttar Pradesh	CNRE	DFO	Sameer Kumar	05 August 2020
49	Uttar Pradesh- Nagaria Wetland	CNRE	DFO	Anil Patel	06 July 2020
50	Uttarakhand	CNRE	Director, NDBR	D.K. Singh	1 July 2020
51	Uttarakhand	CNRE	APCCF	RN Jha	30 June 2020
52	Uttarakhand	CNRE	DFO	Niraj Saharma	01 July 2020
53	Uttarakhand	CNRE	DFO	Deep Chandra	03 July 2020
54	Uttarakhand	CNRE	Rang Officer	Mr. Dhiresb Bisht	15 July 2020
55	Uttarakhand	CNRE	DFO NDBR	S sharma	05 August 2020
56	Uttarakhand	CNRE	Rang Officer	Govind Ghat	05 August 2020
57	West Bengal	CNRE	Joint Director, Sundarban Biosphere Reserve	Dr S Kulandaivel, IFS	24 June 2020
58	West Bengal	CNRE	Director	Mr. P. Chand, IFS - Director-9531743112	16 June 2020
59	West Bengal	CNRE	Joint Director, Sundarban Biosphere Reserve	Dr S Kulandaivel, IFS	24 June 2020
60	West Bengal	CNRE	DFO, 24 Paragana South Division	G Santosha	23 June 2020
61	West Bengal	CNRE	DFO, 24 Paragana South Division	G Santosha	25 June 2020,
62	West Bengal	CNRE	DFO	Miland Mohan	18 August 2020
63	West Bengal	CNRE	Joint Director, SunderBand Biosphere Reserve	Ajay Das	18 August 2020
64	West Bengal	CNRE	Sundarban Biosphere Reserve	Director	24 June 2020

## GIM

Sl. No.	State-District-Village	Scheme	Designation	Name & designation	Date of interview
1	Andhra Pradesh	GIM	Addl. Principal Chief Conservator of Forest	S. Sreedhar	17 August 2020
2	Andhra Pradesh	GIM	DFO-Pareru Division	K Vinod Kumar	12 August 2020
3	Andhra Pradesh	GIM	APCCF	K Gopinath	21 August 2020



Sl. No.	State-District-Village	Scheme	Designation	Name & designation	Date of interview
4	Andhra Pradesh-Ananthapuram	GIM	DFO	Jagannath Singh	08 August 2020
5	Assam	GIM	Chief Conservator of Forests	Hirdesh Mishra	21 July 2020
6	Assam	GIM	CCF	Dr. Muthu Kumaravel	29 August 2020
7	Assam-Cachar	GIM	DFO	Sunnydeo Chowdhry	17 August 2020
8	Kerala	GIM	Technical Assistant of Officer of CWW	Mr. Anjan	17 June 2020
9	Kerala	GIM	Principal Chief Conservator of Forests	Shri D.K. Verma (PCCF of Planning and development.)	29 June 2020
10	Kerala-Malayatoor	GIM	DFO	Ravi Kumar Meena	23 July 2020
11	Kerala-Munnar	GIM	DFO	MVG Kannan	31 July 2020
12	Kerala-Nilambur	GIM	DFO	Mr. Saji Kumar	16 July 2020
13	Kerala-Palakkad	GIM	DFO	Sunil Kumar	15 July 2020
14	Kerala-Palakkad	GIM	DFO	Sri. Narendranath Veluri	16 July 2020
15	Madhya Pradesh	GIM	Addl. Principal Chief Conservator of Forest	Shri Alok Kumar	24 June 2020
16	Madhya Pradesh - Barwani	GIM	DFO	Dr. Anupam Sahay	22 July 2020
17	Madhya Pradesh-north seoni	GIM	DFO	Pradeep Mishra	13 August 2020
18	Madhya Pradesh-Shivpuri	GIM	CCF	Y.T. Singh, CCF	22 July 2020
19	Madhya Pradesh-Shivpuri	GIM	DFO	Lovit Bharti	20 August 2020
20	Maharashtra	GIM	Principal Chief Conservator of Forests	Shri. G.Saiprakash, APCCF (Budget, Planning & Development)	19 June 2020
21	Maharashtra	GIM (NAP)	Principal Chief Conservator of Forests	Shri. G.Saiprakash, APCCF (Budget, Planning & Development)	19 June 2020



Sl. No.	State-District-Village	Scheme	Designation	Name & designation	Date of interview
22	Maharashtra	GIM	Addl. Principal Chief Conservator of Forest	Mohan Karnat	19 June 2020
23	Maharashtra-Gadchiroli	GIM	Dy. conservator of forest	Kumaraswami S.R.	09 July 2020
24	Maharashtra-Pune	GIM	CCF	vivek Khandekar	07 August 2020
25	Maharashtra-Chandrapur	GIM	CCF	SV Ramarao	10 July 2020
26	Mizoram	GIM	Principal Chief Conservator of Forests	Sh.H.C.Murlidhar Rao (GIM/NAP)	17 June 2020
27	Mizoram	GIM	Addl. Principal Chief Conservator of Forest	Dr. Pu Keyiekhrie Kire	17 June 2020
28	Mizoram	GIM	Chief Conservator of Forests (Admn)	Shri Lalthlamuana Pachuau	11 June 2020
29	Mizoram-Kolasib Forest Division	GIM	DFO	Mr. Tiana Zathang	24 June 2020
30	Mizoram-Kolasib Forest Division	GIM	RO	Sh V. Lalrohluia	24 June 2020
31	Mizoram-Kolasib Forest Division	GIM	RO	Sh Thangliana	24 June 2020
32	National	GIM	Deputy Director, FSO	Sunil Chandra	17 August 2020
33	National	GIM	sector expert	T R Manoharan	29 July 2020
34	National	GIM	IGF (NAEB) Inspector General of Forest	Mr. Pankaj Asthana IGF (NAEB) Inspector General of Forest	09 April 2020
35	National	GIM	Rutu	s Geeta Menon	28 July 2020
36	National	GIM	Rutu	Sushil Sehgal	31 July 2020
37	Odisha	GIM	Addl. Principal Chief Conservator of Forest	Mr. A. K. Pathak	16 July 2020
38	Odisha	GIM (NAP)	Addl. Principal Chief Conservator of Forest	Mr. A. K. Pathak	16 July 2020



Sl. No.	State-District-Village	Scheme	Designation	Name & designation	Date of interview
39	Odisha	GIM (FPM)	Addl. Principal Chief Conservator of Forest	A K Pathak	16 July 2020
40	Odisha	GIM	DCF-GIS	Sundhasu Khora	29 August 2020
41	Odisha-Bolangir	GIM	DFO	Samir Kumar Satpathy	21 July 2020
42	Odisha-Dhenkanal	GIM	ACF	Subrat Patra	27 July 2020
43	Odisha-Kalahandi	GIM	ACF	Shivaprasad Rath	20 July 2020
44	Odisha-Kalahandi	GIM	DFO	Nitish Kumar	25 July 2020
45	Odisha-Karanja	GIM	DFO	Mr. Gajanand (not sure)	24 July 2020
46	Odisha-Keojar	GIM	DFO	Santosh Joshi	21 July 2020
47	Rajashtan-Bharatpur	GIM	DCF	Mr. Mohit Gupta	07 March 2020
48	Rajasthan	GIM	Addl. Principal Chief Conservator of Forest	Shikha Mehra APCCF NAP-FPM	27 July 2020
49	Rajasthan	GIM	Addl. Principal Chief Conservator of Forest	Arijit Banerjee	14 August 2020
50	Rajasthan-Bundi	GIM	DFO	Suresh Mishra	07 January 2020
51	Rajasthan-Tonk	GIM	DFO	V Chethan Kumar	15 June 2020
52	Tamil Nadu	GIM	APCCF	Rajeshwari	11 August 2020
53	TamilNadu-Namakkal	GIM	DFO	Dr. R Kanchana	11 August 2020
54	TamilNadu-Coimbatore	GIM	DFO	D Venkatesh	21 August 2020
55	Uttar Pradesh	GIM	Addl. Principal Chief Conservator of Forest	Shri Prabhakar Dubey	07 July 2020
56	Uttar Pradesh-Hamirpur	GIM	DFO	Narendra Singh	22 July 2020
57	Uttar Pradesh-Bahraich	GIM	DFO	Manish Singh	25 July 2020
58	Uttar Pradesh-Mirzapur	GIM	DFO	Mr. Rakesh Chaubey	15 July 2020
59	Uttarakhand	GIM	APCCF	Suhag	02 July 2020
60	Uttarakhand	GIM	Chief Conservator of Forests	Mr. B. K. Gangte	19 June 2020
61	Uttarakhand	GIM	APCCF	Samir Sinha	08 August 2020
62	Uttarakhand-Garhwal	GIM	DFO	Akash Verma	25 July 2020
63	Uttarakhand-Kedarnath	GIM	DFO	Shri Amit Kanwar	2 July 2020
64	Uttarakhand-Pauri	GIM	DFO	Mr. Sant Ram	07 August 2020



Sl. No.	State-District-Village	Scheme	Designation	Name & designation	Date of interview
65	Uttrakhand-Almora	GIM	D.F.O. Civil Soyam Ranikhet	Mr. Umesh Chandra Joshi	2 July 2020
66	Uttrakhand-Rurdraprayag	GIM	DFO	Vaibhav Singh	29 July 2020
67	Uttrakhand-Tehri Garhwal	GIM	D.F.O. Tehri Dam-1	Mr. V.K. Singh	02 July 2020
68	Uttrakhand-Tehri garhwal	GIM	DFO	Dharm Singh Meena	25 July 2020
69	West Bengal	GIM	Principal Chief Conservator of Forests	Sh.T.V.Narshima Rao	01 July 2020
70	West Bengal	GIM	Principal Chief Conservator of Forests	Sh.T.V.Narshima Rao	01 July 2020
71	West Bengal- Purulia	GIM	DFO	Mr. Ram Prasad Badana	21 July 2020
72	West Bengal-Bankura	GIM	DFO	Mr. J. V. Bhaskar	06 August 2020
73	Tamil Nadu	GIM	APCCF	Sugato Dutt	22 July 2020
74	Tamil Nadu	GIM-NAP	APCCF	Sugato Dutt	22 July 2020

## IDWH

Sl. No.	State-District-Village	Scheme	Designation	Name & designation	Date of interview
1	Andhra Pradesh	IDWH	Chief Wildlife Warden	Nalini Mohan	17 June 2020
2	AP-Chittor	IDWH	DFO	Mr. Narentthan	09 July 2020
3	AP-Nandyal	IDWH	DFO	Mr. Venkatesh	27 June 2020
4	AP-Vizianagram	IDWH	Range officer	Mr. M Murali Krishna	13 July 2020
5	Assam	IDWH	PCCF	Mr. Md. Faridulla Ali	21 August 2020
6	Assam-Cachar	IDWH	DFO	Sunnydeo Chowdhry	17 August 2020
7	Assam-Kaziranga	IDWH	CCF&FD	P. Sivakumar	27 July 2020
8	Assam-Manas	IDWH	DD	Raghunath Boro	22 July 2020
9	Assam-Nameri	IDWH	DFO	Pankaj sharma	24 July 2020
10	Assam-Orang	IDWH	DFO	V. Sandeep	24 July 2020
11	Chhattisgarh	IDWH	Principle Chief Conservator of Forests	Sh. Atul Shukla	04 July 2020
12	Kerala	IDWH	Deputy Director, Silent Valley National Park	Mr. Samuel	30 June 2020



Sl. No.	State-District-Village	Scheme	Designation	Name & designation	Date of interview
13	Kerala	IDWH	Deputy Director, Eravikulam National Park	Ms. Lakshmi	01 July 2020
14	Kerala	IDWH	Chief Wildlife Warden	Surender Kumar	22nd June 2020
15	Kerala	IDWH	WW, Wayanad Wildlife Sanctuary	Mr. Assif	10 July 2020
16	Madhya Pradesh	IDWH	Chief Wildlife Warden	S.K. Mandal	26 June 2020
17	Madhya Pradesh	IDWH	CCF, Satpura Tiger Reserve	SK Singh	29 June 2020
18	Madhya Pradesh	IDWH	CCF, Bandhavgarh	Vincent Rahim	01 July 2020
19	Maharashtra	IDWH	Chief Wildlife Warden	Nitin Kakodkar	23 June 2020
20	Maharashtra	IDWH	CCF&FD	Mr. R.S. Govekar	17 July 2020
21	Maharashtra-Melghat TR	IDWH	APCCF&FD	Mr. M Srinivasan Reddy	15 July 2020
22	Maharashtra-Nawegaon Nagzira TR	IDWH	CF& FD	R. M. Ramanujam	24 July 2020
23	Maharashtra-Pench&Bor	IDWH	CCF&FD	Ravi Kiran Bovekar	17 July 2020
24	MH-Aurangabad	IDWH	CCF	R.R. Kale	13 July 2020
25	MH-Pune	IDWH	CCF	Ramesh Kumar	02 July 2020
26	MH-Sahyadri TR	IDWH	CF&FD	Satyajeet Gujar	01 July 2020
27	Mizoram	IDWH	Chief Wildlife Warden	Liandawla	12 June 2020
28	MP-Kanha TR	IDWH	CWW	Mr. Krishnamurthy	03 July 2020
29	MP-Pench TR	IDWH	DFO	Vikram Signh Parihar	15 July 2020
30	MZ-Dampa TR	IDWH	DFO	Mr. Lal Bianka	29 June 2020
31	MZ-Phawngpui NP	IDWH	DCF	Mr. Thankima	01 July 2020
32	MZ-Takalo WLS	IDWH	DCF	Mr. Thali T. Azyu	26 June 2020
33	National	IDWH	Scientist, D	Mr. K. Selvan	16 July 2020
34	National	IDWH	IGF	Mr. Noyal Thomas	15 July 2020
35	National	IDWH	Scientist, WII	Dr. K. Ramesh	26 June 2020
36	National	IDWH	Managing Trustee and Director, Centre for Wildlife Studies	Dr. Ullas Karanth	17 August 2020



Sl. No.	State-District-Village	Scheme	Designation	Name & designation	Date of interview
37	National	IDWH	Associate Faculty, Divecha Centre for Climate Change, IISc	Dr. R. Sukumar	23rd June 2020
38	National	IDWH	Team Leader, GiZ	Dr. Neeraj Khera	17 August 2020
39	National	IDWH	IG (NTCA)	Dr. Amit Mallick	06 August 2020
40	Odisha	IDWH	APCCF	Sashi Paul	13 August 2020
41	Odisha-Baripada	IDWH	OFS	Swayam Malik	21 July 2020
42	Odisha-Hirakud WLS	IDWH	DFO	Pratap Kattapalli	22 July 2020
43	Odisha-Jharsugra	IDWH	DFO	Lalit Kumar Patra	23 July 2020
44	Odisha-Kalahandi	IDWH	DFO	T. Ashok Kumar	20 July 2020
45	Odisha-Satkosia TR	IDWH	RCCF& FD	Dr.Pradeep Raj Karat	14 July 2020
46	Rajasthan	IDWH	Chief Wildlife Warden	Arindham Tomar	02 July 2020
47	Rajasthan-Sariska TR	IDWH	DFO	Mr. Sudarshan Sharma	14 August 2020
48	Tamil Nadu-Mudumalai TR	IDWH	FD	K K Kaushal	28 July 2020
49	TamilNadu-Coimbatore	IDWH	DFO	D Venkatesh	21 August 2020
50	UP-Dudhwa TR	IDWH	CCF & FD	Mr. Sanjay Kumar	14 July 2020
51	UP-Pilibhit TR	IDWH	CCF&FD	Dr. Raja Mohan	16 July 2020
52	UP-Ranipur-WLS	IDWH	WW	GD Mishra	17 July 2020
53	Uttarakhand	IDWH	APCCF	Mr. Ranjan Mishra	30 June 2020
54	Uttarakhand-Kedarnath	IDWH	DFO	Mr. Amit Kanwar	20 August 2020
55	Uttarakhand-Nandadevi NP	IDWH	DCF	N B Sharma	20 August 2020
56	WB-Sunderban	IDWH	DFO, FD	Dr. Sudhir Das, FD (Field Director)	09 July 2020
57	West Bengal	IDWH	Chief Wildlife Warden	R.K. Sinha	10 August 2020
58	West Bengal- Buxa TR	IDWH	CCF&FD	Subhankar Sengupta	17 July 2020
59	West Bengal-Purulia	IDWH	DFO	Mr. Ram Prasad Badana	28 July 2020
60	West Bengal-Sundarban TR	IDWH	DFO	Dr. Sudhir Chandra Das	9 July 2020
61	Odisha-Nayagarh	IDWH	DFO	Mr. Sudarshan Behra	18 July 2020



Sl. No.	State-District-Village	Scheme	Designation	Name & designation	Date of interview
62	Maharashtra-Nagpur	IDWH	DFO	Ms. S D Pallavi	06 August 2020



## Appendix 2: Details of Household Surveys

The number of household interviews conducted across states for the selected schemes is illustrated in the table below.

Table 17: Summary of Household Survey (as on 8<sup>th</sup> September)

Scheme	Andhra Pradesh	Assam	Himachal Pradesh	Karnataka	Kerala	Madhya Pradesh	Maharashtra	Manipur	Mizoram	Odisha	Punjab	Rajasthan	Tamil Nadu	Uttar Pradesh	Grand Total	Sub-package Total
AIBP	94	23		26			31	46			17	18			255	1284
CADWM		31		55			52	44				43			225	
SMI		118				50		25							193	
RRR						113						59			172	
PDMC	19	18		24				17			8	21	44	42	193	
WDC	45	18	18	27			13	32			15	68	1	9	246	
CNR		19				95			20	37			21	11	203	515
GIM						22			21	14		36		41	134	
IDWH		22			5	25						76	49	1	178	
<b>Grand Total</b>	<b>158</b>	<b>249</b>	<b>18</b>	<b>132</b>	<b>5</b>	<b>305</b>	<b>96</b>	<b>164</b>	<b>41</b>	<b>51</b>	<b>40</b>	<b>321</b>	<b>115</b>	<b>104</b>	<b>1799</b>	<b>1799</b>



## Appendix 3: Discussion Guides and Tools

### Annexure 1 Primary Survey Guide – Sector

The primary survey guide for ‘water Sector’ is provided below.

#### 1.1 Discussion Guide for KII - Sector

##### 1.1.1 National level stakeholder – Chairman, Central Water Commission

###### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

###### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India’s policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the Water Resources sector. Since you



are a key stakeholder in the sector overseeing planning and implementation at the national level, your insights would be valuable in understanding of the sector, key challenges and factors that led to successful implementation of the schemes. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this sector? What are your current roles and responsibilities?

#### **RESEARCHER TO NOTE:**

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.*

#### **THEME 1:**

##### **ADEQUACY**

##### **Overall water storage capacity as well as water storage capacity per capita in dams**

Q1. What measures are being taken to increase the water storage capacity of existing dams across India (desilting, O&M etc.)? **(focus)**

Q2. What is the future plan for construction of new water storage structures? **(focus)**

Q3. Is there focus on creating few new large dams or multiple small storage structures across the country? Please explain with supporting reasons about the approach? Has there been any study around this aspect? **(focus)**

Q4. What is the total water storage capacity created in last one year? **(validate)**

Q5. Can you please explain in details, future plans (including numbers) on construction of- Major, medium irrigation and Minor Irrigation tanks? **(focus)**



Q6. What are the key issues faced during implementation as well as planning for the same? **(focus)**

## **THEME 2:**

### **ACCESS**

#### **IPC-IPU Gap**

Q1. What measures are being taken to increase the water utilisation of existing dams for irrigation purposes across India (desilting, lining of canals, O&M etc.)? **(focus)**

Q2. What is the future planning for increasing water utilisation from irrigation purposes from the existing or upcoming major and medium irrigation projects? **(focus)**

Q3. What measures are being taken to improve water use efficiency and increase irrigation coverage from existing irrigation projects? Please explain. **(focus)**

Q4. What are the key issues faced during implementation as well as planning for the same? **(focus)**

Q5. Can you share specific data related to IPC-IPU gap and assessment methodology related comments? **(focus)**

## **THEME 3:**

### **EQUITY**

#### **Efficiency of canal network**

Q1. What are the major issues faced during the following stages of a canal irrigation project (a) planning (b) execution and (c) operations? **(focus)**

Q2. What are the key mitigation measure(s) for each issue? **(focus)**

Q3. What are the other options or innovative techniques which may be used in large scale to reduce losses and inequity in water distributions? **(focus)**

Q4. What are the main challenges for each innovative technique identified? **(focus)**

Q5. Can you share case studies where alternate irrigation systems have been explored? **(validate)**

## **THEME 4:**

### **SUSTAINABILITY**

#### **Dependency on groundwater for irrigation**

Q1. What are the top reasons for farmers favoring irrigation from Groundwater over Surface water where Surface water sources are present? **(focus)**

Q2. What are the ways to reduce dependence on Ground Water for irrigation, especially in water stressed areas / states? **(focus)**

Q3. Is power subsidy for farmers the right way forward? If no, what measures can be taken in this regard? **(focus)**



Q4. Can you share model cases or initiatives taken to reduce dependency on groundwater for irrigation? **(validate)**

### **Climate Change**

Q1. Do we have a well-developed understanding of impact of climate change on water resources sector? **(focus)**

Q2. What are the policies and planning being undertaken to tackle climate change, uneven rainfall, or disasters like flood? **(focus)**

Q3. How are these plans being implemented? **(focus)**

Q4. Can you please share top 5 impact and possible mitigation measures on Water Resources sector due to Climate change, uneven rainfall or disasters like flood? **(validate)**

### **Gap between demand and supply of water**

Q1. Top 5 measures being taken or planned to reduce demand supply gap in respective areas? **(focus)**

Q2. Top 5 recommendations for reducing the demand supply gap in the future **(focus)**

## **THEME 5:**

### **OVERALL NATURE AND RESPONSIVENESS OF WATER SECTOR PLANNING**

#### **Conjunctive use of surface and groundwater**

Q1. How can conjunctive use of surface and groundwater resources be included in planning, design, implementation of water resources related scheme? Is there adequate understanding of concepts around conjunctive use among beneficiaries, state level nodal agency responsible for planning? **(focus)**

Q2. How has the same been implemented in recent times? **(validate)**

Q3. Can you please share any model case studies addressing this area? **(validate)**

Q4. What are the main challenges to conjunctive use of ground and surface water? **(focus)**

Q5. What impact does separation of institutions in planning and managing of surface and ground water resource play? **(focus)**

## **THEME 7:**

### **WATER SECURITY**

#### **Water sharing treaties / agreements and diplomacy**

Q1. What are the range of issues covered in the water sharing agreements with neighbouring countries? How well are such agreements enforced? **(focus)**

Q2. What are the present and future areas of challenge / conflict in water sharing between countries? **(focus)**



Q3. What are the range of issues covered in the water sharing agreements between states? How well are such agreements enforced? **(focus)**

Q4. What are the present and future areas of challenge / conflict in water sharing between states? **(focus)**

Q5. Can you please share any best practices in this area of water sharing treaties? **(validate)**

## **THEME 8:**

### **GAPS IN BROAD SECTORAL OUTCOMES**

#### **R&D in the sector**

Q1. What percentage of total fund allocation is directed towards R&D in CWC? **(validate)**

Q2. How much of that percent is being utilized? What is status of availability of any Institute or centre or department dedicated for R&D in the Sector? **(focus)**

Q3. What is the percentage of private sector participation in R&D? **(focus)**

Q4. What are the challenges and gaps in under researched areas? **(focus)**

Q5. What are some innovations or practices under R&D carried out by CWC? **(validate)**

### 1.1.2 National level stakeholder - Member- Water Planning and Projects- Central Water Commission

#### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_that made you decide to\_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said\_\_\_\_\_ but it also seems like\_\_\_\_\_. Can you explain?

#### **INTRODUCTION: SELF**



Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the Water Resources sector. Since you are a key stakeholder in the sector overseeing planning and implementation at the national level, your insights would be valuable in understanding of the sector, key challenges and factors that led to successful implementation of the schemes. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this sector? What are your current roles and responsibilities?

#### **RESEARCHER TO NOTE:**

*1. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*

*2. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.*

#### **THEME 1:**

##### **ADEQUACY**

**Overall water storage capacity as well as water storage capacity per capita in dams**



Q1. Currently, are there any storage capacity augmenting (dams) related projects stalled due to want of funds? If yes, provide some details. Do you feel innovative funding's like Long Term Irrigation Fund (LTIF) (currently being used for AIBP projects) may help in reviving such projects? **(focus)**

Q2. What is the average cost for mobilization of funds (through market borrowings) for such projects? **(focus)**

### **THEME 3:**

#### **EQUITY**

##### **Spatial variance in surface water availability and River interlinking**

Q1. How can we mitigate the impact of spatial variation of rainfall and surface water availability? **(focus)**

Q2. Are there alternatives to river-linking / inter-basin transfers to address the geographic variations in water availability? If yes, please explain. **(focus)**

Q3. What are the merits and demerits of river linking and other approaches? **(focus)**

Q4. Is there any negative environmental impact of altering the natural flow of water? How can these be addressed? **(focus)**

Q5. Can you share best practices implemented addressing this issue in India? **(validate)**

Q6. Do you feel establishment of innovative funding mechanisms like Long Term Irrigation Fund (LTIF) (currently being used for AIBP projects) may encourage more initiatives projects like river-linking that help in reducing spatial variance in surface water availability? **(focus)**

### **THEME 4:**

#### **SUSTAINABILITY**

##### **Extraction of groundwater and its regulation**

Q1. What are the top 5 reasons for over extraction of Ground Water? **(validate)**

Q2. Can you share key steps which may be taken for regulating the same? **(validate)**

Q3. Can you share successful case studies in India where unregulated extraction has been reduced? **(validate)**

Q4. What are the acts/rules/regulations adopted at different levels (National/State/District)? **(validate)**

Q5. What are the challenges faced in effective implementation of the Model Acts and Regulations? **(validate)**

Q6. What measures are being taken to ensure effective implementation and compliance of adopted acts/rule/regulations? (Like in areas of safety, accountability, transparency) **(validate)**

### **THEME 5:**

#### **Overall Nature and Responsiveness of Water Sector Planning**

##### **Planning and data management in the sector**



Q1. National Hydrology project may bring better quality data. What measures may further improve the data availability? **(focus)**

Q2. Demand side data availability for all sectors- Agriculture, Industrial and Domestic (Rural and Urban) is a challenge. What are the possible ways to address and streamline such efforts? **(focus)**

Q3. What are the Challenges and opportunities in coordinated approach between various departments like Ground Water, Surface water, and Irrigation/ Agriculture and demand side departments? **(focus)**

Q4. What is the suggested way forward for Capacity building of stakeholders and streamlined /standardized approach for data collection? **(focus)**

### **Coordination between the various central government level organizations and the state government departments**

Q1. What are the top 5 interventions taken or being planned for improving coordination between the various stakeholders within CWC? **(validate)**

Q2. In what ways can greater coordination between the various central government level organizations and the state government departments help in planning and implementation of water resources related policies, schemes, etc.? **(focus)**

### **Water for environmental needs**

Q1. What are the top 5 ways to ensure environmental water requirements are being fulfilled? **(focus)**

Q2. What are the current measures being taken or planned to provide water for ecosystem services? **(validate)**

Q3. How is the overall ecological balance impacted due to scarcity and how can these be addressed? **(focus)**

## **THEME 8:**

### **GAPS IN BROAD SECTORAL OUTCOMES**

#### **Efficient groundwater management and technologies**

Q1. What are the top 5 interventions taken or being planned for improving groundwater management & technologies? **(validate)**

Q2. In what other ways can efficient groundwater management be achieved? **(validate)**

#### **Need for water regulator for all states and /or central**

Q1. What are the top 5 reasons for and against need for water regulator for all states and at central level? **(validate)**

Q2. What are the top 5 ways on how water regulatory authority may benefit the sector as a whole? What should be the key functions of the regulators? **(validate)**



## **Capacity building of the organizations/utilities creating and managing Water Resources infrastructure and providing service**

Q1. What are the top 5 areas or skills in which capacity building is required in your department or in CWC?

**(focus)**

Q2. What are the top 5 organizations providing such capacity building activities? Which forms of capacity building activities are more effective? **(focus)**

## **Staffing levels**

Q1. Do you feel that adequate staffing exists in various sections of the department or in CWC? Ways to improve the same? **(focus)**

Q2. Should the ratio of office to field staff in the department improve? Recommendations in this area. **(focus)**

## **Financing in the sector**

Q1. What are the sources of revenue for the CWC? Are there possible improvements that can be done to increase revenue? **(focus)**

Q2. For O&M of assets created, how can financing be improved (including innovative funding options)? **(focus)**

Q3. How can PPPs be implemented in Water Supply Side and Percentage of private investment presently in the sector? **(focus)**

Q4. Can you please share model case studies and experience in PPP in the sector (supply side)? **(validate)**

Q5. What incentives are available to promote private investments or PPP in the Sector (supply side)? **(focus)**

Q6. How and in which activities can Private sector provide additional value with their expertise? **(focus)**

Q7. What are the challenges faced in attracting private sector participation? How has PPP worked in the sector (supply side)? **(focus)**

## **Project Management issues and Slow project execution**

Q1. What are the various categories of projects being undertaken by CWC? What are the project management techniques being presently used by CWC? How can these be improved? **(focus)**

Q2. What are the top 5 reasons for project cost overrun? **(focus)**

Q3. What are the top 5 reasons for project time overrun? **(focus)**

Q4. What are the present Mitigation measures taken to avoid project time and cost overrun issues? How can these be further improved? **(focus)**



### 1.1.3 National level stakeholders - Additional Secretary [Wing Head (River Development and Project Planning-RD&PP)] (Water Resources Department- Ministry of Jal Shakti)

#### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the Water Resources sector. Since you are a key stakeholder in the sector overseeing planning and implementation at the national level, your insights would be valuable in understanding of the sector, key challenges and factors that led to successful implementation of the schemes. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes



- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this sector? What are your current roles and responsibilities?

### **RESEARCHER TO NOTE:**

1. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.
2. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.

### **THEME 1:**

#### **ADEQUACY**

#### **Overall water storage capacity as well as water storage capacity per capita in dams**

Q1. What measures are being taken to increase the water storage capacity of existing dams across India (desilting, O&M etc.)? **(focus)**

Q2. What is the future plan for construction of new water storage structures? **(focus)**

Q3. Is there focus on creating few new large dams or multiple small storage structures across the country? Please explain with supporting reasons about the approach? Has there been any study around this aspect?

**(focus)**

Q4. What is the total water storage capacity created in last one year? **(validate)**

Q5. Can you please explain in details future plans (including numbers) on construction of- Major, medium irrigation and Minor Irrigation tanks? **(validate)**

Q6. What are the key issues faced during implementation as well as planning for the same? **(focus)**

### **THEME 3:**

#### **EQUITY**

#### **Spatial variance in surface water availability and River interlinking**



- Q1. How can we mitigate the impact of spatial variation of rainfall and surface water availability? **(focus)**
- Q2. Are there alternatives to river-linking / inter-basin transfers to address the geographic variations in water availability? If yes, please explain. **(focus)**
- Q3. What are the merits and demerits of river linking and other approaches? **(focus)**
- Q4. Is there any negative environmental impact of altering the natural flow of water? How can these be addressed? **(focus)**
- Q5. Can you share best practices implemented addressing this issue in India? **(validate)**

#### **Efficiency of canal network**

- Q1. What are the major issues faced during the following stages of a canal irrigation project (a) planning (b) execution and (c) operations? **(focus)**
- Q2. What are the key mitigation measure(s) for each issue? **(focus)**
- Q3. What are the other options or innovative techniques which may be used in large scale to reduce losses and inequity in water distributions? **(focus)**
- Q4. What are the main challenges for each innovative technique identified? **(focus)**
- Q5. Can you share case studies where alternate irrigation systems have been explored? **(validate)**

### **THEME 4:**

#### **SUSTAINABILITY**

##### **Efficiency in water use and pricing in domestic sector**

- Q1. Can you please share your views on the following aspects of urban water supply - inefficient utilization, high per capita consumption in urban areas? What are the possible ways to overcome these challenges? What are the measures already taken to mitigate these challenges? **(validate)**
- Q2. What are your views on water pricing and its effective implementation for the domestic sector? What are your views on the need for regulatory authorities? **(focus)**

##### **Gap between demand and supply of water**

- Q1. Can you please suggest top 5 measures being taken or planned to reduce demand supply gap of water resources? **(validate)**
- Q2. Can you please suggest top 5 recommendations for reducing the demand supply gap in the future? **(validate)**

### **THEME 5:**

#### **Overall Nature and Responsiveness of Water Sector Planning**

##### **Planning and data management in the sector**



Q1. National Hydrology project may bring better quality data. What measures may further improve the data availability? **(focus)**

Q2. Demand side data availability for all sectors- Agriculture, Industrial and Domestic (Rural and Urban) is a challenge. What are the possible ways to address and streamline such efforts? **(focus)**

Q3. What are the Challenges and opportunities in coordinated approach between various departments like Ground Water, Surface water, and Irrigation/ Agriculture and demand side departments? **(focus)**

Q4. What is the suggested way forward for Capacity building of stakeholders and streamlined /standardized approach for data collection? **(focus)**

### **Coordination between the various central government level organizations and the state government departments**

Q1. What are the top 5 interventions taken or being planned for improving coordination between the various stakeholders in WRD? **(validate)**

Q2. In what ways can greater coordination between the various central government level organizations and the state government departments help in planning and implementation of water resources related policies, schemes, etc.? **(focus)**

### **Conjunctive use of surface and groundwater**

Q1. How can conjunctive use of surface and groundwater resources be included in planning, design, implementation of water resources related scheme? Is there adequate understanding of concepts around conjunctive use among beneficiaries, state level nodal agency responsible for planning? **(focus)**

Q2. How has the same been implemented in recent times? **(validate)**

Q3. Can you please share any model case studies addressing this area? **(validate)**

Q4. What are the main challenges to conjunctive use of ground and surface water? **(focus)**

Q5. What impact does separation of institutions in planning and managing of surface and ground water resource play? **(focus)**

### **Water for environmental needs**

Q1. What are the top 5 ways to ensure environmental water requirements are being fulfilled? **(focus)**

Q2. What are the current measures being taken or planned to provide water for ecosystem services? **(validate)**

Q3. How is the overall ecological balance impacted due to scarcity and how can these be addressed? **(focus)**

## **THEME 7:**

### **WATER SECURITY**

#### **Using recycled water for agriculture**



Q1. What measures have been taken or being planned to be implemented , especially from the supply point of view, for planned, safe reuse of treated wastewater for agricultural purpose? **(focus)**

Q2. What may be the possible issues in implementing planned reuse of treated wastewater for agriculture sector, especially from the supply point of view? **(focus)**

Q3. Please share recommendations or possible way forward to implement planned use of recycled water for agriculture, especially from the supply point of view? **(focus)**

## **THEME 8:**

### **GAPS IN BROAD SECTORAL OUTCOMES**

#### **Need for water regulator for all states and /or central**

Q1. What are the top 5 reasons for and against need for water regulator for all states and at central level? **(focus)**

Q2. What are the top 5 ways on how water regulatory authority may benefit the sector as a whole? What should be the key functions of the regulators? **(focus)**

#### **Staffing levels**

Q1. Do you feel that adequate staffing exists in various sections of the WRD? Ways to improve the same? **(validate)**

Q2. Should the ratio of office to field staff in the WRD improve? Recommendations in this area. **(focus)**

#### **Financing in the sector**

Q1. What are the sources of revenue for the WRD? Are there possible improvements that can be done to increase revenue? **(focus)**

Q2. For O&M of assets created, how can financing be improved (including innovative funding options)? **(focus)**

Q3. How can PPPs be implemented in esp. Water Supply Side? Percentage of private investment presently in the water supply side? **(focus)**

Q4. Can you please share model case studies and experience in PPP in the sector, especially in water supply side? **(validate)**

Q5. What incentives are available to promote private investments or PPP in the Sector, especially in water supply side? **(focus)**

Q6. How and in which activities can Private sector provide additional value with their expertise? **(focus)**

Q7. What are the challenges faced in attracting private sector participation? How has PPP worked in the sector, especially in water supply side? **(focus)**

## **THEME 9:**



## CONVERGENCE

### Scheme convergence

Q1. During scheme designing in water resources sector, what are the methodologies presently adopted by the WRD to avoid duplication across schemes and departments at different levels (i.e. National/State/District/Block)? **(focus)**

Q2. What other measures may be taken to avoid overlap and bring convergence in schemes? What are the challenges in achieving convergence? **(focus)**

Q3. What activities are undertaken to ensure convergence at community level? Are there any Action Plans prepared at State/District/Block level to ensure the same? **(validate)**

### 1.1.4 National level stakeholder - Mission Director- National Water Mission

#### GENERAL GUIDELINES:

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  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### INTRODUCTION: SELF

Thank you for giving us your valuable time.

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would like to seek your opinion on certain topics related to the Water Resources sector. Since you are a key stakeholder in the sector overseeing planning and implementation at the national level, your insights would be valuable in understanding of the sector, key challenges and factors that led to successful implementation of the schemes. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this sector? What are your current roles and responsibilities?

#### **RESEARCHER TO NOTE:**

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#### **THEME 1:**

##### **ADEQUACY**

##### **Overall water storage capacity as well as water storage capacity per capita in dams**

Q1. What measures are being taken under the National Water Mission to increase the water storage capacity of existing dams across India (desilting, O&M etc.)? **(focus)**

Q2. What is the future plan for construction of new water storage structures under the National Water Mission? **(focus)**

Q3. Is there focus on creating few new large dams or multiple small storage structures across the country? Please explain with supporting reasons about the approach? Has there been any study around this aspect? **(focus)**



Q4. Can you please explain in details future plans under the National Water Mission on construction of Major, medium irrigation and Minor Irrigation tanks? **(validate)**

Q5. What are the key issues faced during implementation as well as planning for the same? **(validate)**

### **THEME 3:**

#### **EQUITY**

##### **Spatial variance in surface water availability and River interlinking**

Q1. How can we mitigate the impact of spatial variation of rainfall and surface water availability? How does National Water Mission aim to mitigate this? **(focus)**

Q2. Are there alternatives to river-linking / inter-basin transfers to address the geographic variations in water availability? If yes, please explain. **(focus)**

Q3. What are the merits and demerits of river linking and other approaches? **(focus)**

Q4. Is there any negative environmental impact of altering the natural flow of water? How can these be addressed? **(focus)**

Q5. Can you share best practices implemented addressing this issue in India? **(validate)**

##### **Efficiency of canal network**

Q1. What are the options or innovative techniques which may be used in large scale to reduce losses and inequity in water distributions of canal networks? **(focus)**

Q4. What are the main challenges for each innovative technique identified? **(focus)**

Q5. Can you share case studies where alternate irrigation systems have been explored? **(validate)**

### **THEME 5:**

#### **Overall Nature and Responsiveness of Water Sector Planning**

##### **Planning and data management in the sector**

Q1. National Hydrology project may bring better quality data. What measures may further improve the data availability? How does National Water Mission focus to improve this? **(validate)**

Q2. Demand side data availability for all sectors- Agriculture, Industrial and Domestic (Rural and Urban) is a challenge. What are the possible ways to address and streamline such efforts? **(focus)**

Q3. What are the Challenges and opportunities in coordinated approach between various departments like Ground Water, Surface water, and Irrigation/ Agriculture and demand side departments? How does National Water Mission focus to improve this? **(validate)**

Q4. What is the suggested way forward for Capacity building of stakeholders and streamlined /standardized approach for data collection? **(validate)**

##### **Conjunctive use of surface and groundwater**



Q1. How can conjunctive use of surface and groundwater resources be included in planning, design, implementation of water resources related scheme? Is there adequate understanding of concepts around conjunctive use among beneficiaries, state level nodal agency responsible for planning? How does the National Water Mission address this (if at all)? **(validate)**

Q2. How has the same been implemented in recent times? **(validate)**

Q3. Can you please share any model case studies addressing this area? **(validate)**

Q4. What are the main challenges to conjunctive use of ground and surface water? **(validate)**

Q5. What impact does separation of institutions in planning and managing of surface and ground water resource play? How does the National Water Mission address this (if at all)? **(validate)**

### **Water for environmental needs**

Q1. What are the top 5 ways to ensure environmental water requirements are being fulfilled? **(validate)**

Q2. What are the current measures being taken or planned as per the National Water Mission (if any) to provide water for ecosystem services? **(focus)**

Q3. How is the overall ecological balance impacted due to scarcity and how can these be addressed? **(validate)**

## **THEME 7:**

### **WATER SECURITY**

#### **Using recycled water for agriculture**

Q1. What measures have been taken or being planned to be implemented for planned, safe reuse of treated wastewater for agricultural purpose, as per the National Water Mission (if any)? **(focus)**

Q2. What may be the possible issues in implementing planned reuse of treated wastewater for agriculture sector? **(focus)**

Q3. Please share recommendations or possible way forward to implement planned use of recycled water for agriculture? **(focus)**

## **THEME 8:**

### **GAPS IN BROAD SECTORAL OUTCOMES**

#### **Need for water regulator for all states and /or central**

Q1. What are the top 5 reasons for and against need for water regulator for all states and at central level? Does the National Water Mission address this issue and how? **(focus)**

Q2. What are the top 5 ways on how water regulatory authority may benefit the sector as a whole? What should be the key functions of the regulators? Does the National Water Mission address this issue and how? **(focus)**



## R&D in the sector

Q1. What is the percentage of private sector participation in R&D and does the National Water Mission address this issue and how? **(validate)**

### THEME 9:

#### CONVERGENCE

##### Scheme convergence

Q1. During scheme designing in water resources sector, what are the methodologies presently adopted by the authorities to avoid duplication across schemes and departments at different levels (i.e. National/State/District/Block)? Does the National Water Mission address this issue and how? **(focus)**

## 1.1.5 National level stakeholder - Commissioner (CAD)- Water Resources Department (Ministry of Jal Shakti)

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#### **THEME 2:**

##### **ACCESS**

##### **IPC-IPU Gap**

Q1. What measures are being taken to increase the water utilisation of existing dams for irrigation purposes across India (desilting, lining of canals, O&M etc.)? **(validate)**

Q2. What is the future planning for increasing water utilisation from irrigation purposes from the existing or upcoming major and medium irrigation projects? **(validate)**



Q3. What measures are being taken to improve water use efficiency and increase irrigation coverage from existing irrigation projects? Please explain. **(validate)**

Q4. What are the key issues faced during implementation as well as planning for the same? **(focus)**

Q5. Can you share specific data related to IPC-IPU gap and assessment methodology related comments? **(focus)**

## **THEME 8:**

### **GAPS IN BROAD SECTORAL OUTCOMES**

#### **Project Management issues and Slow project execution**

Q1. What are the project management techniques being presently used by the department? How can these be improved? **(focus)**

Q2. What are the top 5 reasons for project cost overrun? **(focus)**

Q3. What are the top 5 reasons for project time overrun? **(focus)**

Q4. What are the present Mitigation measures taken to avoid project time and cost overrun issues? How can these be further improved? **(focus)**

#### 1.1.6 National level stakeholder - Commissioner - Flood Management (Water Resources Department, MoJS)

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## **THEME 7:**



## **WATER SECURITY**

### **Water sharing treaties / agreements and diplomacy**

Q1. What are the range of issues covered in the water sharing agreements with neighbouring countries? How well are such agreements enforced? **(focus)**

Q2. What are the present and future areas of challenge / conflict in water sharing between countries? **(focus)**

Q3. What are the range of issues covered in the water sharing agreements between states? How well are such agreements enforced? **(focus)**

Q4. What are the present and future areas of challenge / conflict in water sharing between states? **(focus)**

Q5. Can you please share any best practices in this area of water sharing treaties? **(focus)**

### **1.1.7 National level stakeholder - Joint Secretary- International Cooperation and Groundwater (IC&GW)- Water Resources Department- MoJS**

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**(focus)**



Q3. What are the range of issues covered in the water sharing agreements between states? How well are such agreements enforced? **(focus)**

Q4. What are the present and future areas of challenge / conflict in water sharing between states? **(focus)**

Q5. Can you please share any best practices in this area of water sharing treaties? **(focus)**

### 1.1.8 National level stakeholder - Joint Secretary- Administration- Water Resources Department, MoJS

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#### **THEME 8:**

##### **GAPS IN BROAD SECTORAL OUTCOMES**

##### **Capacity building of the organizations/utilities creating and managing Water Resources infrastructure and providing service**

Q1. What are the top 5 areas or skills in which capacity building is required in your department or ministry? **(validate)**

Q2. What are the top 5 organizations providing such capacity building activities? Which forms of capacity building activities are more effective? **(validate)**

##### **Staffing levels**

Q1. Do you feel that adequate staffing exists in various sections of the department? Ways to improve the same? **(validate)**

Q2. Should the ratio of office to field staff in the department improve? Recommendations in this area. **(validate)**



## 1.1.9 National level stakeholder - Joint Secretary & Financial Advisor (JS&FA), Water Resources Department, MoJS

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#### **THEME 8:**

#### **GAPS IN BROAD SECTORAL OUTCOMES**

##### **Financing in the sector**

Q1. What are the sources of revenue for the WRD? Are there possible improvements that can be done to increase revenue? **(focus)**

Q2. For O&M of assets created, how can financing be improved (including innovative funding options)? **(focus)**

Q3. How can PPPs be implemented in a) Water Supply Side and b) Water demand side? Percentage of private investment presently in the sector? **(focus)**

Q4. Can you please share model case studies and experience in PPP in the sector? **(validate)**

Q5. What incentives are available to promote private investments or PPP in the Sector? **(focus)**

Q6. How and in which activities can Private sector provide additional value with their expertise? **(focus)**

Q7. What are the challenges faced in attracting private sector participation? How has PPP worked in the sector? **(focus)**

#### 1.1.10 National level stakeholder - Commissioner- State Projects, Water Resources Department, MoJS

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### THEME 2:

#### ACCESS

##### Irrigation coverage status

Q1. What are the key reasons for low irrigation coverage? What are the ways to improve the same? **(focus)**

Q2. What are the key reasons for low cropping intensity even in irrigated areas? What are the ways to improve the same? **(focus)**

Q3. What is the reason for varying land productivity for rain fed v/s canal v/s well irrigation? **(focus)**

### THEME 8:

#### GAPS IN BROAD SECTORAL OUTCOMES

##### Project Management issues and Slow project execution

Q1. What are the project management techniques being presently used by the department or ministry? How can these be improved? **(focus)**

Q2. What are the top 5 reasons for project cost overrun? **(focus)**

Q3. What are the top 5 reasons for project time overrun? **(focus)**

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##### 1.1.11 National level stakeholder - Economic Advisor- Water Resources Department- MoJS

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### **GAPS IN BROAD SECTORAL OUTCOMES**

#### **R&D in the sector**

Q1. What percentage of total fund allocation is directed towards R&D? **(focus)**

Q2. How much of that percent is being utilized? What is status of availability of any Institute or centre or department dedicated for R&D in the Sector? **(focus)**

Q3. What is the percentage of private sector participation in R&D? **(focus)**

Q4. What are the challenges and gaps in under researched areas? **(focus)**

Q5. What are some innovations or practices under R&D carried out by Central or State or District? **(focus)**

#### **1.1.12 National level stakeholder - Chairman, Central Ground Water Board (CGWB)**

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## **THEME 4:**

### **SUSTAINABILITY**

#### **Extraction of groundwater and its regulation**

Q1. What are the top 5 reasons for over extraction of Ground Water? **(focus)**

Q2. Can you share key steps which may be taken for regulating the same? **(focus)**

Q3. Can you share successful case studies in India where unregulated extraction has been reduced? **(validate)**

Q4. What are the acts/rules/regulations adopted at different levels (National/State/District)? **(focus)**

Q5. What are the challenges faced in effective implementation of the Model Acts and Regulations? **(focus)**

Q6. What measures are being taken to ensure effective implementation and compliance of adopted acts/rule/regulations? (Like in areas of safety, accountability, transparency) **(focus)**

#### **Dependency on groundwater for irrigation**

Q1. What are the top reasons for farmers favoring irrigation from Groundwater over Surface water where Surface water sources are present? **(focus)**

Q2. What are the ways to reduce dependence on Ground Water for irrigation, especially in water stressed areas / states? **(focus)**

Q3. Is power subsidy for farmers the right way forward? If no, what measures can be taken in this regard? **(focus)**

Q4. Can you share model cases or initiatives taken to reduce dependency on groundwater for irrigation? **(validate)**

#### **Micro level information on all depleted aquifers**

Q1. Is there adequate micro level information on depleted aquifers? Why? How can this be overcome? **(focus)**

Q2. How are artificial recharging plans done presently? Is there any way by which we can improve the same? **(focus)**

## **THEME 5:**

### **Overall Nature and Responsiveness of Water Sector Planning**

#### **Groundwater Level Monitoring**

Q1. Given India's size, is it necessary to increase the density of observation wells for carrying out micro-level studies and continuous monitoring of groundwater levels? What should be the optimal number of piezometers? **(focus)**

Q2. What are the other technologies used for groundwater level monitoring and their advantages and disadvantages? **(focus)**



Q3. How can installation and increase in density of piezometers (like in AP) help in better monitoring?  
**(focus)**

#### **Conjunctive use of surface and groundwater**

Q1. How can conjunctive use of surface and groundwater resources be included in planning, design, implementation of water resources related scheme? Is there adequate understanding of concepts around conjunctive use among beneficiaries, state level nodal agency responsible for planning? **(validate)**

Q2. How has the same been implemented in recent times? **(validate)**

Q3. Can you please share any model case studies addressing this area? **(validate)**

Q4. What are the main challenges to conjunctive use of ground and surface water? **(validate)**

Q5. What impact does separation of institutions in planning and managing of surface and ground water resource play? **(validate)**

### **THEME 6:**

#### **QUALITY**

##### **Groundwater quality**

Q1. How has over extraction of groundwater impacted its quality? **(focus)**

Q2. How can we control such incidents? **(focus)**

### **THEME 8:**

#### **GAPS IN BROAD SECTORAL OUTCOMES**

##### **Efficient groundwater management and technologies**

Q1. What are the top 5 interventions taken or being planned for improving groundwater management & technologies? **(focus)**

Q2. In what other ways can efficient groundwater management be achieved? **(focus)**

##### **Need for water regulator for all states and /or central**

Q1. What are the top 5 reasons for and against need for water regulator for all states and at central level?  
**(focus)**

Q2. What are the top 5 ways on how water regulatory authority may benefit the sector as a whole? What should be the key functions of the regulators? **(focus)**

##### **Enforceable water entitlements**

Q1. What are the top 5 measures being taken or planned to improve governance and regulated groundwater extraction? **(focus)**

Q2. What are the top 5 recommendations for further improving the same? **(focus)**



### 1.1.13 National level stakeholder - Joint Secretary (Natural Resources Management and Policy), Department of Agriculture, Cooperation & Farmers Welfare, MoAFW

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- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes



- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
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- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

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### **THEME 2:**

#### **ACCESS**

##### **Irrigation coverage status**

Q1. What are the key reasons for low irrigation coverage? What are the ways to improve the same?

**(validate)**

Q2. What are the key reasons for low cropping intensity even in irrigated areas? What are the ways to improve the same? **(validate)**

Q3. What is the reason for varying land productivity for rain fed v/s canal v/s well irrigation? **(validate)**

### **THEME 4:**

#### **SUSTAINABILITY**

##### **Extraction of groundwater and its regulation**

Q1. What are the top 5 reasons for over extraction of Ground Water for agriculture? **(validate)**

Q2. Can you share key steps which may be taken for regulating the same? **(validate)**

Q3. Can you share successful case studies in India where unregulated extraction for agriculture has been reduced? **(validate)**



Q4. What are the acts/rules/regulations adopted at different levels (National/State/District) and role of agriculture department or officials in the same? **(focus)**

#### **Dependency on groundwater for irrigation**

Q1. What are the top reasons for farmers favoring irrigation from Groundwater over Surface water where Surface water sources are present? **(focus)**

Q2. What are the ways to reduce dependence on Ground Water for irrigation, especially in water stressed areas / states? **(focus)**

Q3. Is power subsidy for farmers the right way forward? If no, what measures can be taken in this regard? **(validate)**

Q4. Can you share model cases or initiatives taken to reduce dependency on groundwater for irrigation? **(validate)**

#### **Cropping pattern and crop diversification**

Q1. What can be the possible actions to motivate farmers away from water intensive crops and traditional cropping patterns? **(focus)**

Q2. What are the possible techniques and interventions which may be adopted on large scale to reduce the water footprint of the traditional crops? **(focus)**

#### **Gap between demand and supply of water**

Q1. Can you please suggest top 5 measures being taken or planned to reduce demand supply gap in agricultural sector? **(validate)**

Q2. Can you please suggest top 5 recommendations for reducing the demand supply gap in the future in agricultural sector? **(validate)**

### **THEME 5:**

#### **Overall Nature and Responsiveness of Water Sector Planning**

##### **Planning and data management in the sector**

Q1. Demand side data availability for Agriculture is a challenge. What are the possible ways to address and streamline such efforts? **(validate)**

Q2. What are the Challenges and opportunities in coordinated approach between Irrigation and Agriculture departments? **(focus)**

Q3. What is the suggested way forward for Capacity building of stakeholders and streamlined /standardized approach for data collection especially in areas related to water demand estimation and planning basis crop cycle and cropping pattern? **(focus)**

##### **Coordination between the various central government level organizations and the state government departments**



Q1. What are the top 5 interventions taken or being planned for improving coordination between the various stakeholders from irrigation and agriculture department? **(focus)**

Q2. In what ways can greater coordination between the various central government level organizations and the state government departments help in planning and implementation of water resources related policies, schemes, etc. which have direct or indirect impact on the Agricultural sector? **(validate)**

## **THEME 7:**

### **WATER SECURITY**

#### **Using recycled water for agriculture**

Q1. What measures have been taken or being planned to be implemented for planned, safe reuse of treated wastewater for agricultural purpose? **(focus)**

Q2. What may be the possible issues in implementing planned reuse of treated wastewater for agriculture sector? **(focus)**

Q3. Please share recommendations or possible way forward to implement planned use of recycled water for agriculture? **(focus)**

## **THEME 8:**

### **GAPS IN BROAD SECTORAL OUTCOMES**

#### **Need for water regulator for all states and /or central**

Q1. What are the top 5 reasons for and against need for water regulator for all states and at central level (especially related to the agricultural sector)? What are your views on ISF and water quotas for agriculture sector? **(focus)**

Q2. What are the top 5 ways on how water regulatory authority may benefit the agriculture sector as a whole? What should be the key functions of the regulators especially related to the agriculture sector? **(validate)**

#### **Capacity building of the organizations/utilities creating and managing Water Resources infrastructure and providing service**

Q1. What are the top 5 areas or skills in which capacity building is required in your department, especially in water resources related field and common themes with the agriculture sector? **(focus)**

Q2. What are the top 5 organizations providing such capacity building activities? Which forms of capacity building activities are more effective? **(focus)**

## **THEME 9:**

### **CONVERGENCE**

#### **Scheme convergence**



Q1. What are the top issues the department face when implementing water resources related schemes or component of any scheme? **(focus)**

### 1.1.14 National level stakeholder - Joint Secretary- Ministry of Environment, Forest and Climate Change

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to successful implementation of the schemes. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
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- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

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### **THEME 3:**

#### **EQUITY**

##### **Spatial variance in surface water availability and River interlinking**

Q1. How can we mitigate the impact of spatial variation of rainfall and surface water availability? **(validate)**

Q2. Are there alternatives to river-linking / inter-basin transfers to address the geographic variations in water availability? If yes, please explain. **(focus)**

Q3. What are the merits and demerits of river linking and other approaches? **(focus)**

Q4. Is there any negative environmental impact of altering the natural flow of water? How can these be addressed? **(focus)**

Q5. Can you share best practices implemented addressing this issue in India? **(validate)**

### **THEME 4:**

#### **SUSTAINABILITY**

##### **Water consumption in Thermal Power Plants**

Q1. What steps have been taken to reduce water consumption by existing thermal Power plants? **(focus)**



Q2. Can you let us know possible measures that may be taken for thermal power plants failing to adhere to water consumption regulations as per MoEF&CC? **(focus)**

#### **Efficiency in water use and pricing in Industrial sector**

Q1. What are the water consumption trends in water intensive industries like paper & pulp and what measures are being taken to move towards efficient water use? How can Industrial water pricing be implemented effectively in this sector? **(validate)**

Q2. What are the water consumption trends in the iron and steel industry and what measures are being taken to move towards efficient water use? How can Industrial water pricing be implemented effectively in this sector? **(validate)**

Q3. What are the water consumption trends in the textile industry and what measures are being taken to move towards efficient water use? How can Industrial water pricing be implemented effectively in this sector? **(validate)**

#### **Climate Change**

Q1. Do we have a well-developed understanding of impact of climate change on water resources sector? **(focus)**

Q2. What are the policies and planning being undertaken to tackle climate change, uneven rainfall, or disasters like flood? **(focus)**

Q3. How are these plans being implemented? **(focus)**

Q4. Can you please share top 5 impact and possible mitigation measures on Water Resources sector due to Climate change, uneven rainfall or disasters like flood? **(validate)**

#### **THEME 5:**

##### **Overall Nature and Responsiveness of Water Sector Planning**

###### **Water for environmental needs**

Q1. What are the top 5 ways to ensure environmental water requirements are being fulfilled? **(focus)**

Q2. What are the current measures being taken or planned to provide water for ecosystem services? What role does MoEF&CC play in this? **(focus)**

Q3. How is the overall ecological balance impacted due to scarcity and how can these be addressed? **(focus)**

#### **THEME 6:**

##### **QUALITY**

###### **Wastewater reuse & pollution abatement measures**

Q1. What are the major reasons for lack of Effluent Treatment Plants (ETP) facilities for industries? Possible ways to address the gap and ensure compliance? **(focus)**

Q2. What are the major reasons for lack of Sewage Treatment Plant (STP) capacity for domestic sewage? Possible ways to address the gap and ensure compliance? **(focus)**



Q3. What are your views on authentic and up dated database creation for wastewater generation and treatment- dashboard? **(focus)**

Q4. Are there any training sessions held regularly for reducing water pollution, adopting green practices? **(focus)**

#### **THEME 7:**

#### **WATER SECURITY**

##### **Using recycled water for agriculture**

Q1. What measures have been taken or being planned to be implemented for planned, safe reuse of treated wastewater for agricultural purpose? **(focus)**

Q2. What may be the possible issues in implementing planned reuse of treated wastewater for agriculture sector? **(focus)**

Q3. Please share recommendations or possible way forward to implement planned use of recycled water for agriculture? **(focus)**

#### **THEME 8:**

#### **GAPS IN BROAD SECTORAL OUTCOMES**

##### **Wastewater Reuse Policy**

Q1. What is the effectiveness of wastewater reuse policy by states? **(validate)**

Q2. How is the market for treated wastewater and are industries willing to use treated wastewater? Please explain the issues involved. **(validate)**

Q3. What are the top 5 opportunities and risks of mandating wastewater reuse especially by industrial sector? **(validate)**

#### **THEME 9:**

#### **CONVERGENCE**

##### **Scheme convergence**

Q1. What are the top issues the department face when implementing water resources related schemes or component of any scheme? **(focus)**

1.1.15 National level stakeholder - Joint Secretary- Public Health Engineering and Swachh Bharat Mission (PHE & SBM), Ministry of Housing and Urban Affairs

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### **PROFILE OF THE STAKEHOLDER**

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## **THEME 4:**

### **SUSTAINABILITY**

#### **Efficiency in water use and pricing in domestic sector**

Q1. Can you please share your views on the following aspects of urban water supply - inefficient utilization, high per capita consumption in urban areas? What are the possible ways to overcome these challenges? What are the measures already taken to mitigate these challenges? **(focus)**

Q2. What are your views on water pricing and its effective implementation for the domestic sector? What are your views on the need for regulatory authorities? **(focus)**

#### **O&M and financing**

Q1. Can you please share your views on the following aspects of urban water supply - high NRW losses, poor O&M, inadequate coverage of piped water supply in urban area, cost recovery, 24x7 supply, financing mechanisms? What are the possible ways to overcome these challenges? What are the measures already taken to mitigate these challenges? **(focus)**

#### **Urban Water Consumption**

Q1. What is the average urban water consumption in LPCD? Does this include NRW leakages? **(focus)**

## **THEME 5:**

### **Overall Nature and Responsiveness of Water Sector Planning**

#### **Planning and data management in the sector**

Q1. Demand side data availability for Domestic (Urban) is a challenge. What are the possible ways to address and streamline such efforts? **(focus)**

Q2. What is the suggested way forward for Capacity building of stakeholders and streamlined /standardized approach for data collection? **(focus)**

#### **Coordination between the various central government level organizations and the state government departments**



Q1. What are the top 5 interventions taken or being planned for improving coordination between the various stakeholders? **(focus)**

Q2. In what ways can greater coordination between the various central government level organizations and the state government departments help in planning and implementation of water resources related policies, schemes, etc.? **(focus)**

## **THEME 8:**

### **GAPS IN BROAD SECTORAL OUTCOMES**

#### **Wastewater Reuse Policy**

Q1. What is the effectiveness of wastewater reuse policy by states? **(focus)**

Q2. How is the market for treated wastewater and are industries willing to use treated wastewater? Please explain the issues involved. **(focus)**

Q3. What are the top 5 opportunities and risks of mandating wastewater reuse especially by industrial sector? **(focus)**

#### **Need for water regulator for all states and /or central**

Q1. What are the top 5 reasons for and against need for water regulator for all states and at central level? **(focus)**

Q2. What are the top 5 ways on how water regulatory authority may benefit the sector as a whole? What should be the key functions of the regulators? **(focus)**

#### **Capacity building of the organizations/utilities creating and managing Water Resources infrastructure and providing service**

Q1. What are the top 5 areas or skills in which capacity building is required in your department? **(focus)**

Q2. What are the top 5 organizations providing such capacity building activities? Which forms of capacity building activities are more effective? **(focus)**

#### **Staffing levels**

Q1. Do you feel that adequate staffing exists in various sections of the department? Ways to improve the same? **(focus)**

Q2. Should the ratio of office to field staff in the department improve? Recommendations in this area. **(focus)**

#### **Financing in the sector**

Q1. What are the sources of revenue for the department or ministry? Are there possible improvements that can be done to increase revenue? **(focus)**



Q2. For O&M of assets created, how can financing be improved (including innovative funding options)? **(focus)**

Q3. How can PPPs be implemented in Water demand side? Percentage of private investment presently in the sector? **(focus)**

Q4. Can you please share model case studies and experience in PPP in the sector? **(validate)**

Q5. What incentives are available to promote private investments or PPP in the Sector? **(focus)**

Q6. How and in which activities can Private sector provide additional value with their expertise? **(focus)**

Q7. What are the challenges faced in attracting private sector participation? How has PPP worked in the sector? **(focus)**

### **Project Management issues and Slow project execution**

Q1. What are the project management techniques being presently used by the department or ministry? How can these be improved? **(focus)**

Q2. What are the top 5 reasons for project cost overrun? **(focus)**

Q3. What are the top 5 reasons for project time overrun? **(focus)**

Q4. What are the present Mitigation measures taken to avoid project time and cost overrun issues? How can these be further improved? **(focus)**

### **R&D in the sector**

Q1. What percentage of total fund allocation is directed towards R&D? **(focus)**

Q2. How much of that percent is being utilized? What is status of availability of any Institute or centre or department dedicated for R&D in the Sector? **(focus)**

Q3. What is the percentage of private sector participation in R&D? **(focus)**

Q4. What are the challenges and gaps in under researched areas? **(focus)**

Q5. What are some innovations or practices under R&D carried out by Central or State or District? **(focus)**

## **THEME 9:**

### **CONVERGENCE**

#### **Scheme convergence**

Q1. What are the top issues the department face when implementing water resources related schemes or component of any scheme? **(focus)**

Q2. During scheme designing in water resources sector, what are the methodologies presently adopted by the authority to avoid duplication across schemes and departments at different levels (i.e. National/State/District/Block)? **(focus)**

Q3. What other measures may be taken to avoid overlap and bring convergence in schemes? What are the challenges in achieving convergence? **(focus)**



Q4. What activities are undertaken to ensure convergence at community level? Are there any Action Plans prepared at State/District/Block level to ensure the same? **(focus)**

### 1.1.16 National level stakeholder - Joint Secretary- Thermal, Climate Change, IC, DVC, UMPP, IPP and Fuel Supply, Ministry of Power

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#### **THEME 4:**

##### **SUSTAINABILITY**

###### **Extraction of groundwater and its regulation**

Q1. Can you share key steps which may be taken, from power supply point of view, for regulating the extraction of groundwater for irrigation or agriculture purpose? **(focus)**

Q2. Can you share successful case studies in India where unregulated extraction has been reduced by various initiatives of the power ministry? **(focus)**

###### **Water consumption in Thermal Power Plants**

Q1. What steps have been taken to reduce water consumption by existing thermal Power plants? **(focus)**

Q2. Can you let us know possible measures that may be taken for thermal power plants failing to adhere to water consumption regulations as per MoEF&CC? **(focus)**

###### **Climate Change**



Q1. Do we have a well-developed understanding of impact of climate change on water resources sector and consequently on the power sector? **(focus)**

Q2. What are the policies and planning being undertaken to tackle climate change and its impact on power sector? **(focus)**

Q3. How are these plans being implemented? **(focus)**

Q4. Can you please share top 5 impact and possible mitigation measures on Power sector due to Climate change? **(focus)**

### 1.1.17 National level stakeholder - Joint Secretary, Ministry of Steel

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- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

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#### **THEME 4:**

##### **SUSTAINABILITY**

###### **Efficiency in water use and pricing in Industrial sector**

Q1. What are the water consumption trends in the iron and steel industry and what measures are being taken to move towards efficient water use? How can Industrial water pricing be implemented effectively?  
**(focus)**

#### **THEME 5:**

##### **Overall Nature and Responsiveness of Water Sector Planning**

###### **Planning and data management in the sector**

Q1. Demand side data availability for Steel sector is a challenge. What are the possible ways to address and streamline such efforts? **(focus)**



## 1.1.18 National level stakeholder - Joint Secretary, Ministry of Textile

### GENERAL GUIDELINES:

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#### **THEME 4:**

##### **SUSTAINABILITY**

##### **Efficiency in water use and pricing in Industrial sector**

Q1. What are the water consumption trends in the textile industry and what measures are being taken to move towards efficient water use? How can Industrial water pricing be implemented effectively? **(focus)**

#### **THEME 5:**

##### **Overall Nature and Responsiveness of Water Sector Planning**

##### **Planning and data management in the sector**

Q1. Demand side data availability for Textile sector is a challenge. What are the possible ways to address and streamline such efforts? **(focus)**

#### **1.1.19 National level stakeholder - Chairman, Central Pollution Control Board**

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## **THEME 6:**

### **QUALITY**

#### **Wastewater reuse & pollution abatement measures**

Q1. What are the major reasons for lack of Effluent Treatment Plants (ETP) facilities for industries? Possible ways to address the gap and ensure compliance? **(focus)**

Q2. What are the major reasons for lack of Sewage Treatment Plant (STP) capacity for domestic sewage? Possible ways to address the gap and ensure compliance? **(focus)**

Q3. What are your views on Authentic and up dated database creation for wastewater generation and treatment- dashboard? **(focus)**

Q4. Are there any training sessions held regularly for reducing water pollution, adopting green practices on behalf of CPCB? **(focus)**

## **THEME 7:**

### **WATER SECURITY**

#### **Using recycled water for agriculture**

Q1. What measures have been taken or being planned to be implemented for planned, safe reuse of treated wastewater for agricultural purpose? **(focus)**

Q2. Possible issues in implementing planned reuse of treated wastewater for agriculture sector? **(focus)**

Q3. Recommendations or possible way forward? **(focus)**

## **THEME 8:**

### **GAPS IN BROAD SECTORAL OUTCOMES**

#### **Wastewater Reuse Policy**

Q1. What is the effectiveness of wastewater reuse policy by states? **(focus)**

Q2. How is the market for treated wastewater and are industries willing to use treated wastewater? Please explain the issues involved? **(validate)**

Q3. What are the top 5 opportunities and risks of mandating wastewater reuse especially by industrial sector? **(validate)**



## 1.1.20 National level stakeholder - Chairman, National Mission for Clean Ganga

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Q1. What measures have been taken or being planned to be implemented for planned, safe reuse of treated wastewater for agricultural purpose? **(validate)**

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Q3. What are the top 5 opportunities and risks of mandating wastewater reuse especially by industrial sector? **(validate)**

#### 1.1.21 National level stakeholder - Additional Secretary (Water), Department of Drinking Water and Sanitation, MoJS

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#### **THEME 4:**

#### **SUSTAINABILITY**

#### **Efficiency in water use and pricing in domestic sector**

Q1. What are your views on water pricing and its effective implementation for the domestic sector? What are your views on the need for regulatory authorities? **(focus)**



### **O&M and lack of financing- rural water supply**

Q1. What are your views on the following aspects of rural water supply - any available figures on NRW losses, O&M, coverage of piped water supply in rural area, cost recovery, 24x7 supply, financing mechanisms? What are the possible ways to overcome these issues? What are the measures already taken in these areas? **(focus)**

### **THEME 5:**

#### **Overall Nature and Responsiveness of Water Sector Planning**

##### **Planning and data management in the sector**

Q1. Demand side data availability for Domestic (Rural) is a challenge. What are the possible ways to address and streamline such efforts? **(focus)**

### **THEME 8:**

#### **GAPS IN BROAD SECTORAL OUTCOMES**

##### **Need for water regulator for all states and /or central**

Q1. What are the top 5 reasons for and against need for water regulator for all states and at central level? **(validate)**

Q2. What are the top 5 ways on how water regulatory authority may benefit the sector as a whole? What should be the key functions of the regulators? **(validate)**

##### **Capacity building of the organizations/utilities creating and managing Water Resources infrastructure and providing service**

Q1. What are the top 5 areas or skills in which capacity building is required in your department or ministry, especially related to rural water supply sector? **(validate)**

Q2. What are the top 5 organizations providing such capacity building activities? Which forms of capacity building activities are more effective? **(validate)**

##### **Staffing levels**

Q1. Do you feel that adequate staffing exists in various sections of the department? Ways to improve the same? **(focus)**

Q2. Should the ratio of office to field staff in the department improve? Recommendations in this area. **(focus)**

##### **Financing in the sector**

Q1. What are the sources of revenue for the department or ministry? Are there possible improvements that can be done to increase revenue? **(focus)**



Q2. For O&M of assets created, how can financing be improved (including innovative funding options)? **(focus)**

Q3. How can PPPs be implemented in Rural Water demand side? Percentage of private investment presently in the area? **(focus)**

Q4. Can you please share model case studies and experience in PPP in the sector? **(validate)**

Q5. What incentives are available to promote private investments or PPP in the Sector? **(focus)**

Q6. How and in which activities can Private sector provide additional value with their expertise? **(validate)**

Q7. What are the challenges faced in attracting private sector participation? How has PPP worked in the sector? **(validate)**

### **Project Management issues and Slow project execution**

Q1. What are the project management techniques being presently used by the department or ministry? How can these be improved? **(focus)**

Q2. What are the top 5 reasons for project cost overrun? **(focus)**

Q3. What are the top 5 reasons for project time overrun? **(focus)**

Q4. What are the present Mitigation measures taken to avoid project time and cost overrun issues? How can these be further improved? **(focus)**

### **R&D in the sector**

Q1. What percentage of total fund allocation is directed towards R&D in the rural water sector? **(focus)**

Q2. How much of that percent is being utilized? What is status of availability of any Institute or centre or department dedicated for R&D in the rural water sector? **(focus)**

Q3. What is the percentage of private sector participation in R&D in the rural water sector? **(focus)**

Q4. What are the challenges and gaps in under researched areas? **(focus)**

Q5. What are some innovations or practices under R&D carried out by Central or State or District? **(validate)**

## **THEME 9:**

### **CONVERGENCE**

#### **Scheme convergence**

Q1. During scheme designing in rural water sector, what are the methodologies presently adopted by the authority to avoid duplication across schemes and departments at different levels (i.e. National/State/District/Block)? **(focus)**

Q2. What other measures may be taken to avoid overlap and bring convergence in schemes? What are the challenges in achieving convergence? **(focus)**



Q3. What activities are undertaken to ensure convergence at community level? Are there any Action Plans prepared at State/District/Block level to ensure the same? **(focus)**

### 1.1.22 National level stakeholder - Joint Secretary, Department of Health and Family Welfare (MoH & FW)

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### **THEME 7:**

#### **WATER SECURITY**

##### **Effect of water stress on households- Health Impact**

Q1. What are the trends and status of disease incidence rates related to water stress or water quality? Has there been any significant increase in the incidence of diseases such as diarrhoea, fluorosis, gastroenteritis and malaria due to water stress or water quality problems? Please share relevant data **(focus)**

### **THEME 9:**

#### **CONVERGENCE**

##### **Scheme convergence**

Q1. What are the top issues the department face when implementing water resources related schemes or component of any scheme? **(focus)**



### 1.1.23 National level stakeholder - Joint Secretary, Policy, Planning and management (PPM) (Ministry of Rural Development)

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#### **CONVERGENCE**

#### **Scheme convergence**

Q1. What are the top issues the ministry faces when implementing water resources related schemes or component of any scheme? **(focus)**

### 1.1.24 National level stakeholder - Joint Secretary, Ministry of Women and Child Development

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## **THEME 9:**

### **CONVERGENCE**

#### **Scheme convergence**

Q1. What are the top issues the ministry faces when implementing water resources related schemes or component of any scheme? **(focus)**

#### 1.1.25 National level stakeholder - Independent Expert

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#### **THEME 1:**

##### **ADEQUACY**

##### **Overall water storage capacity as well as water storage capacity per capita in dams**

Q1. What measures should be taken to increase the water storage capacity of existing dams across India (desilting, O&M etc.)? **(focus)**

Q2. What should be the future plans for construction of new water storage structures? **(focus)**

Q3. Should there be focus on creating few new large dams or multiple small storage structures across the country? Please explain with supporting reasons about the approach? **(focus)**

Q. Can you please explain in detail what should be the future plans (including numbers) on construction of-Major, medium irrigation and Minor Irrigation tanks? **(focus)**



## **THEME 2:**

### **ACCESS**

#### **IPC-IPU Gap**

- Q1. What measures should be taken to increase the water utilisation of existing dams for irrigation purposes across India (desilting, lining of canals, O&M etc.)? **(focus)**
- Q2. What should be the future planning for increasing water utilisation from irrigation purposes from the existing or upcoming major and medium irrigation projects? **(focus)**
- Q3. What measures should be taken to improve water use efficiency and increase irrigation coverage from existing irrigation projects? Please explain. **(focus)**
- Q4. What key issues may be faced during implementation as well as planning for the same? **(focus)**
- Q5. Can you share your comments related to IPC-IPU gap and its assessment methodology? **(focus)**

#### **Irrigation coverage status**

- Q1. What are the key reasons for low irrigation coverage? What are the ways to improve the same? **(focus)**
- Q2. What are the key reasons for low cropping intensity even in irrigated areas? What are the ways to improve the same? **(focus)**
- Q3. What is the reason for varying land productivity for rain fed v/s canal v/s well irrigation? **(focus)**

## **THEME 2:**

### **EQUITY**

#### **Efficiency of canal network**

- Q1. What are the major issues which may be faced during the following stages of a canal irrigation project (a) planning (b) execution and (c) operations? **(focus)**
- Q2. What are the key mitigation measure(s) for each issue? **(focus)**
- Q3. What are the other options or innovative techniques which may be used in large scale to reduce losses and inequity in water distributions? **(focus)**
- Q4. What are the main challenges for each innovative technique identified? **(focus)**
- Q5. Can you share case studies where alternate irrigation systems have been explored? **(validate)**

## **THEME 3:**

### **SUSTAINABILITY**

#### **Extraction of groundwater and its regulation**

- Q1. What are the top 5 reasons for over extraction of Ground Water? **(focus)**
- Q2. Can you share key steps which may be taken for regulating the same? **(focus)**
- Q3. Can you share successful case studies in India where unregulated extraction has been reduced? **(validate)**



### **Dependency on groundwater for irrigation**

Q1. What are the top reasons for farmers favoring irrigation from Groundwater over Surface water where Surface water sources are present? **(focus)**

Q2. What are the ways to reduce dependence on Ground Water for irrigation, especially in water stressed areas / states? **(focus)**

Q3. Is power subsidy for farmers the right way forward? If no, what measures can be taken in this regard? **(focus)**

Q4. Can you share model cases or initiatives taken to reduce dependency on groundwater for irrigation? **(validate)**

### **Cropping pattern and crop diversification**

Q1. What can be the possible actions to motivate farmers away from water intensive crops and traditional cropping patterns? **(focus)**

Q2. What are the possible techniques and interventions which may be adopted on large scale to reduce the water footprint of the traditional crops? **(focus)**

### **Efficiency in water use and pricing in Industrial sector**

Q1. What are the water consumption trends in the water intensive industries like power, paper & pulp, textile industry and what measures may be taken to move towards efficient water use? How can Industrial water pricing be implemented effectively? **(focus)**

### **Efficiency in water use and pricing in domestic sector**

Q1. Can you please share your views on the following aspects of urban water supply - inefficient utilization, high per capita consumption in urban areas? What are the possible ways to overcome these challenges?

Q2. What are your views on water pricing and its effective implementation for the domestic sector? What are your views on the need for regulatory authorities? **(focus)**

### **O&M and financing**

Q1. Can you please share your views on the following aspects of urban water supply - high NRW losses, poor O&M, inadequate coverage of piped water supply in urban area, cost recovery, 24x7 supply, financing mechanisms? What are the possible ways to overcome these challenges? What are the measures already taken to mitigate these challenges? **(focus)**

### **Climate Change**



Q1. Do we have a well-developed understanding of impact of climate change on water resources sector? **(focus)**

Q2. What are the policies and planning which need to be undertaken to tackle climate change, uneven rainfall, or disasters like flood? **(focus)**

Q3. Can you please share top 5 impact and possible mitigation measures on Water Resources sector due to Climate change, uneven rainfall or disasters like flood? **(focus)**

#### **Micro level information on all depleted aquifers**

Q1. Is there adequate micro level information on depleted aquifers? Why? How can this be overcome? **(focus)**

Q2. What are your views on current artificial recharging plans? Is there any way by which we can improve the same? **(focus)**

#### **Gap between demand and supply of water**

Q1. Can you please suggest top 5 measures which may be taken or planned to reduce demand supply gap in respective areas? **(focus)**

Q2. Can you please suggest top 5 recommendations for reducing the demand supply gap in the future? **(focus)**

#### **Urban Water Consumption**

Q1. What is the average urban water consumption in LPCD? Does this include NRW leakages? **(focus)**

#### **O&M and lack of financing- rural water supply**

Q1. What are your views on the following aspects of rural water supply - any available figures on NRW losses, O&M, coverage of piped water supply in rural area, cost recovery, 24x7 supply, financing mechanisms? What are the possible ways to overcome these issues? **(focus)**

### **THEME 4:**

#### **Overall Nature and Responsiveness of Water Sector Planning**

##### **Planning and data management in the sector**

Q1. National Hydrology project may bring better quality data. What measures may further improve the data availability? **(focus)**

Q2. Demand side data availability for all sectors- Agriculture, Industrial and Domestic (Rural and Urban) is a challenge. What are the possible ways to address and streamline such efforts? **(focus)**

Q3. What are the Challenges and opportunities in coordinated approach between various departments like Ground Water, Surface water, and Irrigation/ Agriculture and demand side departments? **(focus)**



Q4. What is the suggested way forward for Capacity building of stakeholders and streamlined /standardized approach for data collection? **(focus)**

### **Coordination between the various central government level organizations and the state government departments**

Q1. What are the top 5 interventions which may be taken for improving coordination between the various stakeholders? **(focus)**

Q2. In what ways can greater coordination between the various central government level organizations and the state government departments help in planning and implementation of water resources related policies, schemes, etc.? **(focus)**

### **Groundwater Level Monitoring**

Q1. Given India's size, is it necessary to increase the density of observation wells for carrying out micro-level studies and continuous monitoring of groundwater levels? What should be the optimal number of piezometers? **(focus)**

Q2. What are the other technologies used for groundwater level monitoring and their advantages and disadvantages? **(focus)**

Q3. How can installation and increase in density of piezometers (like in AP) help in better monitoring? **(focus)**

### **Conjunctive use of surface and groundwater**

Q1. How can conjunctive use of surface and groundwater resources be included in planning, design, implementation of water resources related scheme? **(focus)**

Q2. Can you please share any model case studies addressing this area? **(validate)**

Q3. What are the main challenges to conjunctive use of ground and surface water? **(focus)**

Q4. What impact does separation of institutions in planning and managing of surface and ground water resource play? **(focus)**

## **THEME 7:**

### **WATER SECURITY**

#### **Water sharing treaties / agreements and diplomacy**

Q1. What should the range of issues covered in the water sharing agreements with neighbouring countries? How can such agreements be better enforced? **(focus)**

Q2. What are the present and future areas of challenge / conflict in water sharing between countries? **(focus)**



Q3. What are the range of issues covered in the water sharing agreements between states? How can such agreements be better enforced? **(focus)**

Q4. What are the present and future areas of challenge / conflict in water sharing between states? **(focus)**

Q5. Can you please share any best practices in this area of water sharing treaties? **(validate)**

## **THEME 5:**

### **GAPS IN BROAD SECTORAL OUTCOMES**

#### **Wastewater Reuse Policy**

Q1. What is the effectiveness of wastewater reuse policy by states? **(focus)**

Q2. How is the market for treated wastewater and are industries willing to use treated wastewater? Please explain the issues involved. **(focus)**

Q3. What are the top 5 opportunities and risks of mandating wastewater reuse especially by industrial sector? **(focus)**

#### **Need for water regulator for all states and /or central**

Q1. What are the top 5 reasons for and against need for water regulator for all states and at central level? **(focus)**

Q2. What are the top 5 ways on how water regulatory authority may benefit the sector as a whole? What should be the key functions of the regulators? **(focus)**

#### **Financing in the sector**

Q1. For O&M of assets created, how can financing be improved (including innovative funding options)? **(focus)**

Q2. How can PPPs be implemented in a) Water Supply Side and b) Water demand side? Percentage of private investment presently in the sector? **(focus)**

Q3. Can you please share model case studies and experience in PPP in the sector? **(validate)**

Q4. What incentives are available to promote private investments or PPP in the Sector? **(focus)**

Q5. How and in which activities can Private sector provide additional value with their expertise? **(focus)**

Q6. What are the challenges faced in attracting private sector participation? How has PPP worked in the sector? **(focus)**

#### **Enforceable water entitlements**

Q1. What are the top 5 measures which may be taken to improve governance and regulated groundwater extraction? **(focus)**

#### **R&D in the sector**



Q1. Do you feel R&D in the sector needs to be enhanced? Please explain **(focus)**

Q2. What are the challenges and gaps in under researched areas? **(focus)**

## **THEME 6:**

### **CONVERGENCE**

#### **Scheme convergence**

Q1. During scheme designing in water resources sector, what are the methodologies which may be adopted by the authority to avoid duplication across schemes and departments at different levels (i.e. National/State/District/Block)? **(focus)**

Q2. What are the challenges in achieving convergence? **(focus)**

Q3. What activities are undertaken to ensure convergence at community level? Are there any Action Plans prepared at State/District/Block level to ensure the same? **(focus)**

#### 1.1.26 State level stakeholder - Chief Engineer, Irrigation Department

### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

### **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:



- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the Water Resources sector. Since you are a key stakeholder in the sector overseeing planning and implementation at the state level, your insights would be valuable in understanding of the sector, key challenges and factors that led to successful implementation of the schemes. We are also meeting other stakeholders from national, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this sector? What are your current roles and responsibilities?

#### **RESEARCHER TO NOTE:**

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#### **THEME 1:**

##### **ADEQUACY**

##### **Overall water storage capacity as well as water storage capacity per capita in dams**

Q1. What measures are being taken to increase the water storage capacity of existing dams in this state (desilting, O&M etc.)? **(focus)**

Q2. What is the future plan for construction of new water storage structures? **(focus)**



Q3. Is there focus on creating few new large dams or multiple small storage structures in the state? Please explain with supporting reasons about the approach? Has there been any study around this aspect. **(focus)**

Q4. What is the total water storage capacity created in last one year? **(validate)**

Q5. Can you please explain in details future plans (including numbers) on construction of- Major, medium irrigation and Minor Irrigation tanks? **(focus)**

Q6. What are the key issues faced during implementation as well as planning for the same? **(focus)**

## **THEME 2:**

### **ACCESS**

#### **IPC-IPU Gap**

Q1. What measures are being taken to increase the water utilisation of existing dams for irrigation purposes in the state (desilting, lining of canals, O&M etc.)? **(focus)**

Q2. What is the future planning for increasing water utilisation from irrigation purposes from the existing or upcoming major and medium irrigation projects? **(focus)**

Q3. What measures are being taken to improve water use efficiency and increase irrigation coverage from existing irrigation projects? Please explain. **(focus)**

Q4. What are the key issues faced during implementation as well as planning for the same? **(focus)**

Q5. Can you share specific data related to IPC-IPU gap and assessment methodology related comments? **(focus)**

#### **Irrigation coverage status**

Q1. What are the key reasons for low irrigation coverage? What are the ways to improve the same? **(focus)**

Q2. What are the key reasons for low cropping intensity even in irrigated areas? What are the ways to improve the same? **(focus)**

Q3. What is the reason for varying land productivity for rain fed v/s canal v/s well irrigation? **(focus)**

## **THEME 3:**

### **EQUITY**

#### **Efficiency of canal network**

Q1. What are the major issues faced during the following stages of a canal irrigation project (a) planning (b) execution and (c) operations? **(focus)**

Q2. What are the key mitigation measure(s) for each issue? **(focus)**

Q3. What are the other options or innovative techniques which may be used in large scale to reduce losses and inequity in water distributions? **(focus)**

Q4. What are the main challenges for each innovative technique identified? **(focus)**

Q5. Can you share case studies where alternate irrigation systems have been explored? **(validate)**



## **THEME 4:**

### **SUSTAINABILITY**

#### **Dependency on groundwater for irrigation**

Q1. What are the top reasons for farmers favoring irrigation from Groundwater over Surface water where Surface water sources are present? **(validate)**

Q2. What are the ways to reduce dependence on Ground Water for irrigation, especially in water stressed areas / states? **(validate)**

Q3. Is power subsidy for farmers the right way forward? If no, what measures can be taken in this regard? **(focus)**

Q4. Can you share model cases or initiatives taken to reduce dependency on groundwater for irrigation? **(focus)**

#### **Gap between demand and supply of water**

Q1. Can you please suggest top 5 measures being taken or planned to reduce demand supply gap in irrigation sector? **(validate)**

Q2. Can you please suggest top 5 recommendations for reducing the demand supply gap in the future? **(validate)**

## **THEME 5:**

### **Overall Nature and Responsiveness of Water Sector Planning**

#### **Coordination between the various central government level organizations and the state government departments**

Q1. What are the top 5 interventions taken or being planned for improving coordination between the various stakeholders and especially with agriculture department? **(validate)**

Q2. In what ways can greater coordination between the various central government level organizations and the state government departments help in planning and implementation of water resources related policies, schemes, etc.? **(validate)**

#### **Conjunctive use of surface and groundwater**

Q1. How can conjunctive use of surface and groundwater resources be included in planning, design, implementation of water resources related scheme? Is there adequate understanding of concepts around conjunctive use among beneficiaries, state level nodal agency responsible for planning? **(validate)**

Q2. How has the same been implemented in recent times? **(validate)**

Q3. Can you please share any model case studies addressing this area? **(validate)**

Q4. What are the main challenges to conjunctive use of groundwater and surface water? **(validate)**

Q5. What impact does separation of institutions in planning and managing of surface and ground water resource play? **(validate)**



## **THEME 7:**

### **WATER SECURITY**

#### **Using recycled water for agriculture**

Q1. What measures have been taken or being planned to be implemented for planned, safe reuse of treated wastewater for agricultural purpose? **(validate)**

Q2. What may be the possible issues in implementing planned reuse of treated wastewater for agriculture sector? **(validate)**

Q3. Please share recommendations or possible way forward to implement planned use of recycled water for agriculture? **(validate)**

#### **Water sharing treaties / agreements and diplomacy**

Q1. What are the range of issues covered in the water sharing agreements with neighbouring countries? How well are such agreements enforced? **(validate)**

Q2. What are the present and future areas of challenge / conflict in water sharing between countries? **(validate)**

Q3. What are the range of issues covered in the water sharing agreements between states? How well are such agreements enforced? **(validate)**

Q4. What are the present and future areas of challenge / conflict in water sharing between states? **(validate)**

Q5. Can you please share any best practices in this area of water sharing treaties? **(validate)**

## **THEME 8:**

### **GAPS IN BROAD SECTORAL OUTCOMES**

#### **Capacity building of the organizations/utilities creating and managing Water Resources infrastructure and providing service**

Q1. What are the top 5 areas or skills in which capacity building is required in your department? **(focus)**

Q2. What are the top 5 organizations providing such capacity building activities? Which forms of capacity building activities are more effective? **(focus)**

#### **Staffing levels**

Q1. Do you feel that adequate staffing exists in various sections of the department? Ways to improve the same? **(focus)**

Q2. Should the ratio of office to field staff in the department improve? Recommendations in this area. **(focus)**

#### **Financing in the sector**

Q1. What are the sources of revenue for the department? Are there possible improvements that can be done to increase revenue? **(focus)**



Q2. For O&M of assets created, how can financing be improved (including innovative funding options)?

**(focus)**

Q3. How can PPPs be implemented in a) Water Supply Side and b) Water demand side (especially for Agriculture)? Percentage of private investment presently in the sector? **(focus)**

Q4. Can you please share model case studies and experience in PPP in the sector? **(validate)**

Q5. What incentives are available to promote private investments or PPP in the Sector? **(validate)**

Q6. How and in which activities can Private sector provide additional value with their expertise? **(validate)**

Q7. What are the challenges faced in attracting private sector participation? How has PPP worked in the sector? **(validate)**

### **Project Management issues and Slow project execution**

Q1. What are the project management techniques being presently used by the department? How can these be improved? **(focus)**

Q2. What are the top 5 reasons for project cost overrun? **(focus)**

Q3. What are the top 5 reasons for project time overrun? **(focus)**

Q4. What are the present Mitigation measures taken to avoid project time and cost overrun issues? How can these be further improved? **(focus)**

### **R&D in the sector**

Q1. What percentage of total fund allocation is directed towards R&D? **(validate)**

Q2. How much of that percent is being utilized? What is status of availability of any Institute or centre or department dedicated for R&D in the Sector? **(validate)**

Q3. What is the percentage of private sector participation in R&D? **(validate)**

Q4. What are the challenges and gaps in under researched areas? **(validate)**

Q5. What are some innovations or practices under R&D carried out by Central or State or District? **(validate)**

## **THEME 9:**

### **CONVERGENCE**

#### **Scheme convergence**

Q1. During scheme designing in water resources sector, what are the methodologies presently adopted by the authority to avoid duplication across schemes and departments at different levels (i.e. National/State/District/Block)? **(validate)**

Q2. What other measures may be taken to avoid overlap and bring convergence in schemes? What are the challenges in achieving convergence? **(validate)**

Q3. What activities are undertaken to ensure convergence at community level? Are there any Action Plans prepared at State/District/Block level to ensure the same? **(validate)**



## 1.1.27 State level stakeholder - Joint Secretary, Department of Agriculture

### GENERAL GUIDELINES:

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- Explore the reasons behind a response. For example:
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  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

### INTRODUCTION: SELF

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- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes



- Introduce note taker and any other team members (if present) and explain what each one would be doing.
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- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this sector? What are your current roles and responsibilities?

### **RESEARCHER TO NOTE:**

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### **THEME 2:**

#### **ACCESS**

##### **Irrigation coverage status**

Q1. What are the key reasons for low irrigation coverage? What are the ways to improve the same? **(focus)**

Q2. What are the key reasons for low cropping intensity even in irrigated areas? What are the ways to improve the same? **(focus)**

Q3. What is the reason for varying land productivity for rain fed v/s canal v/s well irrigation? **(focus)**

### **THEME 4:**

#### **SUSTAINABILITY**

##### **Cropping pattern and crop diversification**

Q1. What can be the possible actions to motivate farmers away from water intensive crops and traditional cropping patterns? **(focus)**

Q2. What are the possible techniques and interventions which may be adopted on large scale to reduce the water footprint of the traditional crops? **(focus)**

##### **Gap between demand and supply of water**



Q1. Can you please suggest top 5 measures being taken or planned to reduce demand supply gap in respective areas, especially to cater to the agriculture sector water demand? **(focus)**

Q2. Can you please suggest top 5 recommendations for reducing the demand supply gap in the future? **(focus)**

#### **THEME 5:**

##### **Overall Nature and Responsiveness of Water Sector Planning**

##### **Coordination between the various central government level organizations and the state government departments**

Q1. What are the top 5 interventions taken or being planned for improving coordination between the various stakeholders- especially between the Irrigation and Agriculture department a state level? **(focus)**

Q2. In what ways can greater coordination between the various central government level organizations and the state government departments help in planning and implementation of water resources related policies, schemes, etc. which have a direct or indirect impact on the agriculture sector? **(focus)**

#### **THEME 7:**

##### **WATER SECURITY**

##### **Using recycled water for agriculture**

Q1. What measures have been taken or being planned to be implemented for planned, safe reuse of treated wastewater for agricultural purpose? **(focus)**

Q2. What may be the possible issues in implementing planned reuse of treated wastewater for agriculture sector? **(focus)**

Q3. Please share recommendations or possible way forward to implement planned use of recycled water for agriculture? **(focus)**

#### **THEME 8:**

##### **GAPS IN BROAD SECTORAL OUTCOMES**

##### **Capacity building of the organizations/utilities creating and managing Water Resources infrastructure and providing service**

Q1. What are the top 5 areas or skills in which capacity building is required in your department, especially in water resources related field and common themes with the agriculture sector? **(focus)**

Q2. What are the top 5 organizations providing such capacity building activities? Which forms of capacity building activities are more effective? **(focus)**

#### **THEME 9:**

##### **CONVERGENCE**



## Scheme convergence

Q1. What are the top issues the department face when implementing water resources related schemes or component of any scheme? **(validate)**

### 1.1.28 State level stakeholder - Regional Director, CGWB

#### GENERAL GUIDELINES:

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- Seek clarity and check for inconsistencies. For example:
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successful implementation of the schemes. We are also meeting other stakeholders from national, district and block level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this sector? What are your current roles and responsibilities?

#### **RESEARCHER TO NOTE:**

*1. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*

*2. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.*

#### **THEME 4:**

##### **SUSTAINABILITY**

##### **Extraction of groundwater and its regulation**

Q1. What are the top 5 reasons for over extraction of Ground Water? **(validate)**

Q2. Can you share key steps which may be taken for regulating the same? **(validate)**

Q3. Can you share successful case studies where unregulated extraction has been reduced? **(validate)**

Q4. What are the acts/rules/regulations adopted at different levels (National/State/District)? **(validate)**

Q5. What are the challenges faced in effective implementation of the Model Acts and Regulations? **(validate)**

Q6. What measures are being taken to ensure effective implementation and compliance of adopted acts/rule/regulations? (Like in areas of safety, accountability, transparency) **(validate)**

##### **Dependency on groundwater for irrigation**

Q1. What are the top reasons for farmers favoring irrigation from Groundwater over Surface water where Surface water sources are present? **(validate)**



Q2. What are the ways to reduce dependence on Ground Water for irrigation, especially in water stressed areas / states? **(validate)**

Q3. Is power subsidy for farmers the right way forward? If no, what measures can be taken in this regard? **(validate)**

Q4. Can you share model cases or initiatives taken to reduce dependency on groundwater for irrigation? **(validate)**

#### **Micro level information on all depleted aquifers**

Q1. Is there adequate micro level information on depleted aquifers? Why? How can this be overcome? **(validate)**

Q2. How are artificial recharging plans done presently? Is there any way by which we can improve the same? **(validate)**

### **THEME 5:**

#### **Overall Nature and Responsiveness of Water Sector Planning**

##### **Groundwater Level Monitoring**

Q1. Given India's size, is it necessary to increase the density of observation wells for carrying out micro-level studies and continuous monitoring of groundwater levels? What should be the optimal number of piezometers? **(validate)**

Q2. What are the other technologies used for groundwater level monitoring and their advantages and disadvantages? **(validate)**

Q3. How can installation and increase in density of piezometers (like in AP) help in better monitoring? **(validate)**

### **THEME 6:**

#### **QUALITY**

##### **Groundwater quality**

Q1. How has over extraction of groundwater impacted its quality? **(validate)**

Q2. How can we control such incidents? **(validate)**

### **THEME 8:**

#### **GAPS IN BROAD SECTORAL OUTCOMES**

##### **Efficient groundwater management and technologies**

Q1. What are the top 5 interventions taken or being planned for improving groundwater management & technologies? **(validate)**

Q2. In what other ways can efficient groundwater management be achieved? **(validate)**

##### **Enforceable water entitlements**



Q1. What are the top 5 measures being taken or planned to improve governance and regulated groundwater extraction? **(validate)**

Q2. What are the top 5 recommendations for further improving the same? **(validate)**

### 1.1.29 State level stakeholder - Chief Executive Officer, Maharashtra Industrial Development Corporation

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successful implementation of the schemes. We are also meeting other stakeholders from national, district and block level. The study also involves a survey with the HHs/ beneficiaries.

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#### **PROFILE OF THE STAKEHOLDER**

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#### **THEME 4:**

##### **SUSTAINABILITY**

##### **Efficiency in water use and pricing in Industrial sector**

Q1. What are the water consumption trends in water intensive industries like paper & pulp and what measures are being taken to move towards efficient water use? How can Industrial water pricing be implemented effectively? **(focus)**

Q2. What are the water consumption trends in the iron and steel industry and what measures are being taken to move towards efficient water use? How can Industrial water pricing be implemented effectively? **(focus)**

Q3. What are the water consumption trends in the textile industry and what measures are being taken to move towards efficient water use? How can Industrial water pricing be implemented effectively? **(focus)**

#### **THEME 8:**

##### **GAPS IN BROAD SECTORAL OUTCOMES**

##### **Wastewater Reuse Policy**



Q1. What is the effectiveness of wastewater reuse policy by states? **(validate)**

Q2. How is the market for treated wastewater and are industries willing to use treated wastewater? Please explain the issues involved. **(focus)**

Q3. What are the top 5 opportunities and risks of mandating wastewater reuse especially by industrial sector? **(focus)**

### 1.1.30 State level stakeholder - Chairman, Maharashtra Water Resources Regulatory Authority (MWRRA)

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insights would be valuable in understanding of the sector, key challenges and factors that led to successful implementation of the schemes. We are also meeting other stakeholders from national, district and block level. The study also involves a survey with the HHs/ beneficiaries.

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#### **THEME 4:**

#### **SUSTAINABILITY**

##### **Extraction of groundwater and its regulation**

Q1. What are the top 5 reasons for over extraction of Ground Water? **(validate)**

Q2. Can you share key steps which may be taken for regulating the same? **(validate)**

Q3. Can you share successful case studies where unregulated extraction has been reduced? **(validate)**

Q4. What are the acts/rules/regulations adopted at different levels (National/State/District)? **(validate)**

Q5. What are the challenges faced in effective implementation of the Model Acts and Regulations? **(validate)**

Q6. What measures are being taken to ensure effective implementation and compliance of adopted acts/rule/regulations? (Like in areas of safety, accountability, transparency) **(validate)**



### **Water consumption in Thermal Power Plants**

Q1. What steps have been taken to reduce water consumption by existing thermal Power plants?  
**(validate)**

Q2. Can you let us know possible measures that may be taken for thermal power plants failing to adhere to water consumption regulations as per MoEF&CC? **(validate)**

### **Efficiency in water use and pricing in Industrial sector**

Q1. What are the water consumption trends in water intensive industries like paper & pulp and what measures are being taken to move towards efficient water use? How can Industrial water pricing be implemented effectively? **(validate)**

Q2. What are the water consumption trends in the iron and steel industry and what measures are being taken to move towards efficient water use? How can Industrial water pricing be implemented effectively?  
**(validate)**

Q3. What are the water consumption trends in the textile industry and what measures are being taken to move towards efficient water use? How can Industrial water pricing be implemented effectively?  
**(validate)**

### **Efficiency in water use and pricing in domestic sector**

Q1. Can you please share your views on the following aspects of urban water supply - inefficient utilization, high per capita consumption in urban areas? What are the possible ways to overcome these challenges? What are the measures already taken to mitigate these challenges? **(focus)**

Q2. What are your views on water pricing and its effective implementation for the domestic sector? What are your views on the need for regulatory authorities? **(focus)**

### **O&M and financing**

Q1. Can you please share your views on the following aspects of urban water supply - high NRW losses, poor O&M, inadequate coverage of piped water supply in urban area, cost recovery, 24x7 supply, financing mechanisms? What are the possible ways to overcome these challenges? What are the measures already taken to mitigate these challenges? **(focus)**

### **Urban Water Consumption**

Q1. What is the average urban water consumption in LPCD? Does this include NRW leakages? **(focus)**

### **O&M and lack of financing- rural water supply**

Q1. What are your views on the following aspects of rural water supply - any available figures on NRW losses, O&M, coverage of piped water supply in rural area, cost recovery, 24x7 supply, financing mechanisms? What are the possible ways to overcome these issues? What are the measures already taken in these areas? **(focus)**



## **THEME 5:**

### **Overall Nature and Responsiveness of Water Sector Planning**

## **THEME 8:**

### **GAPS IN BROAD SECTORAL OUTCOMES**

#### **Wastewater Reuse Policy**

Q1. What is the effectiveness of wastewater reuse policy by states? **(focus)**

Q2. How is the market for treated wastewater and are industries willing to use treated wastewater? Please explain the issues involved. **(focus)**

Q3. What are the top 5 opportunities and risks of mandating wastewater reuse especially by industrial sector? **(focus)**

#### **Need for water regulator for all states and /or central**

Q1. What are the top 5 reasons for and against need for water regulator for all states and at central level? **(focus)**

Q2. What are the top 5 ways on how water regulatory authority may benefit the sector as a whole? What should be the key functions of the regulators? **(focus)**

#### **Enforceable water entitlements**

Q1. What are the top 5 measures being taken or planned to improve governance and regulated groundwater extraction? **(focus)**

Q2. What are the top 5 recommendations for further improving the same? **(focus)**

### **1.1.31 State level stakeholder - Principal Secretary, Water Resources Department, Government of Andhra Pradesh**

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## **THEME 5:**

### **Overall Nature and Responsiveness of Water Sector Planning**

#### **Groundwater Level Monitoring**

Q1. Given India's size, is it necessary to increase the density of observation wells for carrying out micro-level studies and continuous monitoring of groundwater levels? What should be the optimal number of piezometers? **(validate)**

Q2. What are the other technologies used for groundwater level monitoring and their advantages and disadvantages? **(validate)**

Q3. How can installation and increase in density of piezometers (like in AP) help in better monitoring? **(focus)**

#### **Conjunctive use of surface and groundwater**

Q1. How can conjunctive use of surface and groundwater resources be included in planning, design, implementation of water resources related scheme? Is there adequate understanding of concepts around conjunctive use among beneficiaries, state level nodal agency responsible for planning? **(validate)**

Q2. How has the same been implemented in recent times? **(validate)**

Q3. Can you please share any model case studies addressing this area? **(validate)**

Q4. What are the main challenges to conjunctive use of groundwater and surface water? **(validate)**

Q5. What impact does separation of institutions in planning and managing of surface and ground water resource play? **(validate)**

### 1.1.32 State level stakeholder - Chief Engineer, Public Health Engineering Department

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## **THEME 4:**

### **SUSTAINABILITY**

#### **Efficiency in water use and pricing in domestic sector**

Q1. Can you please share your views on the following aspects of urban water supply - inefficient utilization, high per capita consumption in urban areas? What are the possible ways to overcome these challenges? What are the measures already taken to mitigate these challenges? **(validate)**

Q2. What are your views on water pricing and its effective implementation for the domestic sector? What are your views on the need for regulatory authorities? **(validate)**

#### **O&M and financing**

Q1. Can you please share your views on the following aspects of urban water supply - high NRW losses, poor O&M, inadequate coverage of piped water supply in urban area, cost recovery, 24x7 supply, financing mechanisms? What are the possible ways to overcome these challenges? What are the measures already taken to mitigate these challenges? **(focus)**

#### **Urban Water Consumption**

Q1. What is the average urban water consumption in LPCD? Does this include NRW leakages? **(validate)**

#### **O&M and lack of financing- rural water supply**

Q1. What are your views on the following aspects of rural water supply - any available figures on NRW losses, O&M, coverage of piped water supply in rural area, cost recovery, 24x7 supply, financing mechanisms? What are the possible ways to overcome these issues? What are the measures already taken in these areas? **(validate)**

## **THEME 8:**

### **GAPS IN BROAD SECTORAL OUTCOMES**

#### **Capacity building of the organizations/utilities creating and managing Water Resources infrastructure and providing service**



Q1. What are the top 5 areas or skills in which capacity building is required in your department? **(validate)**

Q2. What are the top 5 organizations providing such capacity building activities? Which forms of capacity building activities are more effective? **(validate)**

### **Staffing levels**

Q1. Do you feel that adequate staffing exists in various sections of the department? Ways to improve the same? **(validate)**

Q2. Should the ratio of office to field staff in the department improve? Recommendations in this area. **(validate)**

### **Financing in the sector**

Q1. What are the sources of revenue for the department? Are there possible improvements that can be done to increase revenue? **(validate)**

Q2. For O&M of assets created, how can financing be improved (including innovative funding options)? **(validate)**

Q3. How can PPPs be implemented in Water demand side (both urban and rural)? Percentage of private investment presently in the sector? **(focus)**

Q4. Can you please share model case studies and experience in PPP in the sector? **(validate)**

Q5. What incentives are available to promote private investments or PPP in the Sector? **(focus)**

Q6. How and in which activities can Private sector provide additional value with their expertise? **(focus)**

Q7. What are the challenges faced in attracting private sector participation? How has PPP worked in the sector? **(focus)**

## **1.1.33 State level stakeholder - Chief Engineer, Urban Water Supply Authority**

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##### **SUSTAINABILITY**

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Q2. What are your views on water pricing and its effective implementation for the domestic sector? What are your views on the need for regulatory authorities? **(focus)**

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##### **GAPS IN BROAD SECTORAL OUTCOMES**

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Q1. What is the effectiveness of wastewater reuse policy by states? **(validate)**

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Q1. What are the top 5 areas or skills in which capacity building is required in your department? **(focus)**



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Q3. How can PPPs be implemented in Water demand side (urban)? Percentage of private investment presently in the sector? **(focus)**

Q4. Can you please share model case studies and experience in PPP in the sector? **(validate)**

Q5. What incentives are available to promote private investments or PPP in the Sector? **(focus)**

Q6. How and in which activities can Private sector provide additional value with their expertise? **(focus)**

Q7. What are the challenges faced in attracting private sector participation? How has PPP worked in the sector? **(focus)**

#### **Project Management issues and Slow project execution**

Q1. What are the project management techniques being presently used by the department? How can these be improved? **(focus)**

Q2. What are the top 5 reasons for project cost overrun? **(focus)**

Q3. What are the top 5 reasons for project time overrun? **(focus)**

Q4. What are the present Mitigation measures taken to avoid project time and cost overrun issues? How can these be further improved? **(focus)**

### **THEME 9:**

#### **CONVERGENCE**

##### **Scheme convergence**

Q1. During scheme designing in water resources sector, what are the methodologies presently adopted by the authority to avoid duplication across schemes and departments at different levels (i.e. District/Block)? **(focus)**

Q2. What other measures may be taken to avoid overlap and bring convergence in schemes? What are the challenges in achieving convergence? **(focus)**



Q3. What activities are undertaken to ensure convergence at community level? Are there any Action Plans prepared at State/District/Block level to ensure the same? **(focus)**

### 1.1.34 District level stakeholder - District Agricultural Officer

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- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this sector? What are your current roles and responsibilities?

### **RESEARCHER TO NOTE:**

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## **THEME 4:**

### **SUSTAINABILITY**

#### **Cropping pattern and crop diversification**

Q1. What can be the possible actions to motivate farmers away from water intensive crops and traditional cropping patterns? **(validate)**

Q2. What are the possible techniques and interventions which may be adopted on large scale to reduce the water footprint of the traditional crops? **(validate)**

## **THEME 7:**

### **WATER SECURITY**

#### **Using recycled water for agriculture**

Q1. What measures have been taken or being planned to be implemented for planned, safe reuse of treated wastewater for agricultural purpose? **(validate)**

Q2. What may be the possible issues in implementing planned reuse of treated wastewater for agriculture sector? **(validate)**



Q3. Please share recommendations or possible way forward to implement planned use of recycled water for agriculture? (**validate**)

### 1.1.35 District level stakeholder - Chief Medical Officer of Health

#### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the Water Resources sector. Since you are a key stakeholder in the sector overseeing implementation at the district level, your insights would be valuable in understanding of the sector, key challenges and factors that led to successful implementation of the schemes. We are also meeting other stakeholders from national, state and block level. The study also involves a survey with the HHs/ beneficiaries.



- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this sector? What are your current roles and responsibilities?

### **RESEARCHER TO NOTE:**

*1. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*

*2. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.*

### **THEME 7:**

#### **WATER SECURITY**

##### **Effect of water stress on households- Health Impact**

Q1. What are the trends and status of disease incidence rates related to water stress or water quality? Has there been any significant increase in the incidence of diseases such as diarrhoea, fluorosis, gastroenteritis and malaria due to water stress or water quality problems? Please share relevant data.

**(focus)**



## 1.2 Discussion Guide for FGD

### 1.2.1 FGD: Farmers and WUAs

#### SECTION 1:

##### SUSTAINABILITY

###### Extraction of groundwater and its regulation

- Q1. Why is use of groundwater increasing within the community? **(validate)**
- Q2. Is there preference for using groundwater over surface water? Why? **(validate)**
- Q3. Possible ways in which groundwater usage can be discouraged? **(validate)**
- Q4. Reaction of the community in case groundwater extraction is restricted **(validate)**

###### Dependency on groundwater for irrigation

- Q1. Do farmers favour groundwater over surface water in case both are present? Why? **(validate)**
- Q2. If surface water is made available, what are the top factors for still relying on groundwater **(focus)**
- Q3. Approximate percentage of land area cultivated from various sources- surface water , ground water, Others (by season) **(focus)**

###### Cropping pattern and crop diversification

- Q1. What are the top reasons for growing traditional water intensive crops (rice, wheat, sugarcane etc.) year after year? **(validate)**
- Q2. Are farmers open to change cropping patterns? What are the key factors for or against change in cropping patterns? What incentives are necessary? **(focus)**
- Q3. How has water stress been affecting crop production in recent years? What are the farmers doing to cater to the same? **(focus)**

###### Efficiency in water use and pricing in domestic sector

- Q1. Are you paying/willing to pay for drinking water and under what conditions? **(focus)**
- Q2. Top 5 reasons for not paying for drinking water **(focus)**

#### SECTION 2:

##### ACCESS

###### Irrigation coverage status

- Q1. What is the main source of water for agriculture? What is the approximate percentage of water being used at the fields for cultivation- by source (rain fed, canal and well)? **(focus)**

#### SECTION 3:

##### WATER SECURITY



### **Using recycled water for agriculture**

Q1. Has the farmer community been using or planning to use treated waste water for irrigation? Issues faced if any? **(validate)**

Q2. In case government mandates the same, any reservations against the same and willingness of the community to adopt the same? **(focus)**

### **Effect of water stress on households- Socio Economic Impact (WOMEN to be asked)**

Q1. Has there been any impact on time required for water collection (for drinking water) due to water scarcity? If yes what extra time is required now? **(focus)**

Q2. What is the average income per hour of the member who is spending extra time (if applicable) and source of income? **(focus)**

Q3. Any other effect of water stress on the household? **(focus)**



## Annexure 2 Primary Survey Guide – AIBP

The primary survey guide for ‘Accelerated Irrigation Benefit program’ is provided below.

### 2.1 Discussion Guide for KII

#### 2.1.1 National level stakeholder - Commissioner, SPR Wing [Department of Water Resources, RD & GR]

##### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

##### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India’s policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme AIBP. Since you are a key stakeholder in the scheme overseeing planning and implementation at the national level, your



insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH AIBP SCHEME**

#### **RESEARCHER TO NOTE:**

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

### **SECTION 1: DEEP DIVE INTO AIBP SCHEME USING REESIE FRAMEWORK:**

#### **RELEVANCE**

#### **RL2: Is it appropriate to continue / prioritize this scheme?**

#### **What would be the impact if the scheme were to be scaled down or stopped?**

Q1. Could you please provide an overview of the scheme in terms of its objectives, impact etc.?

Q2. In your opinion, is continuation and further investments in Major and Medium Irrigation (MMI) projects the right approach? Or should decentralized irrigation schemes (e.g. minor irrigation, watershed management, smaller flood control and irrigation structures) be given more preference? Please explain your answer with supporting evidence. (focus)

Q3. Should central grants be made available for maintenance of state major and medium irrigation assets? (focus)

#### **EFFECTIVENESS**



**ET1: Is the scheme design appropriate to address scheme objectives?**

**Is there evidence that assumptions have been tested and are valid?**

Q1. Has completion of AIBP works resulted in targeted Irrigation Potential Utilization (IPU)? If not mention the causes (say non-completion of minor, technical deficiencies, etc.). (focus)

**ET2: How are scheme targets set and monitored?**

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. Comment on the adequacy of the monitoring and supervision done by DoWR and CWC, including suggestions for improvement (if any). Are adequate resources (field staff, vehicles, etc.) available for supervision and monitoring? (focus)

Q2. How effective are remote sensing technologies for monitoring? Do you suggest any other technical interventions for supervision? (focus)

**ET3: How has the scheme performed against scheme objectives and annual targets?**

**Identify states that have performed well? What are the underlying reasons for such performance?**

Q1. Which states have performed well under PMKSY-AIBP projects in terms of project planning, execution and financial management? What are the underlying reasons for such performance (say state specific policies for land acquisition, political willingness, community participation, etc)? (focus)

**Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q1. Which are the most under-performing states? Mention the top three underlying reasons for such performances. (focus)

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. What are the key issues (during both planning and execution stages) affecting both the physical and financial progresses? (focus)

**What is the planning process proposed under the scheme? Is the planning process adequately and effective followed? If not, what improvements are desirable.**

Q1. Has there arisen any need to adopt some major course correction measures in relation to timely completion of the 99 priority AIBP projects?



**ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1. Do you feel Centre needs to provide additional grants for ensuring proper maintenance of assets created? (focus)

**Was there timely utilization of available funds? If not, what were the reasons?**

Q1. Comment on the overall fund utilization rate by the states. In case of low utilization mention reasons for the same. (focus)

Q2. How strictly does the Centre enforce the provisions of 'conversion of grants into loans' exercised in case of delay in project implementation? Mention the reasons in case of deviation/ waive off the provision for defaulting states. (focus)

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1. Do you suggest any additional interventions (adoption of new technologies like piped distribution system, automatic regulators, better crop planning, pricing mechanisms, etc.) that may improve scheme performance? (focus)

Q2. What measures do you suggest ensuring conjunctive use of ground and surface water resources in the AIBP command area? (focus)

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. What are the negative factors affecting scheme performance (say inadequate availability of water in the main canal, non-completion of distributary networks, low conveyance efficiency including poor maintenance of assets, low access of water at farm levels (particularly those at tail ends) including poor water efficiency)? Suggest some mitigating measures (focus)

## **EQUITY**

**EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**



**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Please share evidence/information. (focus)

**IMPACT**

**IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. What are the long-term impacts of the scheme? Are there any studies on this? (focus)

**EFFICIENCY**

**EC1: Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. List the key direct and indirect benefits attributable to AIBP projects. (focus)

Q2. Are there any studies (government appraisal report, studies by Multilateral Financial Institutions, etc.) that have captured the monetary values of agricultural, power generation (if applicable), flood protection, tourism, fisheries and other allied activities? If Yes, please share some sample reports. (focus)

**What are the costs of the scheme? What is the monetary value of all costs?**

Q1. What are the major socio-economic costs (like R&R costs, environmental degradation, loss of livelihood owing to displacement, cultural destruction, etc.)? Mention the suggested mitigation measures (focus)

**EC2: Can the costs of the scheme be lowered?**

**Are there lower cost alternatives for achieving the scheme outcomes?**

Q1. What measures do you suggest to mitigate the issue of cost over-runs? (focus)

Q2. How can private investments be leveraged to reduce project costs? (focus)

**What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**



Q1. Do you suggest convergence with any other government initiatives for improved scheme performances (say with Agriculture Ministry for micro-irrigation related initiatives, ground water related initiatives, MGNREGA, etc.)? (focus)

## **SUSTAINABILITY**

### **SS3: Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

#### **Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. Are the irrigation fees adequate for offsetting the cost of maintenance and operation? If No, provide suggestions on how to increase the irrigation revenue. (focus)

Q2. Do you suggest any institutional change (like more effective functioning of WUAs, establishment of state water regulator for better pricing mechanisms, etc.) for better scheme performance? (focus)

### **SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

#### **What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. What are the key risks (technical, institutional, financial, political and environmental) affecting scheme sustenance? Please provide some mitigating measures (focus)

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Gender mainstreaming**

#### **Gender-friendly infrastructure and policies**

Q1. Mention how the project contributed to increased women empowerment (say higher income, literacy, better decision taking roles, etc.). Please provide any best practices.

### **Use of IT/Technology in driving efficiency**

#### **Deployment of IT enabled mechanisms for monitoring of the Schemes**

Q1. How effective are remote sensing technology for monitoring IP creation? (focus)

Q2. Do you envisage any other advanced technologies for data collection and monitoring purposes? (focus)



## Use of latest technology to improve efficiency and effectiveness of scheme implementation

Q1. What are the technologies (say mobile apps, e-kiosks) being used in project implementation, service delivery? (focus)

### SECTION 3: CHALLENGES AND SUGGESTIONS

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

### 2.1.2 National level stakeholder - Sr. Joint Commissioner, SPR-I & SPR-II [Department of Water Resources, RD & GR]

#### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
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  - What happened next?



- Explore the reasons behind a response. For example:
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- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme AIBP. Since you are a key stakeholder in the scheme overseeing planning and implementation at the national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
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- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH AIBP SCHEME**

### **RESEARCHER TO NOTE:**

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2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

## **SECTION 1: DEEP DIVE INTO AIBP SCHEME USING REESIE FRAMEWORK:**

### **RELEVANCE**

#### **RL1: Is the scheme relevant in the present context?**

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1. Could you please provide an overview of the scheme in terms of the areas of sectoral challenge, beneficiary need, national priority, SDG which the scheme is designed to address?

Q2. To what extent AIBP has contributed to creation of Irrigation Potential (IP)? Mention the UIP-IPC gap that has been closed through AIBP till date and after all 99 AIBP projects are completed. (focus)

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1. In addition to creation of Irrigation Potential, should the AIBP projects target any other interventional gaps like maintenance of irrigation structures, conjunctive use of ground water resources, utilization of IPC, water use efficiency or other suggested areas?

#### **RL2: Is it appropriate to continue / prioritize this scheme?**

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1. In your opinion, is continuation and further investments in Major and Medium Irrigation (MMI) projects the right approach? Or should decentralized irrigation schemes (e.g. minor irrigation, watershed management, smaller flood control and irrigation structures) be given more preference? Please explain your answer with supporting evidence. (focus)

Q2. Should central grants be made available for maintenance of irrigation assets? (focus)

Q3. Shall the govt. focus more on other PMKSY schemes (like WDC, CADWM, RRR & SMI) instead of AIBP? (focus)

### **EFFECTIVENESS**



**ET1: Is the scheme design appropriate to address scheme objectives?**

**Is there evidence that assumptions have been tested and are valid?**

- Q1. Has completion of AIBP works resulted in targeted Irrigation Potential Utilization (IPU)? If not mention the causes (say non-completion of minor, technical deficiencies.) (focus)
- Q2. Are there any pilot studies (post completion of AIBP works in any one of the 40 completed projects)? Please share such studies and discuss the key findings from such studies and how the design of the scheme may need to be modified in light of the findings. (focus)
- Q3. Approximately for what percentage of the total Irrigation Potential Created through the 99 AIBP projects, are the command area development works completed (cumulative)? (focus)

**ET2: How are scheme targets set and monitored?**

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

- Q1. How is the created and utilized Irrigation Potential assessed/ estimated (for e.g. assessment methodology, physical validation, etc.)? Do you suggest any modifications in the assessment methodology (say incorporating asset discounting factor while calculating IPC because of wear and tear, siltation, change due to shift in cropping pattern, etc.)? Are there any mechanism for physical validation of IPC and IPU? (focus)
- Q2. Comment on the adequacy of the monitoring and supervision done by CWC, including suggestions for improvement (if any). How frequent are site-visits made by CWC? Are adequate resources (field staff, vehicles, etc.) available for supervision and monitoring? (focus)
- Q3. How is the progress including quality of works physically validated? (focus)
- Q4. What percentage of the total Central Assistance (CA) has been disbursed for impact assessment studies, third party monitoring, etc.? (focus)
- Q5. Do the states submit Independent Evaluation report at end of each financial years? If Yes, please share some sample reports for last year (2018-19). (focus)

**What information is contained in utilization certificate issued by state govt? Are they credible and can they be relied upon as an indicator of scheme progress?**

- Q1. What is the key information collected in the Utilization Certificate (UC)? Is there any mechanism for validating the data submitted in the UC?
- Q2. How prominent are instances of late submission of UC by states? Please mention some of the repeated defaulter states and also state the reasons for delay in submission by them.



### **ET3: How has the scheme performed against scheme objectives and annual targets?**

#### **What is the state wise, year wise performance against target?**

Q1. Mention the year-wise REVISED physical targets for the ongoing projects (considering the completion of only 40 projects by June'19 inspite of the target completion date of Dec'19 for all the 99 AIBP projects) (focus)

Q2. Mention the time over-runs (if any) for the 99 AIBP projects (i.e. difference between expected completion and actual completion dates) (focus)

#### **Identify states that have performed well? What are the underlying reasons for such performance?**

Q1. Provide the list of states that have performed well in relation to timely completion of AIBP projects, financial management, utilization of IPC, etc. Mention the top 3 reasons for such performances for each of the good performing states. (focus)

#### **Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q1. Which are the most under-performing states? Mention the top three underlying reasons for such performances. (focus)

#### **What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. Mention some of the key issues faced during the planning stage (e.g. delay in preparing DPRs, poor quality of DPRs and surveys)? Suggest mitigating measures including successful examples (focus)

Q2. Mention some of the key issues affecting financial management (say delay in release of CA owing to defective proposals or delay in submission of UC by states, mismanagement of funds by states like diversion, parking and non-utilization of funds, rush of expenditure towards end of March, etc.)? Suggest some mitigating measures including successful examples (focus)

Q3. Mention some of the key issues affecting implementation stage (say delays due to change in project design, land acquisition issues, sub-standard works, contractor issues, splitting of works, etc.) Suggest mitigation measures for the same. (focus)

Q4. How recurrent/ common are the issues of incorrect phasing of works (for e.g. non-synchronized completion of barrage, main canal and branch channels) in these 99 AIBP projects? If yes, how can such issues be addressed – please explain with examples. (focus)

#### **What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**



Q1. Do you suggest any other indicators for better scheme monitoring and evaluation say additional indicators for financial management, contractor management, etc.? (focus)

**ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1. Have there been instances of delay in fund release by Centre/ NABARD? If yes, what are the key reasons for such delay. (focus)

Q2. What are the mandatory criteria to be fulfilled prior to release of Central assistance? (focus)

Q3. How prominent are issues of rush of expenditure towards March/ end of financial year? Which states/ projects are more prone to such issues and how it has impacted the scheme implementation? (focus)

Q4. Do you feel Centre needs to provide additional grants for ensuring proper maintenance of assets created? (focus)

**Was there timely utilization of available funds? If not, what were the reasons?**

Q1. Comment on the overall fund utilization rate by the states. In case of low utilization mention reasons for the same. (focus)

Q2. How strictly does the Centre enforce the provisions of 'conversion of grants into loans' exercised in case of delay in project implementation? Mention the reasons in case of deviation/ waive off the provision for defaulting states. (focus)

**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. Mention some of the key initiatives adopted by the Centre to expedite the completion of the 99 priority AIBP projects (like fast clearance/ approval mechanisms from various central government departments, innovative funding model through NABARD, easy approval for cost escalation schemes) that have enhanced scheme performance. (focus)

Q2. What do you suggest to improve the utilization of irrigation assets created? (focus)



**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1. What additional interventions do you suggest for hastening the pace of works and ensuring better maintenance of irrigation assets and water management? (focus)

Q2. Do you suggest any technological interventions (say use of piped distribution system, new technology for design of head, regulators, etc.) to improve conveyance efficiency? (focus)

Q3. Do you feel volumetric water supply and differential pricing may lead to better water management? If Yes, suggest the implementation measures for the same including successful case studies. Do you feel establishment of state water regulators may be helpful in this aspect? (focus)

Q4. Suggest measures on how to strengthen the Participatory Irrigation Management (PIM) in the command area.

Q5. What measures do you suggest for ensuring conjunctive use of ground and surface water resources in the AIBP command area? (focus)

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. What are the negative factors affecting scheme performance (say inadequate availability of water in the main canal, non-completion of distributary networks, low conveyance efficiency including poor maintenance of assets, low access of water at farm levels (particularly those at tail ends) including poor water efficiency)? Suggest some mitigating measures. (focus)

Q2. How prominent is the issue where large tracts of land in the command area are unsuitable for irrigation which subsequently led to increasing incidences of waterlogging and salination? (focus)

**EQUITY**

**EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? (focus)



Q2. Considering the issue of inadequate water level in the main canal/ river and over-irrigation at upper reaches, how prominent is the issue of water not reaching the drought prone areas in the tail ends? (focus)

Q3. Are there any safeguards for addressing the needs of the people like forest encroachers, canal affected fishermen, landless laborers and marginal farmers who may not be directly covered under the compensation scheme? (focus)

Q4. Do you feel implementation of AIBP scheme resulted in redistribution of benefits from upstream farmers to downstream farmers? If Yes, please provide some examples/ evidences to substantiate your answer. (focus)

## IMPACT

**IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. What are the long-term impacts of the scheme? Are there any studies on this? (focus)

Q2. Have there been any impact on literacy rate, skill levels of farmers, migration, health standards after the implementation of the scheme? Are there any studies on this?

## EFFICIENCY

**EC1: Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. List the key direct and indirect benefits attributable to AIBP projects. (focus)

Q2. Are there any studies (government appraisal report, studies by Multilateral Financial Institutions, etc.) that have captured the monetary values of agricultural, power generation (if applicable), flood protection, tourism, fisheries and other allied activities? If Yes, please share some sample reports. (focus)

**What are the costs of the scheme? What is the monetary value of all costs?**

Q1. What are the major socio-economic costs (like R&R costs, environmental degradation, loss of livelihood owing to displacement, cultural destruction, etc.)? Mention the suggested mitigation measures. (focus)

Q2. Mention the provisions in place for environmental and social safeguards. (focus)

Q3. Please share studies (like government appraisal reports, studies by Multilateral Financial Institutions, etc.) that have conducted cost benefit analysis for the 99 priority AIBP projects. (focus)

Q4. Is there any recent estimate of the financial IRR and economic IRR of these 99 AIBP projects? (focus)

**EC2: Can the costs of the scheme be lowered?**



### **Are there lower cost alternatives for achieving the scheme outcomes?**

Q1. Please provide an approximate range of cost over-runs across the 99 projects. What are the main issues responsible for cost over-runs (like re-works due to sub-standard works by contractors, change in design, increase in land prices, etc.)?

Q2. What measures do you suggest for mitigating the issue of cost over-runs? (focus)

Q3. How can private investments be leveraged? (focus)

### **Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1. In which areas inter-ministerial co-ordination (say between Finance, Environment, Agriculture and Water Resources Ministries, DoWR and Central Water Commission) and Centre-State co-ordination are needed? Are there any instances of lowered scheme performance owing to non-coordination among ministries? (focus)

### **What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1. Do you suggest convergence with any other government initiatives for improved scheme performances (say with Agriculture Ministry for micro-irrigation related initiatives, ground water related initiatives, MGNREGA, etc.)? (focus)

Q2. Are there any other sources of fund (like CSR efforts, MPLADS, etc.) that the scheme may target?

## **SUSTAINABILITY**

### **SS3: Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

#### **Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. Are the irrigation fees adequate for offsetting the cost of maintenance and operation? If No, provide suggestions on how to increase the irrigation revenue. (focus)

Q2. Do you suggest any institutional change (like more effective functioning of WUAs, establishment of state water regulator for better pricing mechanisms, etc.) for better scheme performance? (focus)

### **SS5: Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

#### **Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1. Comment on the environmental and social sustainability of the scheme? Please provide evidence in support of your answer. (focus)



Q2. How prominent is the issue of inadequate availability of water at main canal/ river? Which of the 99 AIBP projects are more prone to such issues? (focus)

**SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. What are the key risks (technical, institutional, financial, political and environmental) affecting scheme sustenance?

Q2. Provide suggestions for addressing the following issues:

- a. Over-irrigation and diversion of water for non-irrigation purposes (at head areas)
- b. Water leakages due to system deficiencies (canal seepages, leakages in gates, etc.)
- c. Un-authorized lifting of canal water using submerged pumps

#### **Sustainability - Climate Change**

Q3. Given the increasing incidence and intensity of floods and droughts on account of climate change or otherwise, are there any changes that are required in the planning, design and O&M of major and medium irrigation projects? Please elaborate on the specific issues and changes required.

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Direct/Indirect Employment Generation**

#### **Employment generation**

Q1. Is there any data or estimate of total no of man-days of work generated due to this scheme? Mention % of women employed. (focus)

Q2. Do you have an estimate of the number of women farmers benefitted owing to AIBP projects? (focus)

### **Gender mainstreaming**

#### **Inclusiveness in scheme design/planning**

Q1. Is there a specific mention of gender equality and equity considerations in the scheme guidelines/objectives, i.e. has the scheme been designed keeping gender considerations in mind?



Q2. Are there any social safeguards for addressing the needs of the women who may suffer disproportionately in the resettlement process considering their loss in common resources (like community support) and social networks?

### **Gender-friendly infrastructure and policies**

Q1. Comment on the overall involvement of women in the WUAs? Which of the states performed well in this aspect? May you share some sample case studies in this respect? (focus)

Q2. Mention how the project contributed to increased women empowerment (say higher income, literacy, better decision taking roles, etc.). Please share any best practices.

### **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population**

#### **Funds allocated under TSP/ SCSP and other provisions for vulnerable communities**

Q1. Is there any fund allocated under TSP & SCSP for AIBP projects? If yes, mention the details and also how such targeted allocation helped in improving equity. Mention any successful case study in area of interventions for vulnerable people. (focus)

### **Use of IT/Technology in driving efficiency**

#### **Deployment of IT enabled mechanisms for monitoring of the Schemes**

Q1. Is geotagging and use of geotagged photographs being done? (focus)

If yes, mention

- the overall progress of geo-tagging across projects. Mention some of the key issues (if any)
- the benefits accrued due to geo-tagging of assets (for e.g. monitoring ease, project planning, etc.)

Q2. How is technology being used for on-ground data collection? What are the technologies (say mobile apps, e-kiosks) being used in project implementation, service delivery? Which states are using the latest technologies? (focus)

(focus)

Q3. How effective are remote sensing technology for monitoring IP creation? (focus)

Q4. Do you envisage any other advanced technologies for data collection and monitoring purposes? (focus)

### **Development, dissemination & adoption of innovative practices, technology & know-how**

#### **Fund allocation towards promotion of innovation**

Q1. What percent of total allocation is directed towards development, dissemination and adoption of innovative practices and technology? How much of it is utilized?

Q2. Shall you like to highlight any state that has adopted innovative technologies (say piped distribution, superior design for head and regulators, automatic operating valves, etc.)?



**Stakeholder and Beneficiary behavioural change**

**Fund Allocation**

Q1. Is there any portion of fund earmarked for awareness generation or sensitization? If Yes, please specify the related provisions and also mention the fund utilization rate during the period of 2016-17 to 2018-19.

**Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme**

**Public-Private Partnership**

Q1. Is there any instance of Private Sector investment (PPP mode) in any of the projects? What are the challenges faced? How such investment can be attracted in other projects?

**SECTION 3: CHALLENGES AND SUGGESTIONS**

1. Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
2. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

2.1.3 National level stakeholder - Chief Engineer [PMO, Central Water Commission - New Delhi]

**GENERAL GUIDELINES:**



- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme AIBP. Since you are a key stakeholder in the scheme overseeing planning and implementation at the national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHS/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.



## PROFILE OF THE STAKEHOLDER

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH AIBP SCHEME

### RESEARCHER TO NOTE:

1. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.
2. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.

## SECTION 1: DEEP DIVE INTO AIBP SCHEME USING REESIE FRAMEWORK:

### RELEVANCE

**RL1: Is the scheme relevant in the present context?**

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1. Could you please provide an overview of the scheme in terms of the areas of sectoral challenge, beneficiary need, national priority, SDG which the scheme is designed to address?

Q2. To what extent AIBP has contributed to creation of Irrigation Potential (IP)? Mention the UIP-IPC gap that has been closed through AIBP till date and after all 99 AIBP projects are completed. (focus)

**RL2: Is it appropriate to continue / prioritize this scheme?**

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1. In your opinion, is continuation and further investments in Major and Medium Irrigation (MMI) projects the right approach? Or should decentralized irrigation schemes (e.g. minor irrigation, watershed management, smaller flood control and irrigation structures) be given more preference? Please explain your answer with supporting evidence. (focus)

### EFFECTIVENESS



**ET1: Is the scheme design appropriate to address scheme objectives?**

**Is there evidence that assumptions have been tested and are valid?**

Q1. Has completion of AIBP works resulted in targeted Irrigation Potential Utilization (IPU)? If not mention the causes (say non-completion of minor, technical deficiencies.). (focus)

Q2. Please share estimates of the IPC-IPU gap for the 99 Priority AIBP projects. (validate)

Q3. Are there any pilot studies (post completion of AIBP works in any one of the 40 completed projects)? Please share such studies and discuss the key findings from such studies and how the design of the scheme may need to be modified in light of the findings. (focus)

**ET2: How are scheme targets set and monitored?**

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. How is the created and utilized Irrigation Potential assessed/ estimated (for e.g. assessment methodology, physical validation, etc.)? Do you suggest any modifications in the assessment methodology (say incorporating asset discounting factor while calculating IPC because of wear and tear, siltation, change due to shift in cropping pattern, etc.)? Are there any mechanism for physical validation of IPC and IPU? (focus)

Q2. Comment on the adequacy of the monitoring and supervision done by regional monitoring directorates of CWC, including suggestions for improvement (if any). Are adequate resources (field staff, vehicles, etc.) available for supervision and monitoring? (focus)

Q3. How is the progress including quality of works physically validated? (focus)

Q4. Have you conducted any independent evaluation report for any of these 99 AIBP projects? If Yes, please share some of the sample reports and the key issues and recommendations highlighted in these reports.

Q5. How effective are remote sensing technologies for monitoring? Do you suggest any other technical interventions for supervision? (focus)

**ET3: How has the scheme performed against scheme objectives and annual targets?**



### **What is the state wise, year wise performance against target?**

Q1. Mention the year-wise REVISED physical targets for the ongoing projects (considering the completion of only 40 projects by June'19 inspite of the target completion date of Dec'19 for all the 99 projects).

(focus)

Q2. Please share the latest physical and financial progress status of the 99 AIBP projects. (focus)

Q3. Mention the time over-runs (if any) for the 99 AIBP projects (i.e. difference between expected completion and actual completion dates) (focus)

### **Identify states that have performed well? What are the underlying reasons for such performance?**

Q1. Provide the list of states that have performed well in relation to timely completion of AIBP projects, financial management, utilization of IPC, etc. Mention the top 3 reasons for such performances of each of the good performing states. (focus)

### **Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q1. Which are the most under-performing states? Mention the top three underlying reasons for such performances. (focus)

### **What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. Mention some of the key issues faced during the planning stage (e.g. delay in preparing DPRs, poor quality of DPRs and surveys)? Suggest mitigating measures including successful examples (focus)

Q2. Mention some of the key issues affecting financial management (say delay in release of CA owing to defective proposals or delay in submission of UC by states, mismanagement of funds by states like diversion, parking and non-utilization of funds, rush of expenditure towards end of March, etc.)? May you provide a list of the projects (among the 99 priority AIBP projects) that were severely affected by financial mismanagement? (focus)

Q3. What are the key issues affecting implementation stage (say delays due to change in project design, land acquisition issues, sub-standard works, contractor issues, splitting of works, etc.) Suggest measures on how to improve the implementation process. May you provide a list of the projects (among the 99 priority AIBP projects) that were severely affected by poor project planning? (focus)



Q4. How recurrent/ common are the issues of incorrect phasing of works (for e.g. non-synchronized completion of barrage, main canal and branch channels) in these 99 AIBP projects? May you provide a list of the projects (among the 99 priority AIBP projects) that were affected by incorrect phasing of works (focus)

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1. Do you suggest any other indicators for better scheme monitoring and evaluation say additional indicators for financial management, contractor management, etc.? (focus)

Q2. Shall indicators for scheme benefits like increase in ground water level, water use efficiency in the command area be tracked in the MIS portal?

**ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1. Has there been instances of delay in fund release by Centre/ NABARD? If yes, what are the key reasons for such delay. (focus)

Q2. Are there any instances of rush of expenditure towards March? If yes, mention the defaulting projects and how it has impacted the scheme implementation? (focus)

**Was there timely utilization of available funds? If not, what were the reasons?**

Q1. Provide date in respect to fund utilization by the states implementing the 99 priority AIBP projects during the period 2016-17 to 2018-19. In case of low utilization mention some of the key causes for the same. (validate)

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**



Q1. What additional interventions do you suggest for hastening pace of works and ensuring better maintenance and water management?

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. What are the negative factors affecting scheme performance (say inadequate availability of water in the main canal, non-completion of distributary networks, low conveyance efficiency including poor maintenance of assets, low access of water at farm levels (particularly those at tail ends) including poor water efficiency)? Suggest some mitigating measures (focus)

Q2. In your opinion, is there an absence / lack of data flowing from the states that hinders the planning process? If yes, what measures can be taken in this regard?

## **EFFICIENCY**

### **EC1: Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. List the key direct and indirect benefits attributable to AIBP projects. (focus)

Q2. Are there any studies (government appraisal report, studies by Multilateral Financial Institutions, etc.) that have captured the monetary values of agricultural, power generation (if applicable), flood protection, tourism, fisheries and other allied activities? If Yes, please share some sample reports. (focus)

**What are the costs of the scheme? What is the monetary value of all costs?**

Q1. Provide data in relation to total expenditure incurred in each of the 99 priority AIBP projects (both cumulative expenditure and expenditure during 2016-17 to 2018-19). (focus)

What are the major socio-economic costs (like R&R costs, environmental degradation, loss of livelihood owing to displacement, cultural destruction, etc.)? Are there any monetary estimates of such costs? If Yes, please provide cumulative project wise estimates of such costs (focus)



Q2. Please share studies (like government appraisal reports, studies by Multilateral Financial Institutions, etc.) that have conducted cost benefit analysis for the 99 priority AIBP projects. [\(focus\)](#)

**EC2: Can the costs of the scheme be lowered?**

**Are there lower cost alternatives for achieving the scheme outcomes?**

Q1. Please provide an approximate range of cost over-runs across the 99 projects. What are the main issues responsible for cost over-runs (like re-works due to sub-standard works by contractors, change in design, increase in land prices, etc.)? [\(focus\)](#)

**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1. In which areas inter-ministerial co-ordination (say between Finance, Environment, Agriculture and Water Resources Ministries, DoWR and Central Water Commission) and Centre-State co-ordination are needed? [\(focus\)](#)

**SUSTAINABILITY**

**SS5: Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1. How prominent is the issue of inadequate availability of water at main canal/ river? Provide a list of the 99 AIBP projects which are more prone to such issues. [\(validate\)](#)

**SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Accountability & Transparency**

**Availability of Data Records and Reports in public domain**



Q1. How effectively does the states practice social auditing (for e.g. putting up plaques with financial and physical progress at critical places, etc.)? Provide some evidences/ examples in this aspect.

### **Direct/Indirect Employment Generation**

#### **Employment generation**

Q1. Do you have an estimate of the number of women farmers benefitted owing to AIBP projects? (focus)

#### **Gender-friendly infrastructure and policies**

Q1. Comment on the overall involvement of women in the WUAs? Which of the states performed well in this aspect? May you share some sample case studies in this respect? (focus)

### **Use of IT/Technology in driving efficiency**

#### **Deployment of IT enabled mechanisms for monitoring of the Schemes**

Q1. Is geotagging and use of geotagged photographs being done? (focus)

If yes, mention

- the progress of geo-tagging across projects. In case of delay, mention the reasons for the same.
- mention the benefits accrued due to geo-tagging

Q2. How is technology being used for on-ground data collection? (focus)

Q3. How effective are remote sensing technology for monitoring IP creation? (focus)

Q4. Do you envisage any other advanced technologies for data collection and monitoring purposes? (focus)

#### **Use of latest technology to improve efficiency and effectiveness of scheme implementation**

Q1. What are the technologies (say mobile apps, e-kiosks) being used in project implementation, service delivery? Which states are using the latest technologies?

### **SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?



<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

### **THANK AND END**

## 2.1.4 National level stakeholder – Advisor (NITI Aayog)

### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

### **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:



- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme AIBP. Since you are Advisor with NITI Aayog, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

#### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH AIBP SCHEME**

##### **RESEARCHER TO NOTE:**

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

#### **SECTION 1: DEEP DIVE INTO AIBP SCHEME USING REESIE FRAMEWORK:**

##### **RELEVANCE**

<b>RL1: Is the scheme relevant in the present context?</b>
--



**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1. Could you please provide an overview of the scheme in terms of the areas of sectoral challenge, beneficiary need, national priority, SDG which the scheme is designed to address?

Q2. In addition to creation of Irrigation Potential, should the AIBP projects target any other interventional gaps like maintenance of irrigation structures, conjunctive use of ground water resources, water use efficiency or other suggested areas? (focus)

**RL2: Is it appropriate to continue / prioritize this scheme?**

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1. In your opinion, is continuation and further investments in Major and Medium Irrigation (MMI) projects the right approach? Or should decentralized irrigation schemes (e.g. minor irrigation, watershed management, smaller flood control and irrigation structures) be given more preference? Please explain your answer with supporting evidence. (focus)

Q2. Should central grants be made available for maintenance of irrigation assets? (focus)

**EFFECTIVENESS**

**ET1: Is the scheme design appropriate to address scheme objectives?**

**Is there evidence that assumptions have been tested and are valid?**

Q1. Has completion of AIBP works resulted in targeted Irrigation Potential Utilization (IPU)? If not mention the causes (say non-completion of distributary networks, technical deficiencies.). (focus)

Q2. What are the top 3 reasons for the widening of gap between IPC and IPU? (focus)

**ET2: How are scheme targets set and monitored?**

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. How is the created and utilized Irrigation Potential assessed/ estimated (for e.g. assessment methodology, physical validation, etc.)? Do you suggest any modifications in the assessment methodology (say incorporating asset discounting factor while calculating IPC because of wear and tear, siltation)? Are there any mechanism for physical validation of IPC and IPU? (focus)



Q2. How effective are remote sensing technologies for monitoring? Do you suggest any other technical interventions for supervision? (focus)

**ET3: How has the scheme performed against scheme objectives and annual targets?**

**Identify states that have performed well? What are the underlying reasons for such performance?**

Q1. May you identify some of the states that have performed well in terms of timely completion of AIBP projects, financial management, utilization of IPC, etc. Please state some of the underlying reasons for such good performances. (focus)

**Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q1. May you identify some of the states that have performed poorly in terms of timely completion of AIBP projects, financial management, utilization of IPC, etc. Please state some of the underlying reasons for such poor performances. (focus)

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. What are the key reasons for huge time runs and cost runs in many of the AIBP projects? Mention the key bottlenecks/ challenges affecting the planning, implementation and monitoring stage. (focus)

**ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (state or time period) and mention the relative impact of each factor on performance?**

Q1. Mention some of the key initiatives adopted both by the Centre and/ States to expedite the completion of the 99 priority AIBP projects (like fast clearance/ approval mechanisms from various government departments, innovative, easier approval for cost escalation schemes, better land acquisition policies, etc.) that have enhanced scheme performance. (focus)

Q2. What do you suggest to improve the utilization of irrigation assets created? (focus)



**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1. Do you suggest any additional interventions (adoption of new technologies like piped distribution system, automatic regulators, better crop planning, pricing mechanisms, etc.) that may improve scheme performance? (focus)

Q2. What measures do you suggest to ensure conjunctive use of ground and surface water resources in the AIBP command area? (focus)

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. What are the negative factors affecting scheme performance (say inadequate availability of water in the main canal, non-completion of distributary networks, low conveyance efficiency including poor maintenance of assets, low access of water at farm levels (particularly those at tail ends) including poor water efficiency)? Suggest some mitigating measures (focus)

## **EQUITY**

**EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Considering the issue of inadequate water level in the main canal/ river and over-irrigation at upper reaches, how successful has been the scheme in delivering water to drought prone areas in the tail ends? (validate)

Q2. Have the majority of the projects employed adequate safeguards for addressing the needs of the people like forest encroachers, canal affected fishermen, landless laborers and marginal farmers who may not be directly covered under the compensation scheme? (validate)



Q3. Do you feel implementation of AIBP scheme resulted in redistribution of benefits from upstream farmers to downstream farmers? If Yes, please provide some examples/ evidences to substantiate your answer. (focus)

## **EFFICIENCY**

### **EC1: Did the benefits of the scheme exceed costs?**

#### **What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. List the key direct and indirect benefits attributable to AIBP projects. (focus)

#### **What are the costs of the scheme? What is the monetary value of all costs?**

Q1. What are the major socio-economic costs (like R&R costs, environmental degradation, loss of livelihood owing to displacement, cultural destruction, etc.)? Mention the suggested mitigation measures. (focus)

### **EC2: Can the costs of the scheme be lowered?**

#### **Are there lower cost alternatives for achieving the scheme outcomes?**

Q1. What measures do you suggest to mitigate the issue of cost over-runs? (focus)

#### **What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1. Do you suggest convergence with any other government initiatives for improved scheme performances (say with Agriculture Ministry for micro-irrigation related initiatives, ground water related initiatives, MGNREGA, etc.)? (focus)

## **SUSTAINABILITY**

### **SS3: Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

#### **Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. What measure do you suggest to improve the irrigation fees so as to at least offset the cost of maintenance and operation? (focus)

## **SECTION 2: CROSS SECTIONAL THEMES**



**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Direct/Indirect Employment Generation**

**Gender-friendly infrastructure and policies**

Q1. Given improved access to water and better irrigation facilities; has there been any noticeable change in the division of farm labour? If Yes, have women benefitted from this change (focus)

Q2. Comment on the extent of women involvement in the WUAs (say their decision-making power, etc). (focus)

Q3. Mention how the project contributed to increased women empowerment (say higher income, literacy, better decision taking roles, etc.). Please share any best practices. (focus)

**Development, dissemination & adoption of innovative practices, technology & know-how**

**Fund allocation towards promotion of innovation**

Q1. Shall you like to highlight any state that has adopted innovative technologies (say piped distribution, superior design for head and regulators, automatic operating valves, etc.)?

**SECTION 4: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

2.1.5 National level stakeholder – Regional Director [Regional Office, Central Ground Water Board]



## **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme AIBP. Since you are a key stakeholder in the scheme overseeing planning and implementation at the national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHS/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.



- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

#### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH AIBP SCHEME**

##### **RESEARCHER TO NOTE:**

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

#### **SECTION 1: DEEP DIVE INTO AIBP SCHEME USING REESIE FRAMEWORK:**

##### **EFFECTIVENESS**

**ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization**

Q1. May you suggest some ground water development measures that may be adopted in areas covered under canal irrigation? (focus)

##### **EFFICIENCY**

EC1 Did the benefits of the scheme exceed costs?

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. Has there been any change in ground water level and quality of ground water in areas covered with canal water? Please share data in relation to this for the said districts/ villages (SHARE THE NAMES OF VILLAGES/ DISTRICTS WHERE WORKS RELATED TO THE 99 PRIORITY AIBP PROJECTS HAVE BEEN COMPLETED) for the period 2016-17 to 2018-19.

**Sustainability – Unregulated extraction of ground water**



SS1/ Q1. Given increased level of ground water availability owing to increased water availability of canal water, how prominent is the phenomenon of farmers switching to privately owned GW minor irrigation structures like bore wells, tube wells, etc.? (focus)

**SECTION 4: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

2.1.6 State level stakeholder – Secretary, State Irrigation Department

**GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?



- What was it about \_\_\_\_that made you decide to\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said\_\_\_\_\_ but it also seems like\_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India’s policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme AIBP. Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from nation, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can’t write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH AIBP SCHEME**

### **RESEARCHER TO NOTE:**

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*



2. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.

## SECTION 1: DEEP DIVE INTO AIBP SCHEME USING REESIE FRAMEWORK:

### EFFECTIVENESS

#### ET1: Is the scheme design appropriate to address scheme objectives?

##### Access - Widening IPC-IPU Gap

Q1. What are the top 3 reasons for the widening of gap between IPC and IPU in the state? Please explain with reason and suggest some mitigating measures. (focus)

#### ET3: How has the scheme performed against scheme objectives and annual targets?

##### Identify states that have performed well? What are the underlying reasons for such performance?

Q1. What are the key success factors (for e.g. favourable land acquisition policies, implementation strategies, effective WUAs, etc.) that have positively affected the scheme performance? (focus)

##### What are the key bottlenecks, issues & challenges in the implementation of the scheme?

Q1. Mention the top 5 issues that are negatively affecting/ affected the implementation of AIBP projects in the state. (focus)

##### Gaps in broad sectoral outcomes - Staffing levels

Q1. Do you feel the staff level at field is adequate? Do you suggest any need for shift in recruitment policy (like preference for technical personnel over administrative ones etc.)?

#### ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?

##### Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?

Q1. Do you suggest any change in the current Centre: Share funding splits? If Yes, please provide justifications for the same.

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**



Q1. Do you feel volumetric water supply and differential pricing may lead to better water management? If Yes, suggest the implementation measures for the same including successful case studies. (focus)

Q2. Do you feel establishment of state water regulator may aid in better pricing mechanisms and collection of revenues? (focus)

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. What are the negative factors affecting scheme performance (say inadequate availability of water in the main canal, non-completion of distributary networks, low conveyance efficiency including poor maintenance of assets, low access of water at farm levels (particularly those at tail ends) including poor water efficiency)? Suggest some mitigating measures (focus)

## **EFFICIENCY**

### **EC1: Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. List the key direct and indirect benefits attributable to AIBP projects.

Q2. Are there any studies (government appraisal report, studies by Multilateral Financial Institutions, etc.) that have captured the monetary values of agricultural, power generation (if applicable), flood protection, tourism, fisheries and other allied activities? If Yes, please share some sample reports. (focus)

**What are the costs of the scheme? What is the monetary value of all costs?**

Q1. What are the major socio-economic costs (like R&R costs, environmental degradation, loss of livelihood owing to displacement, cultural destruction, etc.)? Mention the suggested mitigation measures. (focus)

## **SUSTAINABILITY**

### **SS3: Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. Are the irrigation fees adequate for offsetting the cost of maintenance and operation? If No, provide suggestions on how to increase the irrigation revenue. (focus)

Q2. Do you suggest any institutional change (like more effective functioning of WUAs, establishment of state water regulator for better pricing mechanisms, etc.) for better scheme performance? (focus)

## **RELEVANCE**



**RL1: Is the scheme relevant in the present context?**

**Adequacy - Low total water storage capacity as well as water storage capacity per capita in dams**

Q1. What are the major constraints in increasing the storage capacity in the state (e.g. financial resources, hydrology / topography, land acquisition, relocation and rehabilitation, etc.)? Please elaborate on these constraints. (focus)

**RL2: Is it appropriate to continue / prioritize this scheme?**

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1. In your opinion, is continuation and further investments in Major and Medium Irrigation (MMI) projects the right approach for this state? Or should decentralized irrigation schemes (e.g. minor irrigation, watershed management, smaller flood control and irrigation structures) be given more preference? Please explain your answer with supporting evidence. (focus)

Q2. Should additional central grants be made available for maintenance of state major and medium irrigation assets? (focus)

**SECTION 3: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Use of IT/Technology in driving efficiency**

**Deployment of IT enabled mechanisms for monitoring of the Schemes**

**Secretary (State irrigation and water resources dept.), Chief Engineer (Irrigation department)**

Q1. Are the assets created under AIBP geo-tagged? What are the key benefits of geo-tagging?

**SECTION 4: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?



<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

2.1.7 State level stakeholder- Chief Engineer [Department: irrigation (major and medium projects)]

**GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
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  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

**INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:



- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme AIBP. Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from nation, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

#### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH AIBP SCHEME**

##### **RESEARCHER TO NOTE:**

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

#### **SECTION 1: DEEP DIVE INTO AIBP SCHEME USING REESIE FRAMEWORK:**

##### **EFFECTIVENESS**

**ET1: Is the scheme design appropriate to address scheme objectives?**

**Is there evidence that assumptions have been tested and are valid?**



Q1. Has completion of AIBP works resulted in targeted Irrigation Potential Utilization (IPU)? If not mention the causes (say non-completion of distributary networks, technical deficiencies.). (focus)

Q2. Approximately for what percentage of the total Irrigation Potential Created through the AIBP projects in the state are the command area development works completed? (focus)

Q3. Provide an estimate of the current IPC-IPU gap of the AIBP projects in the state. What are the top 3 reasons for the widening of gap between IPC and IPU in the state? (if applicable) (focus)

## **ET2: How are scheme targets set and monitored?**

### **Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. How is the created Irrigation Potential assessed/ estimated (for e.g. assessment methodology, physical validation, etc.)? How is the progress including quality of works validated? (focus)

Q2. Comment on the adequacy of the monitoring and supervision done by irrigation department including suggestions for improvement (if any) (focus)

Q3. Has the state formed any State Level Monitoring Committee?

Q4. Has the state conducted any Independent Third-Party Evaluation during 2016-17 to 2018-19 for the priority AIBP projects in the state? If Yes, please provide some details like expenditure incurred and some of the key recommendations of these evaluation reports. Also, please share some of the reports. (validate)

Q5. How effective are remote sensing technologies for monitoring? Do you suggest any other technical interventions for monitoring and supervision? (focus)

## **ET3: How has the scheme performed against scheme objectives and annual targets?**

### **What is the state wise, year wise performance against target?**

Q1. What have been the financial progress and physical progress (mention percentage completion of Head Works, Main Canal, Branch Canal, Distributary, Lift Component, SCADA, Minors against target), from 2016-17 to till date for the ongoing and/ or completed projects? (validate)

Q2. Mention the year-wise REVISED physical targets for the ongoing projects in the state (considering the completion of only 40 projects by June'19 inspite of the target completion date of Dec'19 for all the 99 priority AIBP projects) (validate)

Q3. Mention the time over-runs for the ongoing AIBP projects in the states. (validate)

Q4. May you provide data for approximate percentage of state irrigation budget that are yearly earmarked for maintenance of irrigation assets? (focus)

Q5. May you provide data for approximate percentage of state irrigation budget that are yearly earmarked for training purposes of field staff of irrigation department? (focus)



### **Identify states that have performed well? What are the underlying reasons for such performance?**

Q1. What are the key success factors (for e.g. state specific policies, implementation strategies, effective WUAs, etc.) that have positively affected the scheme performance?

Q2. Comment on the effectiveness of the functioning of the WUAs (like devolution of functional and financial power, power to charge levies, ownership of assets, etc.). Do you feel effective functioning of WUAs/ greater community participation may substantially enhance the scheme performance? If Yes, may you provide some examples in the state to substantiate your answer.

### **What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. Does any of the AIBP project in the state suffered substantial delay due to poor planning processes like delay in preparing DPRs, poor quality of DPRs and inaccurate surveys? If Yes, please provide some detail along with suggested/ adopted mitigation measures. (focus)

Q2. What are the 5 key issues affecting the implementation stage (say frequent changes in project design, land acquisition issues, re-work owing to sub-standard works by contractors, etc)? List the issues in priority order of their extent of impact. (focus)

Q3. Are there any deficiencies (say incorrect splitting of works at the project level, cost escalation owing to delays, etc.) related to financial management that you shall like to highlight? (focus)

Q4. Has there been any instance in the state where the project execution suffered due to inadequate phasing of works (for e.g. works on main and distributary channel completed w/o completion of barrage works)? If Yes, please provide some details and explain the mitigation measures adopted. If No, kindly mention how does the government ensure correct phasing of works? (focus)

### **What is the planning process proposed under the scheme? Is the planning process adequately and effective followed? If not, what improvements are desirable?**

Q1. In context of delays endemic to major and medium irrigation projects; has there been any instance where major course corrections needed to be adopted for a particular project? If Yes, share some detail.

#### **Sustainability: Climate Change**

Q3. During implementation stage, has you taken into account the effect of change in cropping pattern owing to climate change (say revision in targeted ha to be covered under this scheme)? If Yes, please provide some detail to substantiate your claim.

### **How has the scheme performed in respect of participatory irrigation management?**

Q1. Mention approximate what percentage of the total command area (of the 99 priority AIBP projects) are covered by the WUAs. Mention the total number of registered WUAs in the command area along with number of firms, irrigated area and beneficiary farmers.



Q2. Comment on the effectiveness of the functioning of the WUAs (like extent of devolution of functional and financial power, power to charge levies, etc.)

### **Gaps in broad sectoral outcomes - Staffing levels**

Q1. Do you feel the staff level at field is adequate? If no, mention which aspects of the scheme (say implementation, monitoring, etc.) are most adversely affected due to the same. Mention some of the mitigation measures.

**ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1. Do you avail loans for the state share from the Long Term Irrigation Fund of NABARD? Mention if there are any other funding mechanisms for the state share.

Q2. Have there been instances of delay in fund release by Centre/ NABARD? (validate)

Q3. May you share the approximate expenditure (as percentage of yearly budgeted estimates) incurred during the month of March of each year from 2016-17 to 2018-19? (validate)

**Was there timely utilization of available funds? If not, what were the reasons?**

Q1. What are the utilization rates of funds received from Centre/ NABARD during the last 3 financial years (2016-17 to 2018-19)? In case of low utilization, mention if there are any specific issues. (validate)

Q2. What are the major financial implications of low fund utilization (like interest borne on funds locked up in stalled projects, opportunity cost)?

**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (state or time period) and mention the relative impact of each factor on performance?**

Q1. Mention some of the key initiatives adopted by the State to expedite the completion of the AIBP projects (like fast clearance/ approval mechanisms from various government departments, innovative, easier approval for cost escalation schemes, better land acquisition policies, etc.) that have enhanced scheme performance. (focus)

Q2. Also mention name some of the Central government initiatives in the above aspect that have enhanced the scheme performances. (validate)

Q3. What do you suggest to improve the utilization of irrigation assets created? (focus)



**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1. What additional interventions do you suggest to hasten the pace of works and ensure better maintenance and water management? (focus)

Q2. Do you suggest any technological interventions (say use of piped distribution system, new technology for design of head, regulators, etc.) to improve conveyance efficiency? (focus)

Q3. Do you feel volumetric water supply and differential pricing may lead to better water management? If Yes, suggest the implementation measures for the same including successful case studies. (focus)

Q4. Do you feel establishment of state water regulator may aid in better pricing mechanisms and collection of revenues? (focus)

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. What are the negative factors affecting scheme performance (say inadequate availability of water in the main canal, non-completion of distributary networks, low conveyance efficiency including poor maintenance of assets, low access of water at farm levels (particularly those at tail ends) including poor water efficiency)? Suggest some mitigating measures (focus)

**Equity – high loss in canal network**

Q2. Have there been any studies done by your department to estimate water losses that occurs during conveyance in the open canal network? If yes, please provide details. If no, in your estimate how much would losses towards evaporation and seepage, etc.? What measures can be undertaken to address such high losses?

Q3. List some of the key complaints received from all the stakeholders (both beneficiaries and non-beneficiaries) in relation to the completed AIBP projects during the last 3 years. (focus)

Q4. How prominent is the issue where large tracts of land in the command area are unsuitable for irrigation which subsequently led to increasing incidences of waterlogging and salination? Mention approximate percentage of land in the command area that is unsuitable for irrigation (if any). (validate)

**EQUITY**

**EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**



Q1. Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? (focus)

Q2. Are there any safeguards for addressing the needs of the people like forest encroachers, canal affected fishermen, landless laborers and marginal farmers who may not be directly covered under the compensation scheme? (focus)

Q3. Do you feel implementation of AIBP scheme resulted in redistribution of benefits from upstream farmers to downstream farmers? If Yes, please provide some examples/ evidences to substantiate your answer. (focus)

Q4. How do you ensure equitable distribution of water between head and middle, tail reaches of farmers? (focus)

**EQ2: Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1. Does the scheme exclude any weaker section of society that may be included? (focus)

## IMPACT

**IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. What are the long-term impacts of the scheme? Are there any studies on this?

Q2. Have there been any impact on literacy rate, skill levels of farmers, migration, health standards, employment rate after the implementation of the scheme? Are there any studies on this? (focus)

## EFFICIENCY

**EC1: Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. List the key direct and indirect benefits attributable to AIBP projects. Please share if there are any monetary estimates of the benefits stated above. (focus)



Q2. Are there any studies (government appraisal report, studies by Multilateral Financial Institutions, etc.) that have captured the monetary values of agricultural, power generation (if applicable), flood protection, tourism, fisheries and other allied activities? If Yes, please share some sample reports. (focus)

### **What are the costs of the scheme? What is the monetary value of all costs?**

Q1. Provide data in relation to total expenditure incurred in the AIBP projects in the state (both cumulative expenditure and expenditure during 2016-17 to 2018-19). (focus)

Q2. What are the major socio-economic costs (like R&R costs, environmental degradation, loss of livelihood owing to displacement, cultural destruction, etc.)? Are there any monetary estimates of such costs? If Yes, please provide cumulative project wise estimates of such costs (focus)

Q3. Mention the provisions in place for environmental and social safeguards.

Q4. Please share studies (like government appraisal reports, studies by Multilateral Financial Institutions, etc.) that have conducted cost benefit analysis for the priority AIBP projects in the state (focus)

Q5. Is there any estimate of the financial IRR and economic IRR of the priority AIBP projects in the state? (focus)

### **EC2: Can the costs of the scheme be lowered?**

#### **Are there lower cost alternatives for achieving the scheme outcomes?**

Q1. Please provide an approximate range of cost over-runs for the ongoing AIBP projects in the state. What are the main issues responsible for cost over-runs (like re-works due to sub-standard works by contractors, change in design, increase in land prices, change in standard schedule of rates etc.)? (focus)

Q2. What measures do you suggest to mitigate the issue of cost over-runs? (focus)

Q3. How can private investments be leveraged? (focus)

#### **Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1. Coordination with which all departments may increase the scheme performance? Give some examples (say co-ordination with land resources for land acquisition, CAD and irrigation department for faster pace of works and irrigation scheduling, agriculture dept. for better water management and crop selection, environment ministry for project appraisal, NABARD for funds disbursements, etc.) (focus)

#### **What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1. Have you faced any co-ordination issues with any Ministries (say with respect to fund disbursement, project sanctioning, etc.) that has hampered the implementation of the scheme? If yes, please provide some details to substantiate your answer. (focus)



Q2. Is there any scope to further enhance the implementation of the scheme through better co-ordination with other departments say with Revenue Department for faster disbursement of funds, Land Resources Department for land acquisition, the Agriculture Department for crop planning and WUAs for effective co-ordination, etc.? (focus)

## **SUSTAINABILITY**

### **SS3: Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

#### **Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. Are the maintenance activities of irrigation canals carried out solely from funds collected through irrigation service fees or does the state provide additional funds/ grants?

Q2. Mention the current irrigation service fees rate (including the base year)?

Q3. Are the irrigation fees recovery adequate? Mention the key issue affecting fees recovery (say inadequate assessment, reluctance of users to pay) (validate)

Q4. Do you suggest any institutional change (say more effective functioning of WUAs) for better scheme performance? (focus)

### **SS5: Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

#### **Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1. Comment on the environmental and social sustainability of the scheme? Please provide evidence in support of your answer.

Q2. How prominent is the issue of inadequate availability of water at main canal/ river? Which of the ongoing AIBP projects in the state are more prone to such issues? (focus)

#### **Sustainability: Climate Change**

Q2. Comment on the impact of extreme climate change events like recurrent droughts etc. on source sustainability. Has there been any correction in the designed capacity of the reservoirs (from that envisaged during the design stage) owing to extreme climate change events?

### **SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**



Q1. What are the other risks in ensuring sustainability of the scheme (technical, social, financial, political)?

Q2. How prominent are the issues of over-irrigation in the upper reaches and non-availability of adequate water at tail ends? How does the state ensure equitable distribution of water (say among head and tail ends)? Mention the challenges and recommendations for ensuring equity (focus)

Q3. How prevalent is the use of lifting of water using submerged pumps by farmers particularly those outside the command area? Suggest some mitigation measures. (focus)

Q4. How prominent is the issue of diversion of water for non-irrigation purposes? Suggest some mitigation measures. (focus)

## RELEVANCE

### RL1: Is the scheme relevant in the present context?

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1. To what extent AIBP has contributed to creation of Irrigation Potential (IP) in the state? Mention the UIP-IPC gap in the state that has been closed through AIBP till date and after all the ongoing AIBP projects in the state are completed. (focus)

**Adequacy - Low total water storage capacity as well as water storage capacity per capita in dams**

Q1. What is the total potential water storage capacity in the state that can be tapped through i) major and medium irrigation projects and ii) minor projects in the state? Of this, what is the current available storage capacity? (focus)

Q2. In addition to AIBP projects, are there other major and medium irrigation projects planned / under construction by your dept.? If yes, please provide names of projects, storage capacity and like date of completion. (focus)

Q3 - What are the major constraints in the increasing the storage capacity in the state (e.g. financial resources, hydrology / topography, land acquisition, relocation and rehabilitation, etc.)? Please elaborate on these constraints. (focus)

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1. In addition to creation of Irrigation Potential, should the AIBP projects target any other interventional gaps like maintenance of irrigation structures, conjunctive use of ground water resources, water use efficiency or other suggested areas? (focus)

Q2 - Is the state or parts of the state water-surplus (further, are there frequent floods) or water-deficient? If yes, is there a rationale to consider inter-basin water transfer projects that may be taken up as part of AIBP projects in the future? If so, please provide details.



Q3. Have any inter-basin water transfer projects already been implemented in the state? If yes, has (have) the project(s) been successful in reducing the spatial variation in water availability across the state? What has been the impact of the such a project on the environment (including environmental flows in the river) and ecology?

**RL2: Is it appropriate to continue / prioritize this scheme?**

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1. In your opinion, is continuation and further investments in Major and Medium Irrigation (MMI) projects the right approach? Or should decentralized irrigation schemes (e.g. minor irrigation, watershed management, smaller flood control and irrigation structures) be given more preference? Please explain your answer with supporting evidence. (focus)

Q2. Do you suggest scaling down the grants for AIBP and use the funds for other state specific irrigation projects? If Yes, please highlight some of the state irrigation projects for which additional central funds may be availed? (focus)

Q3. Should additional central grants be made available for maintenance of state major and medium irrigation assets? (focus)

**SECTION 3: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Accountability & Transparency**

**Availability of Data Records and Reports in public domain**

Q1. Has the state put up plaques with financial and technical details at critical places of the projects? If yes, please provide some evidences. Also mention if the state follows any other social audit mechanisms? (focus)

**Enquiry area- Citizen Accountability**

Q1. What are the various functional grievance redressal mechanisms accessible (like web portals, complaint boxes, etc.) to the various stakeholders (including the project beneficiaries, project affected people, contractors, etc.)? (focus)

**Direct/Indirect Employment Generation**

**Employment generation**



Q1. Is there any estimated of total no of man-days of work generated due to AIBP? Mention % of women employed. (focus)

Q2. Do you have an estimate of the number of women farmers benefitted owing to AIBP projects? (focus)

Q3. In case of hydro-electric generation through this project, discuss how easy access to electricity impacted industrial growth in the backward areas?

### **Gender mainstreaming**

#### **Gender-friendly infrastructure and policies**

Q1. Are there any mechanisms/ provisions through which the state government ensure more involvement of women in the WUAs (like reservation of seats for women in WUA, etc.)? (focus)

Q2. Does the irrigation department conduct any gender-specific training for women in the command area for enhancing other livelihood opportunities? Please provide evidence in support of your answer. (focus)

Q3. Are there any social safeguards for addressing the needs of the women who may suffer disproportionately in the resettlement process considering their loss in common resources (like community support) and social networks? (focus)

Q4. Mention how the project contributed to increased women empowerment (say higher income, literacy, better decision taking roles, etc.) (focus)

#### **Any Best Practices**

Q1. May you share some sample case studies from various block/ districts that have performed relatively well in gender mainstreaming of irrigation facilities? (focus)

### **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population**

#### **Funds allocated under TSP/ SCSP and other provisions for vulnerable communities**

Q1. Are there any fund allocated under TSP & SCSP for AIBP projects? If yes, mention the details and also how such targeted allocation helped in improving equity. (focus)

#### **Inclusion of vulnerable groups in scheme as well as sector**

Q1. Have you undertaken an activity to analyse the problems faced by SCs/STs in your State? If yes, please provide details of the findings?

Q2. Whether SCA to TSP/SCA to SCSP has been implemented in your state or not? If implemented,

- a) What are the activities/interventions being undertaken for SCs and STs which are being funded through SCSP and TSP?



- b) What are the irrigation structures being constructed by the government under SCA to TSP/SCA to SCSP?
- c) Are the farmers being provided any subsidy/incentive for irrigation under SCA to TSP/SCA to SCSP?
- d) Does Krishi Vikas Kendra (KVK) implement Hands-on training/workshops/awareness programmes? If yes, what are the skill development and other irrigation-related trainings being conducted by KVKs under SCA to TSP/SCA to SCSP?
- e) What type of Multi-sector Support and Advisory services are being provided by KVKs to farmers under SCA to TSP/SCA to SCSP?
- f) Is there any other Agriculture Research Organization apart from KVK conducting trainings under SCA to TSP/SCA to SCSP?
- g) What are the steps taken to monitor the SCA to TSP/SCA to SCSP activities at the State level?
- h) How do you measure the impact under SCA to TSP/SCA to SCSP?
- i) What are the issues in the CSS? (Probe for top 5 issues)
- j) Please share recommendations to improve the impact of SCA to TSP/SCA to SCSP?

### **Any Best Practices**

Q1. Mention any successful case study in area of interventions for vulnerable people

### **Use of IT/Technology in driving efficiency**

#### **Deployment of IT enabled mechanisms for monitoring of the Schemes**

Q1. Is geotagging and use of geotagged photographs being done? If yes, mention (focus)

- A. the status of geo-tagging across projects. In case of delay, mention the reasons for the same
- B. the benefits accrued due to geo-tagging

#### **Use of latest technology to improve efficiency and effectiveness of scheme implementation**

Q1. What are the technologies (say mobile apps, e-kiosks) being used in project implementation, service delivery? (focus)

### **Stakeholder and Beneficiary behavioral change**



## Mechanisms to promote and ensure behavior change

Q1. What activities are undertaken at District/Block level to promote adoption of good practices?

### Challenges faced

Q1. What are the major challenges in ensuring behavioural change among beneficiary farmers (say encouraging farmers in head region to minimize flood irrigation, etc.)? Are there any areas which needs more attention in terms of bringing behaviour change (in terms of adoption of new techniques for water management, crop planning, administration issues like payment of water taxes)? Mention some of the mitigating measures and best practices adopted by some states ([focus](#))

## SECTION 4: CHALLENGES AND SUGGESTIONS

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

## 2.1.8 District level stakeholder- Superintending/ Executive Engineer [Irrigation Department]

### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:



- Tell me more about \_\_\_\_\_
- Can you give an example of \_\_\_\_\_?
- What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

### **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme AIBP. Since you are a key stakeholder in the scheme overseeing implementation at the district level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from nation, state and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH AIBP SCHEME**



## RESEARCHER TO NOTE:

1. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.
2. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.

## SECTION 1: DEEP DIVE INTO AIBP SCHEME USING REESIE FRAMEWORK:

### EFFECTIVENESS

#### ET1: Is the scheme design appropriate to address scheme objectives?

##### Is there evidence that assumptions have been tested and are valid?

Q1. Has completion of AIBP works resulted in targeted Irrigation Potential Utilization (IPU)? If not mention the causes (say non-completion of distributary networks, technical deficiencies, etc.). (validate)

Q2. Provide an approximate estimate of the percentage of the command area that is not suitable for irrigation. (validate)

#### ET3: How has the scheme performed against scheme objectives and annual targets?

##### What are the key bottlenecks, issues & challenges in the implementation of the scheme?

Q1. What are top five issues that affected the project implementation? (focus)

Q2. May you highlight other issues in relation to project planning (DPR and survey stage) and implementation process (say issues related to change in project design, land acquisition, contractor management, etc.)? (focus)

Q3. What are the main issues you face in relation to financial management (say delay in receipt of funds from government, cost escalations due to delay and revision of works, contractor issues, re-work owing to sub-standard work by contractors, etc.)? (focus)

#### ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?

##### Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?

Q1. Have there been any instances of delay in fund receipts/ inadequate fund receipts from the relevant authorities? (validate)



**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (state or time period) and mention the relative impact of each factor on performance?**

Q1. Mention some of the key initiatives adopted by the State that assisted in expediting the project completions (like fast clearance/ approval mechanisms from various government departments, innovative, easier approval for cost escalation schemes, better land acquisition policies, etc.). (focus)

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1. What additional measures do you suggest for hastening pace of works and ensuring better maintenance and water management? (focus)

Q2. Approximately for what percentage of the total Irrigation Potential Created through the AIBP projects, are the command area development works completed? (validate)

Q3. How many registered and functional WUAs are there in the command area? Are the WUAs being handed over the assets below outlets and water management in the respective command area? Are the WUAs responsible for management and collection of fees? Provide evidences to substantiate your answer. (validate)

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. Mention some of the key complaints received during last 3 years from key stakeholders (like field level government staff, contractors, villagers, farmers, panchayat representatives, etc.) (focus)

Q2. Has there been any instances of lifting of water using submerged pumps by famers particularly those outside the command area? If Yes, suggest mitigation measures (focus)

Q3. Comment on the adequacy of staff at field level (both number of staff and their technical competency). Does the state government organize adequate training for the field level staff? If yes, mention details of some of the training organized during last year (2018-19). Also comment on the adequacy of other resources (vehicles)? (validate)

**Water Security - Agriculture water use efficiency**

Q1 - How entrenched is the practice of flood irrigation in the command area? Provide data regarding percentage of total irrigated area covered with micro irrigation and water efficient practices.



## Overall nature and responsiveness of Water sector planning - Lack of proper planning and data management

Q1. Is there a lack of coordination between various departments (say Irrigation, Agriculture, Land Resources, Command Area Development Authority) that is hampering scheme implementation? What can be done to improve this lack of coordination?

### EQUITY

**EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?

Q1. How do you ensure equitable distribution of water among the farmers in the head and tail ends? (validate)

**EQ2: Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?

Q1. Does the scheme exclude any weaker section of society that may be included? (focus)

### EFFICIENCY

**EC1: Did the benefits of the scheme exceed costs?**

What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?

Q1. List the key direct and indirect benefits attributable to AIBP projects. Please share if there are any monetary estimates of the benefits stated above. (focus)

Q2. Provide evidences in relation to benefits from flood protection activities accrued due to completion of AIBP works in the district. (focus)

Q3. Provide data in relation to benefits from hydro-electric power generation from the project (if applicable). (focus)



Q4. Has there been any increase in collection of water taxes/ ISF after completion of AIBP works? If Yes, can you provide relevant data to substantiate the same (both pre and post project figures) (focus)

Q5. Has there been any increase in ground water level in the command area (in the district) after completion of AIBP works? If Yes, can you provide relevant data to substantiate the same (both pre and post project figures) (focus)

**What are the costs of the scheme? What is the monetary value of all costs?**

Q1. Provide details of the total capital cost incurred under this scheme. (validate)

Q2. Provide details of the O&M for the assets created under this scheme including the interest cost.

Q3. Provide details of the land acquisition cost including R&R cost.

Q4. Provide an estimate of the property loss/ damage cause, economic loss of livelihood and other socio-economic costs due to displacement caused due to the project.

**EC2: Can the costs of the scheme be lowered?**

**Are there lower cost alternatives for achieving the scheme outcomes?**

Q1. What are the main issues responsible for cost over-runs (like re-works due to sub-standard works by contractors, change in design, increase in land prices, change in standard schedule of rates etc.)? (focus)

**SUSTAINABILITY**

**SS5: Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1. Comment on the environmental and social sustainability of the scheme? What has been the scheme acceptance by farmers?

Q2. What are the social risks (like change in land pattern, encroachment due to developmental activities like roads, etc.)? Suggest mitigating measures.

**Sustainability: Climate Change**

Q1. May you please elaborate on the adverse effects of flood or other extreme climate change events on the irrigation facilities created under AIBP?

**SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**



**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. What are the other risks in ensuring sustainability of the scheme (technical, social, financial and political)?

Q2. How does the state ensure equitable distribution of water (say among head and tail ends)? Mention some challenges and recommendations for ensuring equity. (validate)

Q3. How prevalent is the issue of diversion of water for non-irrigation purposes and lifting of water using submerged pumps? Suggest some mitigating measures (validate)

#### **Sustainability - Unregulated extraction of groundwater**

Q1 - Given increased availability of ground water resources in the command area, are there any instances of noticeable growth in private GW minor-irrigation structures like tube wells, etc.?

### **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

#### **Accountability & Transparency**

##### **Enquiry area- Availability of Data Records and Reports in public domain**

Q1. Are there any practices of conduct of social audit in the villages? If Yes, provide details of the checklist used during audit. Also, mention no. of trainings conducted by govt. in last financial year. (validate)

Q2. Has the government put up plaques with financial and physical details at critical places of the project? (validate)

#### **Direct/Indirect Employment Generation**

##### **Enquiry area- Employment generation**

Q1. May you provide an estimate of the number of man-days of works generated for women owing to this project? (validate)

Q2. Do you have an estimate of the number of women farmers benefitted owing to AIBP projects? (validate)

##### **Enquiry area- Gender-friendly infrastructure and policies**

Q1. Are there any specific provisions for involvement of women in WUAs (like reservation of seats for women, etc.)? (validate)



Q2. Has the irrigation department conducted any gender-specific trainings for promoting more livelihood opportunities for women (both beneficiaries and non-beneficiaries) in the command area during the last three years? (validate)

Q3. Mention how the project contributed to increased women empowerment (say higher income, literacy, better decision taking roles, etc.) (focus)

<b>Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population</b>
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### **Inclusion of vulnerable groups in scheme as well as sector**

Q1. Have you undertaken an activity to analyse the problems faced by SCs/STs in your District? If yes, please provide details of the findings?

Q2. Whether SCA to TSP/SCA to SCSP has been implemented in your district or not? If implemented -

- a) Is there any micro-project under SCA to TSP/SCA to SCSP being undertaken in your district? (Collect details of Irrigation projects, villages where SCA projects are being implemented)
- b) What are the activities/interventions being undertaken for SCs and STs which are being funded through SCSP and TSP?
- c) What are the irrigation structures being constructed by the government under SCA to TSP/SCA to SCSP?
- d) Are the farmers being provided any subsidy/incentive for irrigation under SCA to TSP/SCA to SCSP?
- e) Does Krishi Vikas Kendra (KVK) implement Hands-on training/workshops/awareness programmes? If yes, what are the skill development and other irrigation-related trainings being conducted by KVKs under SCA to TSP/SCA to SCSP?
- f) How many farmers have been trained by KVK under SCA to TSP/SCA to SCSP?
- g) What type of Multi-sector Support and Advisory services are being provided by KVKs to farmers under SCA to TSP/SCA to SCSP? How many farmers have benefitted from such services?
- h) What are the steps taken to monitor the SCA to TSP/SCA to SCSP activities at the State/District/village level?
- i) How do you measure the impact under SCA to TSP/SCA to SCSP?
- j) What are the issues/challenges in the CSS? (Probe for top 5 issues)
- k) Please share recommendations to improve the impact of SCA to TSP/SCA to SCSP?

<b>Use of IT/Technology in driving efficiency</b>
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**Enquiry area - Use of latest technology to improve efficiency and effectiveness of scheme implementation**



Q1. What are the technologies (say mobile apps, e-kiosks) being used in project implementation, service delivery? (validate)

**Stakeholder and Beneficiary behavioral change**

**Enquiry area - Challenges faced**

Q1. What are the major challenges in ensuring behavioural change among beneficiary farmers (say encouraging farmers in head region to minimize flood irrigation, etc.)?? Are there any areas which needs more attention in terms of bringing behaviour change (in terms of adoption of new techniques for water management, crop planning, administration issues like payment of water taxes)? Mention some of the mitigating measures and best practices adopted by some states (validate)

**SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

**2.1.9 District level stakeholder- District Agriculture Officer (Agriculture Department)**

**GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.



- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme AIBP. Since you are a key stakeholder in the scheme overseeing implementation at the district level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from nation, state and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**



- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH AIBP SCHEME**

### **RESEARCHER TO NOTE:**

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

## **SECTION 1: DEEP DIVE INTO AIBP SCHEME USING REESIE FRAMEWORK:**

### **EFFECTIVENESS**

#### **ET1: Is the scheme design appropriate to address scheme objectives?**

##### **Is there evidence that assumptions have been tested and are valid?**

Q1. Has completion of AIBP works resulted in targeted Irrigation Potential Utilization (IPU)? [\(validate\)](#)

Q2. Approximately what percentage of the total agricultural water needs in the command area are met by the water supplied through this scheme? Mention other primary sources of water. [\(validate\)](#)

##### **What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. How common is the practice of flood irrigation in the command area? Provide data regarding percentage of total irrigated area covered with micro irrigation and water efficient practices.

Q2. Does the government conduct training on micro-irrigation and efficient water management practices for beneficiaries? If yes, mention the no. of trainings conducted in last year (2018-19).

##### **Overall nature and responsiveness of Water sector planning - Lack of proper planning and data management**

Q1. Is there a lack of coordination between your department and the Irrigation and Land Resources departments in the implementation of AIBP projects? What can be done to improve this lack of coordination?

### **EQUITY**



**EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Considering the issue of inadequate water level in the main canal/ river and over-irrigation at upper reaches, how prominent is the issue of water not reaching the drought prone areas in the tail ends? Please provide some evidences to substantiate your answer

Q2. Has the government (irrigation/ line department) implemented adequate safeguards for addressing the needs of the people like forest encroachers, landless laborers and marginal farmers who may not be directly covered under the compensation scheme? Please provide some details to substantiate your answer

Q3. Do you feel implementation of AIBP scheme resulted in redistribution of benefits from upstream farmers to downstream farmers? If Yes, please provide some examples/ evidences to substantiate your answer.

## **IMPACT**

**IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. Have there been any change in literacy rate, skill levels of farmers, migration, health standards owing to this scheme? Please explain with supporting evidence. ([validate](#))

## **EFFICIENCY**

**EC1: Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. List the key direct and indirect benefits attributable to AIBP projects.

Q2. Provide data in relation to agricultural benefits (like increase in irrigated area, crop diversity, yield, etc.) accrued due to completion of AIBP works in the district. ([focus](#))

Q3. Provide data in relation to benefits from flood protection activities (like lesser loss of standing crops owing to flooding, etc.) accrued due to completion of AIBP works in the district. ([focus](#))



Q4. Has there been a change in the wage level of the agricultural laborers (in the district) owing to increased farming activities after completion of AIBP works? If Yes, please provide some evidences/ data in relation the same. (focus)

Q5. Has there been any increase in ground water level in the command area (in the district) after completion of AIBP works? If Yes, can you provide relevant data to substantiate the same (both pre and post project figures) (focus)

Q6. Has there been any change in migration of agricultural laborers after implementation of the AIBP scheme? If Yes, can you provide relevant data (like figures for temporary and permanent migration in the command area during 2016-17 to 2018-19) to substantiate the same (both pre and post project figures) (focus)

#### **What are the costs of the scheme? What is the monetary value of all costs?**

Q1. Provide details of the agricultural input cost (in Rs/ ha) (like expenditure incurred for land preparation, seed, fertilizer, pesticides, manure, plant protection, labor, irrigation) for the period 2016-17 to 2018-19. (focus)

Q2. Provide an estimate of the crop loss/ damage caused due to submergence by reservoir.

Q3. Mention whether there are any other socio-economic costs to the farmers owing to this project. If available, please provide some monetary estimates of such costs. (focus)

Q4. Has there been any change in instances of water-logging and sanitation in the command area? Please provide evidences to substantiate your answer.

## **SUSTAINABILITY**

**SS5: Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1. Comment on the environmental and social sustainability of the scheme? What has been the scheme acceptance by farmers?

**SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**



Q1. Are there any instances of beneficiary farmers shifting to more water-intensive crops owing to increased access to irrigated water after completion of the project works? If yes, what measures can be taken to reverse this trend?

### **Sustainability - Unregulated extraction of groundwater**

Q1 - Given increased availability of ground water resources in the command area, are there any instances of noticeable growth in private GW minor-irrigation structures like tube wells, etc.?

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Gender mainstreaming**

#### **Gender-friendly infrastructure and policies**

Q1. Given improved access to water and better irrigation facilities; has there been any noticeable change in the division of farm labour (say there has been a shift of women from traditional labour-intensive tasks, etc.)? If Yes, has women benefitted from this change? (focus)

Q2. Comment how beneficial has been the scheme for women farmers. (focus)

#### **Enquiry area- Decision making by women**

Q1. Do women have adequate control over agricultural and household resources?

Q2. Has there been any shift of women from domestic activities to income-generating activities?

### **Stakeholder and Beneficiary behavioral change**

#### **Enquiry area - Mechanisms to promote and ensure behavior change**

Q1. What activities are undertaken at District/Block level to promote adoption of good practices (like promotion of micro-irrigation, etc.)? (focus)

#### **Enquiry area - Challenges faced**

Q1. What are the major challenges in ensuring behavioural change among beneficiary farmers (say encouraging farmers in head region to minimize flood irrigation, etc.)? Are there any areas which needs more attention in terms of bringing behaviour change (in terms of adoption of new techniques for water management, crop planning, administration issues like payment of water taxes)? Mention some of the mitigating measures and best practices adopted by some states (focus)

#### **Enquiry area - Cropping pattern**

Q1. What are the key constraints in crop planning based on local water availability with a view to reduce water intensive crops?



### SECTION 3: CHALLENGES AND SUGGESTIONS

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

#### 2.1.10 District level stakeholder - District Fisheries Officer (Fisheries Department)

##### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:



- Can you explain what you mean by....?
- Earlier you said\_\_\_\_\_ but it also seems like\_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme AIBP. Since the scheme has an impact on the fishing communities, your insights would be valuable in understanding of the key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from nation, state and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH AIBP SCHEME**

### **RESEARCHER TO NOTE:**

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*



## SECTION 1: DEEP DIVE INTO AIBP SCHEME USING REESIE FRAMEWORK:

### EQUITY

**EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. What safeguards have the state government adopted for addressing the needs of the canal affected fishermen who may not be directly covered under the compensation scheme? Please provide some details to substantiate your answer. (validate)

Q2. Do you feel implementation of AIBP scheme resulted in redistribution of benefits from upstream fishing communities to downstream fishing communities? If Yes, please provide some examples/ evidences to substantiate your answer.

### IMPACT

**IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. Have there been any change in literacy rate, skill levels, migration, health standards of the fishing community (both in upstream and downstream villages of the canal)? Please explain with supporting evidence. (validate)

### EFFICIENCY

**EC1: Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. List the key direct and indirect benefits attributable to AIBP projects in relation to fisheries

Q2. Provide data/ evidences in relation to benefits from pisciculture (reservoir fishing) and allied activities accrued due to completion of AIBP works in the district. (focus)

Q3. Provide data/ evidences in relation to benefits from tourism activities accrued due to completion of AIBP works in the district. (focus)

Q4. Provide data/ evidences in relation to benefits from flood protection activities accrued due to completion of AIBP works in the district. (focus)

**What are the costs of the scheme? What is the monetary value of all costs?**



- Q1. Provide some details of socio-economic and environmental damages caused by this project
- Q2. Provide an estimate of the economic loss of livelihood (particularly for fishing community) due to displacement caused by the project. (focus)
- Q3. Has there been any negative impact on the fishing community dependent on the canal after completion of the AIBP works? If Yes, please provide relevant data to substantiate your answer. (focus)

**SUSTAINABILITY**

**SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. Is adequate water level maintained in the downstream canals? Please provide some details to substantiate your answer.

**SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

2.1.11 Village level stakeholder – NGO



## **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme AIBP. Since you are a key stakeholder involved in the scheme operations at the village level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from nation, state and district level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.



- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH AIBP SCHEME**

#### **RESEARCHER TO NOTE:**

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

#### **FIRST QUESTIONS TO ASK THE VILLAGE LEVEL STAKEHOLDER ARE AS FOLLOWS:**

- 1. What is the population of the village?**
- 2. What are the different projects related to irrigation, agriculture in the village that are currently running? Could you name them? What are your views about these?**
- 3. What are the type of works undertaken in them? According to you, which ones are working well for the village and the people? Why?**

### **SECTION 1: DEEP DIVE INTO AIBP SCHEME USING REESIE FRAMEWORK:**

#### **EFFECTIVENESS**

##### **ET3: How has the scheme performed against scheme objectives and annual targets?**

##### **What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. Has there been any issue in relation to land acquisition in this village? If Yes, mention the key issues (say administrative delays, demand for enhanced compensation, lack of fund, public objection, change in alignment, ownership, deficiency in area assessment, legal disputes). Suggest some mitigating measures.

#### **IMPACT**

IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?



**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. What are the long-term impacts of the scheme? (focus)

Q2. Have there been any changes in literacy rate, skill levels of farmers, migration rate, health standards, etc.? (validate)

## **EQUITY**

**EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? (validate)

Q2. Has the complete coverage of Project Affected People (PAP) ensured while awarding R&R benefits? (validate)

Q3. Has the government implemented adequate safeguards for addressing the needs of the people like forest encroachers, canal affected fishermen, landless laborers and marginal farmers, landless cultivators who may not be directly covered under the compensation scheme? Please provide some details to substantiate your answer. (validate)

Q4. Do you feel implementation of this scheme resulted in redistribution of benefits from upstream farmers to downstream farmers? If Yes, please provide some examples/ evidences to substantiate your answer. (validate)

Q5. Are there any other disadvantaged sections of the society (say marginal framers in the tail end drought-prone areas, landless cultivators) that are deprived of the project benefits? (validate)

## **EFFICIENCY**

**EC1: Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. List the key direct and indirect benefits that accrued to the villagers owing to this project.

Q2. How has the project benefitted the farming community (like increase in agricultural produce, cropping seasons, household income, etc.)? Please provide some evidences/ data for the last 3 years (2016-17 to 2018-19) to support your answer. (validate)

Q3. How has the project benefitted the fishing community? Please provide some evidences to support your answer. (validate)



Q4. Provide some evidences in relation to benefits from tourism activities (if applicable) accrued due to completion of AIBP works in this village. (validate)

Q5. Provide some evidences in relation to benefits from flood protection (like less damage to standing crops, properties, livelihoods and lives, etc.) activities accrued due to completion of AIBP works in in this village. (validate)

Q6. Has there been a change in the general wage level of the agricultural laborers (in this village) owing to increased farming activities after completion of AIBP works? If Yes, please provide some evidences/ data in relation the same. (validate)

Q7. How has the village benefitted (say better access to electricity, growth of industries and related jobs, etc.) from hydel power generation from this project **(if applicable)?** (validate)

Q8. Has there been any change in ground water level in the command area (in the village) after completion of AIBP works? If Yes, can you provide relevant data/ evidences to substantiate the same (both pre and post project figures) Also, mention whether there have been any change in the quality of ground water (validate)

Q9. Has there been any change in migration of agricultural laborers after implementation of the AIBP scheme? If Yes, can you provide relevant data (like figures for temporary and permanent migration in the command area during 2016-17 to 2018-19) to substantiate the same (both pre and post project figures) (validate)

Q10. Mention other socio-economic benefits of the scheme. (validate)

#### **What are the costs of the scheme? What is the monetary value of all costs?**

Q1. What are the major socio-economic and environmental costs? Which communities are most affected (say tribal/ Adivasi villagers, forest encroachers, small and marginal farmers, landless laborers, fishermen)? Suggest some mitigation measures. (validate)

Q2. What are the 5 key complaints in relation to the resettlement or rehabilitation awards by the government?

Q3. Provide some details of the property loss/ damage caused due to submergence by reservoir. (if applicable for this village) (validate)

Q4. Provide an estimate of the economic loss of livelihood due to displacement caused due to the project. (if applicable for this village) (validate)

Q5. Has there been any negative impact on the fishing community dependent on the canal after completion of the AIBP works? If Yes, please provide some evidences to substantiate your answer. (validate)

Q6. Have there been any instances of outbreak of water-borne diseases (for e.g. schistosomiasis which is a water-borne disease that thrives near dams)? If Yes, please provide some evidences to substantiate your answer. (validate)



Q7. Are you aware of the environmental and social safeguards (say infrastructure investments like village extension education centers, establishment of field demonstration sites of improved technologies, etc.) implemented by the government? If yes, please provide some details of the same. (validate)

## **SUSTAINABILITY**

**SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. What are the other risks in ensuring sustainability of the scheme (technical, social, financial, political)?

Q2. For what other purpose (like drinking, domestic uses, etc.) is the water from this project utilized? (validate)

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability & Transparency**

#### **Enquiry area- Availability of Data Records and Reports in public domain**

Q1. Are social audits conducted by the villagers for the irrigation projects? If Yes, provide some details in relation the same. Also, mention number of trainings conducted by government in last financial year (2018-19) in this aspect. (validate)

Q2. Has the government put up plaques with financial and physical details at critical places of the project? If Yes, provide some evidences to substantiate the same. (validate)

#### **Enquiry area- Citizen Accountability**

Q1. Are there functional grievance redressal mechanisms that successfully incorporate beneficiaries' and non-beneficiaries' concerns? (validate)

### **Direct/Indirect Employment Generation**

#### **Enquiry area- Employment generation**

Q1. May you provide an estimate of the number of man-days of works generated for women owing to this project? (validate)

Q2. Do you have an estimate of the number of women farmers benefitted owing to AIBP projects? (validate)



Q3. In case of hydro-electric generation through this project, discuss how easy access to electricity impacted industrial growth in the backward areas? (validate)

## **Gender mainstreaming**

### **Inclusiveness in scheme design/planning**

Q1. Are there any social safeguards for addressing the needs of the women who may suffer disproportionately in the resettlement process considering their loss in common resources (like community support) and social networks? If Yes, please provide some details to substantiate your claim.

### **Enquiry area- Gender-friendly infrastructure and policies**

Q1. Given improved access to water and better irrigation facilities; has there been any noticeable change in the division of farm labour (say there has been a shift of women from traditional labour-intensive tasks, etc.)? If Yes, has women benefitted from this change? (validate)

Q2. Mention how the project contributed to increased women empowerment (say higher income, literacy, better decision taking roles, etc.) (focus)

### **Enquiry area- Decision making by women**

Q1. Are women adequately empowered to take important decisions at household, village levels in respect of the scheme? Please provide some details.

Q2. Do women have adequate control over agricultural and household resources?

Q3. Do women have adequate access to financial resources?

Q4. Has there been any shift of women from domestic activities to income-generating activities in the beneficiary villages after completion of this project?

Q5. Has the health status of women in the beneficiary villages improved after completion of this project?

Q6. Has there been improvement in skill level of women the beneficiary villages after completion of this project? If Yes, mention some details of the area of improvement

## **SECTION 2: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?



<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



## 2.2 Discussion Guide for FGD

### 2.2.1 FGD: Water User Association/ Beneficiary farmers where WUAs are not formed

#### GENERAL GUIDELINES for FGDs:

- The topics and questions below should be used to guide the Focus Group Discussion. Please keep in mind, while conducting the FGDs, do respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- During FGDs, group dynamics are common so it must be ensured that every respondent gets a chance to speak, one person should not be allowed to dominate the discussion. Also, be aware of any power dynamics that may be at play. Please ensure that all respondents speak one by one so that the audio recording is clear.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- **Seek more detail or explanation of a response.** For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- **Explore the reasons** behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- **Seek clarity and check for inconsistencies.** For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the FGD:
- I am ....., working with Ipsos, a global research organization. We regularly carry out research on various social issues. Currently we are implementing a study on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog along with KPMG a consultancy firm.
- The current study is an evaluation of Centrally Sponsored Schemes in the Water Resources sector in various states including yours. We would like to seek your opinion on certain topics related to the scheme **Accelerated Irrigation Benefits Programme (AIBP)**. One aspect of the evaluation is to meet the beneficiaries of these schemes to understand the benefits received, how the benefits



have impacted different aspects of their life- social, economic, and any other. Your views are beneficial to assess the experiences, challenges if any associated with this project. Discussion with your group as well as others will also help us identify recommendations and suggestions to improve the next phase of implementation of similar projects.

- Inform the respondents of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged that will lead to identification of individual responses that they give during this discussion.
- Explain that there are no right/ wrong answers and obtaining opinion and perception and their individual experience is critical.

- **NOTE TO THE TEAM:**
- AT THE VILLAGE LEVEL, RESEARCHER NEEDS TO FIRST MEET THE SARPANCH OF THE VILLAGE
- NO BENEFICIARIES ARE TO BE MET FOR ANY SCHEME/ PROJECT RELATED INTERVIEW/FGD BEFORE MEETING THE SARPANCH

**RESEARCHER TO NOTE:**

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

**Warm up:**

1. Can you give me some information about the village how many households live here, which is the nearest town, mode of transport etc.
2. What are the different occupations that people are engaged in? What percentage of the households are involved in agriculture/ agriculture related activities?



3. Do you all own your own land, or you work on others' land? How many members of your family are currently involved in agriculture related work? What crops do you grow?
4. What are some of the most common problems that farmers in your village face? Note to RESERACHERS- DO NOT DWELL EXTENSIVELEY ON PROBLEMS HERE, THIS IS JUST TO UNDERSTAND INFRASTRUCTURE, WATER/ IRRIGATION, AND MARKET ACCESS RELATED ISSUES IF THEY ARE ON TOP OF MIND.

### **Awareness about different schemes and projects implemented in their village**

1. What are the different irrigation and/or agriculture related projects that have been implemented in your village in last five years?
2. Can you please elaborate on these projects in terms of how they have benefitted you/ others in the village and/ or how do they address the common issues that you face?

What is the type of works undertaken? According to you, which ones are working well for the village and you? Why do you say so? (Note to researcher: To get a brief understanding here and not get into details at this stage)

### **SECTION 1: DEEP DIVE INTO AIBP SCHEME USING REESIE FRAMEWORK:**

**We would like to ask you questions specifically about one particular project/ government scheme – Accelerated Irrigation Benefits Programme (AIBP)**

Q1. Have you heard about this scheme/yojana/ project? What do you know about it? From where did you hear about the scheme/ project? Are you aware of any development under this scheme/ project?

Q2. In your view, what is the purpose of this scheme/ project? When was this created, how much time did it take to complete the project since it was announced?

Q3. When did you start benefitting from this scheme/ project? How is it helping you in agriculture? PROBE TO UNDERSTAND THROUGH EXAMPLES OF WHAT THE BENEFITS EXPERIENCE ARE, WHERE POSSIBLE GET CONCRETE FACTS AND FIGURES.

### **EFFECTIVENESS**

**ET3: How has the scheme performed against scheme objectives and annual targets?**

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. What are the key issues that resulted in delay in completion of the project works (say numerous changes in project design and alignment, financial mis-management by project authorities, contractor mismanagement, etc.)? [\(validate\)](#)



Q2. Have you faced any land acquisition issues (like administrative delays, inadequate compensation, non-inclusion of affected land owners, change in project alignment, deficiency in area assignment, loss in economic livelihood)?

What are the key issues affecting the physical progress (during planning, financial management and implementation stage) of AIBP project? [\(validate\)](#)

Q3. Are there any cases of incorrect phasing of works in the project (say completion of branch and distributary canals much before the execution of upstream works, etc.)? [\(validate\)](#)

## IMPACT

**IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. What are the long-term impacts of the scheme? [\(focus\)](#)

Q2. Have there been any change in literacy rate, skill levels of farmers, health standards owing to this scheme? [\(validate\)](#)

## EQUITY

**EQ2: Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1. Does the scheme exclude any weaker section of society that may be included?

## EFFICIENCY

**EC1: Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. Has there any been change in irrigated area owing to increased water availability form this project? If Yes, can you provide relevant data to substantiate the same (both pre and post project figures) [\(validate\)](#)

Q2. Has there been any change in crop pattern owing to increased water availability form this project? If Yes, can you provide relevant data to substantiate the same (like season-wise crops, percentage of irrigated area) [\(validate\)](#)



Q3. Has there been any change in crop yield owing to increased water availability form this project? If Yes, can you provide relevant data to substantiate the same (both pre and post project figures) [\(validate\)](#)

Q4. Has there been any increase in cropping diversity owing to increased water availability form this project? If Yes, can you provide relevant data to substantiate the same (both pre and post project figures) [\(validate\)](#)

Q6. Has there been any change in employment of agricultural laborers (man-days of employment/ year) owing to increased water availability form this project? If Yes, can you provide relevant data (like no. of man days of employment) to substantiate the same (both pre and post project figures) [\(validate\)](#)

Q7. Has there been any change in the wage level of the agricultural laborers owing to increased farming activities after completion of the project works? If Yes, can you provide relevant data to substantiate the same (both pre and post project figures) [\(validate\)](#)

Q8. Comment on the incidences of migration (both temporary and permanent) of the beneficiaries (including agricultural laborers) in the command area during the last 3 years. Provide approximate percentage of residents who migrated during last 3 years. Are majority of the migrations – seasonal or permanent? Comment on the age and gender of majority of the migrants. Mention the key reasons for migration. [\(validate\)](#)

Q9. Provide an estimate of the total number of man-days of employment generated owing to constructions in relation to this project? [\(validate\)](#)

Q10. How has the fishermen community impacted? [\(validate\)](#)

Q11. Has there been any change in level and quality of ground water in the command area owing to increased water availability form this project? If Yes, can you provide relevant data to substantiate the same (both pre and post project figures) [\(validate\)](#)

Q12. Are there any other socio-economic benefits accrued due to this project? [\(validate\)](#)

### **What are the costs of the scheme? What is the monetary value of all costs?**

Q1. Provide details of the agricultural input cost (in Rs/ ha) (like expenditure incurred for land preparation, seed, fertilizer, pesticides, manure, plant protection, labor, irrigation) [\(focus\)](#)

Q2. Mention some of the key issues related to Rehabilitation and Resettlement awards? Have you received adequate compensation under R&R awards? Are all the Project Affected People (PAP) been covered under the R&R awards? [\(validate\)](#)

Q3. Has there been any change in quality of ground and surface (canal/ river) water after implementation of the AIBP project? If Yes, provide some details. [\(validate\)](#)

Q4. Comment on the incidences of water borne diseases in the blocks near the dam? Provide some details (like type of diseases, incidence rates before and after completion of project works) [\(validate\)](#)

Q5. Has there been any change in incidences of water-logging and salination in the command area? If Yes, provide some details. [\(validate\)](#)



Q6. Comment on the damage on properties, standing crops, etc. owing to submergence by reservoir.

(validate)

Q7. Has there been any loss of economic livelihood owing to displacement for this project? (validate)

Q8. Are there any other environmental and socio-economic issues you want to highlight? (validate)

## SUSTAINABILITY

**SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. What are the other risks in ensuring sustainability of the scheme (technical, social, financial, and political)?

Q2. Comment on the adequacy of the maintenance activities of the irrigation facilities. How prominent are issues of canal leakages, seepages, silting, weed growth, etc.? (validate)

Q3. Comment on the adequacy of the irrigation fees paid for the irrigation water. Are you willing to pay additional fees if reliable water supply is ensured? (validate)

Q4. Is there any instance of water not reaching farms even after completion of project works? If Yes, mention the reasons for the same and the sources of water used for agriculture in such cases. (validate)

Q5. Is adequate water level maintained in the canal through-out the year? Please provide some details to substantiate your answer. (validate)

Q6. How prevalent is the use of lifting of water using submerged pumps by farmers particularly those outside the command area? Are there any instances of water diversion by the farmers in the head reaches of the network? Suggest mitigation measures (validate)

Q7. For what other purposes (say drinking, domestic uses) do you use the irrigation water provided through this scheme? (validate)

Q8 - Given increased availability of water, would you prefer to shift to more water-intensive crops like paddy or sugarcane'? (validate)

Q9 - Given increased availability of groundwater resources in your field, would you prefer to shift to privately owned ground water irrigation structures like tube wells, bore wells? (validate)

### Sustainability - High dependency on groundwater for irrigation

Q1. Are there any other water sources (except canal water) you use for irrigation? If yes, mention the sources in terms of priority. If No, mention the water sources (if applicable) you were using before completion of canal works



## Water Security - Agriculture water use efficiency

Q1 - Has the government conducted any training on micro-irrigation and efficient water management practices? If yes, mention the number of trainings conducted in last year (2018-19)

Q2. Approximately at what percentage of your total irrigated area do you practice micro-irrigation and other water efficient practices?

### RELEVANCE

#### RL2: Is it appropriate to continue / prioritize this scheme?

##### What would be the impact if the scheme were to be scaled down or stopped?

Q1. Do you feel minor irrigation structures (like dug wells, deep tube wells, surface lit etc.) provide better access to water round the year than large (i.e. major and medium) irrigation sources? (validate)

Q2. Are minor irrigation structures, small irrigation facilities and flood control structures more cost effective compared to major & medium irrigation structures? (validate)

### SECTION 2: CROSS SECTIONAL THEMES

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

#### Accountability & Transparency

##### Enquiry area- Availability of Data Records and Reports in public domain

Q1. Has the government put up plaques with financial and physical progresses at critical project sites? Are you aware of the project details like expenditure incurred, budgeted outlays, etc.? Are you aware/ part of any other social audit mechanisms conducted by the irrigation department?

#### Direct/Indirect Employment Generation

##### Employment generation

###### WUA/ beneficiary farmers

Q1. Given improved access to water and better irrigation facilities; has there been any noticeable change in the division of farm labor? If Yes, has women benefitted from this change?

Q2. Mention how the project contributed to increased women empowerment (say higher income, literacy, better decision taking roles, etc.)

### SECTION 3: CHALLENGES AND SUGGESTIONS



- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



## Annexure 3 Primary Survey Guide – CAD and WM

The primary survey guide for ‘Command Area Development and Water Management’ is provided below.

### 3.1 Discussion Guide for KII

#### 3.1.1 National level stakeholder – Commissioner (CAD) [Department: DoWR, RD & GR]

##### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

##### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India’s policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **CAD-WMP**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the national level your insights would be valuable in understanding of the schemes, key challenges and factors that led



to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

### **RESEARCHER TO NOTE:**

*All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*

*The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.*

## **SECTION 1: DEEP DIVE INTO CAD&WM SCHEME USING REESIE FRAMEWORK:**

### **EFFECTIVENESS**

ET1: Is the scheme design appropriate to address scheme objectives?

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

Q2. How many states have formed Command Area Development Authority (CADA) departments? Do you suggest any re-structuring of CADA at the state level? (focus)

Q3. Are there any guidelines from Centre on delineation of works to be done by state irrigation/ CADA departments and registered WUAs? If yes, please share the guidelines. (focus)

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**



Q1. Is there any weakness in scheme design? Explain and provide evidence in this regard. (focus)

Q2. How can the scheme design be modified to ensure effective operation of WUAs after their formation? (focus)

Q3. How can the scheme design be modified to ensure holistic implementation of other scheme components like correction of system deficiencies, reclamation of water-logged areas along with the on-farm development (OFD) works and construction of field, intermediate and link drains? (focus)

Q4. How can the scheme design be modified to ensure proper implementation of micro-irrigation component? (focus)

ET2: How are scheme targets set and monitored?

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. Are the monitoring mechanisms in guidelines strictly followed? Please suggest some measures to strengthen the monitoring mechanisms. (focus)

ET3 How has the scheme performed against scheme objectives and annual targets?

**Identify states that have performed well? What are the underlying reasons for such performance?**

Q1. What are key success factors contributing to effective implementation of structural interventions in Gujarat, Rajasthan and other good performing states? (focus)

Q2. What are the good practices that may be replicated across states to hasten the pace of CAD works, and for effective maintenance of assets and functioning of WUAs? (focus)

**Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q1. What are the main issues responsible for low progress under CADWM particularly in states like Andhra Pradesh, Chhattisgarh, Jharkhand, Punjab, Telangana and Uttar Pradesh? (focus)

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. What are the main implementation challenges faced in construction of field channels, on-farm development (OFD works), reclamation of water-logging areas and correction of system deficiencies? (focus)

Q2. What do you suggest for improving the technical competency of the field staff? Do you suggest any additional budget for trainings/ workshops? (focus)

**How has the scheme performed in respect of participatory irrigation management?**

Q1. Are the WUAs functioning effectively? If not, what are the interventions needed to improve their performance? (focus)

Q2. Are there any reasons for which the registered WUAs are reluctant to take over the physical system and water management? (focus)



ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. What are the negative factors that have adversely impacted scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance? (focus)

**How can the scheme design be modified to mitigate the negative factors?**

Q1. Please provide some suggestions for scheme modifications to mitigate negative influences. (focus)

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1. Do you feel additional grants need to be allotted for any particular scheme component? If yes, please explain why. (focus)

## **EFFICIENCY**

EC1 Did the benefits of the scheme exceed costs?

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. What are the main direct and indirect benefits of the CADWM scheme?

Q2. Has any cost benefit analysis/ impact assessment study been done post completion of CAD works in any project? If Yes, please share some sample reports.

**What are the costs of the scheme? What is the monetary value of all costs?**

Q1. Does the scheme have any negative impacts (like on socio-economic or environmental costs)?

EC2 Can the costs of the scheme be lowered?

**Are there lower cost alternatives for achieving the scheme outcomes?**

Q1. Are there opportunities to lower the cost of projects under the scheme without impacting scheme objectives? If yes, please identify such opportunities along with approximate savings.

Q2. Can convergence with other schemes like MGNREGA result in lowering the costs?

Q3. How can private investments be leveraged to cut down costs?

**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1. In which areas inter-ministerial co-ordination (say between Agriculture and Water Resources Ministries, DoWR and Central Water Commission, etc.) is needed? (focus)

**What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**



Q1. Do you suggest convergence with any other government initiatives which may be leveraged to deliver structural and non-structural interventions? If yes, explain how such convergence can be achieved and the key benefits thereof. (focus)

## **SUSTAINIBILITY**

SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. Is there a need for any additional funds for maintenance? If yes, in what areas and who (Gol or state govt) should provide such funds. (focus)

SS5 Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1. What can be done to improve environmental and social sustainability of the scheme? Please explain with reasons. (focus)

SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? (focus)

## **EQUITY**

EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity? Please share studies or relevant data in this regard as justification. (focus)

## **RELEVANCE**

**RL1: Is the scheme relevant in the present context?**

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**



Q1. To what extent CADWM (in 99 priority AIBP project) scheme has reduced the IPC-IPU gap during 2016-2019? Can you please share relevant data in this regard? (focus)

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1. In addition to reduction of IPC-IPU gap and improving water efficiency, should the CADWM scheme target any other interventional gaps like maintenance of irrigation structures, conjunctive use of ground water resources or other suggested areas? Please explain with reasons. (focus)

RL2 Is it appropriate to continue / prioritize this scheme?

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1. Should the Central Assistance for CADWM scheme be scaled down and used in other areas like maintenance of irrigation assets, enhancing on-farm water use efficiency? If yes, please provide reasons. (focus)

Q2. Do you suggest scaling down or up of any component of the structural interventions like on-farm development (OFD) works, construction of drains, correction of system deficiencies and reclamation of water-logged areas? (focus)

## **IMPACT**

IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas?**

Q1. What are the long term benefits - any noticeable improvement in socio-economic conditions? Please share studies or relevant data in this regard as justification. (focus)

## **SECTION 3: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Financial Accountability - What funding mechanisms are being used?**

Q1. In addition to the LTIF scheme, do you suggest any other funding mechanisms (say from MFIs) that may be more beneficial?

Gender mainstreaming

**Gender-friendly infrastructure and policies - How has empowerment of women improved?**

Q1. Please comment on the extent of women involvement in WUAs in various states. Could you mention the good and poor performing states in this aspect? What do you suggest to improve the women involvement in WUAs? (focus)

Use of IT/Technology in driving efficiency



**Deployment of IT enabled mechanisms for monitoring of the Schemes - In case of a scheme to create physical assets, is geotagging and use of geotagged photographs being done?**

Q1. Mention the benefits of geo-tagging of irrigation assets (say better monitoring and maintenance, coordination with Agriculture department). (focus)

**How is technology being used for on-ground data collection?**

Q1. How effective are remote sensing technology for monitoring IP creation? (focus)

Q2. Do you envisage any other advanced technologies for data collection and monitoring purposes? (focus)

**Which states are using the latest technologies?**

Q1. Which states are using the latest technologies?

Development, dissemination & adoption of innovative practices, technology & know-how

**Contribution of improved practices in increasing outcomes -What is the impact of innovative technologies and practices on scheme and sectoral outcomes?**

Q1. What is the impact of innovative technologies (say piped irrigation for conventional channels) and practices (micro-irrigation practices) on scheme and sectoral outcomes? (focus)

Stakeholder and Beneficiary behavioral change

**Challenges faced - What are the major challenges? Are there any areas which needs more attention in terms of bringing behavior change?**

Q1. What are the major challenges in ensuring behavioral change? Are there any areas which needs more attention in terms of bringing behavior change (in terms of adoption of new techniques for water management, crop planning, administration issues like payment of water taxes)? Mention some of the mitigating measures and best practices adopted by some states

**Private Sector Participation - What is the percentage of private investment in the clusters/programs run by the government?**

Q1. What are the common contractor related issues during implementation?

**SECTION 4: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?



<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

**3.1.2 National level stakeholder - SJC (CAD wing) [Department: DoWR, RD & GR]**

**GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
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- Explore the reasons behind a response. For example:
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- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

**INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organization in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO),



NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **CAD-WMP**). Since you are a key stakeholder in the scheme overseeing planning and implementation at the national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

#### **RESEARCHER TO NOTE:**

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

#### **SECTION 1: DEEP DIVE INTO CAD&WM SCHEME USING REESIE FRAMEWORK:**

##### **RELEVANCE**

RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?

**What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

Q2. How is the increase in 'irrigation potential utilized' owing to implementation of CADWM scheme assessed (assessment methodology)? (focus)



## EFFECTIVENESS

ET1: Is the scheme design appropriate to address scheme objectives?

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1. What per cent of Central Allocation (CA) released till now from 2016-17 to 2018-19 has been earmarked for non-structural interventions? Mention details like CA released for one-time functional, one-time infrastructure grants to registered WUAs, conducting trainings. (focus)

Q2. Is there any empaneled list of Social Facilitators across states? (focus)

**Is there evidence that assumptions have been tested and are valid?**

Q1. Share reports, if any, that may have evaluated the effectiveness of interventions under CADWM (e.g. pilot studies). Also, mention the salient features of these projects (focus)

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1. Is there any weakness in scheme design? Explain and provide evidence in this regard. (focus)

Q2. How can the scheme design be modified to ensure effective operation of WUAs after their formation? (focus)

Q3. How can the scheme design be modified to ensure holistic implementation of other scheme components like correction of system deficiencies, reclamation of water-logged areas along with the on-farm development (OFD) works and construction of field, intermediate and link drains? (focus)

Q4. How can the scheme design be modified to ensure proper implementation of micro-irrigation component? (focus)

ET2: How are scheme targets set and monitored?

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. Are the monitoring mechanisms in guidelines strictly followed? Suggest some measures that may be adopted to further strengthen the monitoring mechanisms (focus)

Q2. Does the CAD cells (CWC) provided periodic report of their site visits (containing project progress, quality of works along with recommendations) to state government, PMO and CADWM wing? If Yes, please share some sample reports from last year (2018-19) (focus)

**What information is contained in utilization certificate issued by state government? Are they credible and can they be relied upon as an indicator of scheme progress?**

Q1. Are there any issues like delay in submission of Utilization Certificates? List the reasons for delay and mention the repeat offenders (focus)

Q2. Is there any mechanism to physically validate / cross-check the figures stated in the Utilization Certificate? (focus)



ET3 How has the scheme performed against scheme objectives and annual targets?

**What is the state wise, year wise performance against target?**

Q1. Mention the state wise performances against target (during 2016-17 to 2018-2019) of both structural and non-structural interventions. (focus)

Q2. How is the creation of physical assets (like OFD works, field channels, reclamation of water-logged areas), creation of WUAs (along with their proper functioning) verified? (focus)

**Identify states that have performed well? What are the underlying reasons for such performance?**

Q1. What are key success factors contributing to effective implementation of structural interventions in Gujarat, Rajasthan and other good performing states? (focus)

Q2. What are the good practices that may be replicated across states to hasten the pace of CAD works, and for effective maintenance of assets and functioning of WUAs. (focus)

**Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q1. What are the main issues responsible for low progress under CADWM particularly in states like Andhra Pradesh, Chhattisgarh, Jharkhand, Punjab, Telangana and Uttar Pradesh? (focus)

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. What are the main implementation challenges faced in construction of field channels, on-farm development (OFD works), reclamation of water-logging areas and correction of system deficiencies? (focus)

Q2. What do you suggest for improving the technical competency of the field staff? Do you suggest any additional budget for trainings/ workshops? (focus)

Q3. What do you suggest for improving the monitoring/ physical validation of the scheme outputs? (focus)

**What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable.**

Q1. In the light of revision of 10 lakh ha target to 5.7 lakh ha; how has the figure of 5.7 lakh been arrived at?

Q2. Is there any committee which determines the course correction measures? Who are the main stakeholders in this committee? (focus)

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1. Do you suggest any change/ additional indicator that may be tracked in the MIS portal like indicators for measuring water use efficiency, effectiveness of WUAs formed, etc. for enhancing monitoring effectiveness? If yes, kindly mention the indicators. (focus)

Q2. Is the performance of Social Facilitator evaluated? Are there any defined evaluation parameters? (focus)

**How has the scheme performed in respect of participatory irrigation management?**



Q1. Are the WUAs functioning effectively? If not, what are the interventions needed to improve their performance? (focus)

Q2. Are there any reasons for which the registered WUAs are reluctant to take over the physical system and water management? (focus)

ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. What are the negative factors that have adversely impacted scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance? (focus)

**How can the scheme design be modified to mitigate the negative factors?**

Q1. Please provide some suggestions for scheme modifications to mitigate negative influences. (focus)

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1. Are the cost norms for OFD works revised appropriately in a periodic manner? If Yes, provide details of the last revised figures. (focus)

Q2. Do you feel additional grants need to be allotted for any particular scheme component? If yes, please explain why. (focus)

Q3. Are there any instances of delay in release of funds by centre? If Yes, mention the reasons for delay (focus)

Q4. Do you feel direct transfer of Central Assistance to Command Area Development Authorities (CADA) may improve scheme performance? (focus)

**Was there timely utilization of available funds? If not, what were the reasons?**

Q1. What are the performances of states in relation to timely utilization of funds? Mention the names of the poor performing states. What are the main reasons for delay? (focus)

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1. Are there any suggested long and short term interventions for improving structural and non-structural interventions? Please explain with supporting reasons. (focus)

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**



Q1. Do you suggest any change in scheme design like additional mandatory requirements prior to release of Central Assistance installments, revision of cost norms/ cost sharing, etc.?

## **EFFICIENCY**

EC1 Did the benefits of the scheme exceed costs?

### **What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. What are the main direct and indirect benefits of the CADWM scheme?

Q2. Has any cost benefit analysis/ impact assessment study been done post completion of CAD works in any project? If Yes, please share some sample reports.

### **What are the costs of the scheme? What is the monetary value of all costs?**

Q1. Does the scheme have any negative impacts (like on socio-economic or environmental costs)?

EC2 Can the costs of the scheme be lowered?

### **Are there lower cost alternatives for achieving the scheme outcomes?**

Q1. Are there opportunities to lower the cost of projects under the scheme without impacting scheme objectives? If yes, please identify such opportunities along with approximate savings.

Q2. Can convergence with other schemes like MGNREGA result in lowering the costs?

Q3. How can private investments be leveraged to cut down costs?

Q4. Do you suggest awarding large packages to contractors to benefit from economies of scale and expertise of large contractors?

Q5. Has implementation of micro-irrigation structures instead of conventional OFD works resulted in cost savings? If Yes, can you provide details of the cost savings from this.

### **Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1. In which areas inter-ministerial co-ordination (say between Agriculture and Water Resources Ministries, DoWR and Central Water Commission) is needed?

### **What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1. Do you suggest convergence with any other scheme which may be leveraged to deliver structural and non-structural interventions? If yes, explain how such convergence can be achieved and the key benefits thereof. (focus)

Q2. Do you suggest convergence with any other scheme (like soil conservation measures) which may be leveraged to prevent silting of channels? (focus)

Q3. Do you suggest convergence with any other scheme which may be leveraged to reduce the unregulated extraction of ground water? (focus)

Q4. Do you suggest convergence with any other scheme which may be leveraged to prevent unauthorized lifting of water by farmers (within or outside command area)? (focus)



Q5. Is there any possibility of utilizing CSR funds for this scheme? If yes, in which areas. (focus)

## **SUSTAINIBILITY**

SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?

### **Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. Is there a need for any additional funds for maintenance? If yes, in what areas and who (Govt or state govt) should provide such funds. (focus)

Q2. Are the WUAs financially and technically sustainable? If no, identify how such sustainability can be improved? (focus)

Q3. Do you suggest any change in institutional structure or roles and responsibilities for ensuring scheme sustenance (e.g. devolution of financial and executive powers to irrigation officials while limiting role of WUAs to planning and supervision)? (focus)

Q4. Has the central share for one-time functional grants been released to the states? If not, please mention the reasons. If yes, provide details of funds released year-wise and state-wise (focus)

SS5 Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?

### **Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1. What can be done to improve environmental and social sustainability of the scheme? Please explain with reasons. (focus)

Q2. What measures do you suggest to mitigate the issue of diversion of water for 'non-irrigation' purposes? (focus)

SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?

### **What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? (focus)

#### **Sustainability – Unregulated extraction of ground water**

SS1/ Q1. Given increased level of ground water owing to CADWM scheme, is there any probability of farmers resorting to unregulated ground water extraction through bore wells, tube wells or other privately-owned ground water minor irrigation structures? If yes, please provide some evidences to substantiate your answer.

#### **Sustainability – More focus on water-intensive crop**



SS1/ Q1. Given increased access to water owing to CADWM scheme, is there any probability of farmers shifting to more water intensive crops like paddy and sugarcane? If yes, please provide some evidences to substantiate your answer.

## **EQUITY**

EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity? Please share studies or relevant data in this regard as justification. (focus)

EQ2 Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1. Does the scheme exclude any weaker section of society that could be included? (focus)

**RL1: Is the scheme relevant in the present context?**

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1. To what extent CADWM (in 99 priority AIBP project) scheme has reduced the IPC-IPU gap during 2016-2019? Can you please share relevant data in this regard? (focus)

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1. In addition to reduction of IPC-IPU gap and improving water efficiency, should the CADWM scheme target any other interventional gaps like maintenance of irrigation structures, conjunctive use of ground water resources or other suggested areas? Please explain with reasons. (focus)

RL2 Is it appropriate to continue / prioritize this scheme?

**What would be the impact if the scheme were to be scaled down or stopped?**



Q1. Should the Central Assistance for CADWM scheme be scaled down and used in other areas like maintenance of irrigation assets, enhancing on-farm water use efficiency? If yes, please provide reasons.

(focus)

Q2. Are there any particular reasons why the central assistance component on enforcement of warabandi schedule (rotational method for equitable distribution of water according to pre-determined schedule) was discontinued since 2004?

Q3. Do you suggest scaling down or up of any component of the structural interventions like on-farm development (OFD) works, construction of drains, correction of system deficiencies and reclamation of water-logged areas? (focus)

## **IMPACT**

IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas?**

Q1. What are the long term benefits - any noticeable improvement in socio-economic conditions? Please share studies or relevant data in this regard as justification. (focus)

## **SECTION 2: CROSS SECTIONAL THEMES –**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION 1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

Accountability & Transparency - Availability of Data Records and Reports in public domain

**What data records are available for the scheme in public domain?**

Q1. Is there any mechanism to validate the data updated in the MIS portal (both in terms of physical validation and consistency)? In case of any inconsistency, how are they resolved with state departments?

(focus)

**Financial Accountability - What funding mechanisms are being used?**

Q1. In addition to the LTIF scheme, do you suggest any other funding mechanisms (say from MFIs) that may be more beneficial?

Q2. Is there any state that has incorporated any innovative funding models for works under the CADWM scheme (including for those CAD works initiated by states on its own)?

Direct/Indirect Employment Generation

**What is the women participation (%) in the Sector/Program?**

Q1. Is there any data or estimate of total number of man-days of work generated due to CADWM? Mention % of women employed. (focus)

Q2. Please provide data or estimate of number of women farmers benefitted



## **Quantum and kind of self-employment opportunities generated**

Q1. What are major livelihood options generated in the command area? Please share some case studies. (focus)

Gender mainstreaming

## **Gender-friendly infrastructure and policies - How has empowerment of women improved?**

Q1. Please comment on the extent of women involvement in WUAs in various states. Could you mention the good and poor performing states in this aspect? What do you suggest to improve the women involvement in WUAs? (focus)

Q2. Please highlight how the scheme contributed to increased women empowerment (say higher income, literacy, better decision taking roles, etc.) (focus)

Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population

## **Funds allocated under TSP/ SCSP and other provisions for vulnerable communities - What is the fund allocated under TSP & SCSP for each scheme?**

Q1. Is there any fund allocated under TSP & SCSP for CADWM? If yes, mention the details and also how such targeted allocation helped in improving equity.

## **Any best practices?**

Q1. Mention any successful case study in area of interventions for vulnerable people

Use of IT/Technology in driving efficiency

## **Deployment of IT enabled mechanisms for monitoring of the Schemes - In case of a scheme to create physical assets, is geotagging and use of geotagged photographs being done?**

Q1. Is there any state-wise data or estimate of percentages of outlets geo-tagged of total outlets covered under CADWM? If Yes, please provide data in this respect. (focus)

Q2. Mention the benefits of geo-tagging (say better monitoring and maintenance, co-ordination with Agriculture department). (focus)

## **How is technology being used for on-ground data collection?**

Q1. How effective are remote sensing technology for monitoring IP creation? (focus)

Q2. Do you envisage any other advanced technologies for data collection and monitoring purposes? (focus)

## **What are the technologies being used in project implementation, service delivery?**

Q1. What are the technologies (say mobile apps, e-kiosks) being used in project implementation, service delivery?

## **Which states are using the latest technologies?**

Q1. Which states are using the latest technologies?

Development, dissemination & adoption of innovative practices, technology & know-how



**Fund allocation towards promotion of innovation - What percent of total allocation is directed towards development, dissemination and adoption of innovative practices and technology? How much of it is utilized?**

Q1. What percent of total allocation is directed towards development, dissemination and adoption of innovative practices and technology? How much of it is utilized?

Q2. Has the CWC/ Department of Water Resources come up with standardized manuals for best practices (for e.g. in construction of field channels, micro-irrigation structures)?

**Contribution of improved practices in increasing outcomes -What is the impact of innovative technologies and practices on scheme and sectoral outcomes?**

Q1. What is the impact of innovative technologies (say piped irrigation for conventional channels) and practices (micro-irrigation practices) on scheme and sectoral outcomes?

Stakeholder and Beneficiary behavioral change

**Fund allocation - What percent of total allocation is directed towards Awareness generation or sensitization? What is the utilization rate? and How much impact has it been able to generate in terms of behavior change?**

Q1. What percent of total allocation is directed towards awareness generation or sensitization (say on micro-irrigation practices, cropping planning)? What is the utilization rate? How much impact has it been able to generate in terms of behavioral change? (focus)

**Mechanisms to promote and ensure behaviour change - What activities are undertaken at District/Block level to promote adoption of good practices?**

Q1. What activities are undertaken at District/Block level to promote adoption of good practices?

**Challenges faced - What are the major challenges? Are there any areas which needs more attention in terms of bringing behavior change?**

Q1. What are the major challenges in ensuring behavioral change? Are there any areas which needs more attention in terms of bringing behavior change (in terms of adoption of new techniques for water management, crop planning, administration issues like payment of water taxes)? Mention some of the mitigating measures and best practices adopted by some states

**RESEARCH AND DEVELOPMENT**

**Fund Allocation - What percentage of total allocation (Sector as well as Scheme specific) is directed towards R&D? How much of that percent is being utilized?**

Q1. Are there any funds allocated out of scheme budget for R&D purposes? If yes, please mention % of fund released for R&D out of the total CA releases.

Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme



**Private Sector Participation - What is the percentage of private investment in the clusters/programs run by the government?**

Q1. For reducing cost, do you suggest any optimum size for contract packages to be offered to private contractors?

Q2. What are the common contractor related issues during implementation?

**SECTION 4: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

**3.1.3 National level stakeholder – Officials (Project Implementation Review Committee)**

**SECTION 1: DEEP DIVE INTO CAD&WM SCHEME USING REESIE FRAMEWORK: EFFECTIVENESS**

ET1: Is the scheme design appropriate to address scheme objectives?

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

Q1. Provide the list of states that have formed Command Area Development Authority (CADA) departments. Do you suggest any re-structuring of CADA departments at the state level? [\(validate\)](#)

Q2. Is there any empaneled list of Social Facilitators across states? Please share the list. [\(validate\)](#)



### **Is there evidence that assumptions have been tested and are valid?**

Q1. Share reports, if any, that may have evaluated the effectiveness of interventions under CADWM (e.g. pilot studies). Also, mention the salient features of these projects. (focus)

### **What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1. Is there any weakness in scheme design? Explain and provide evidence in this regard. (focus)

Q2. How can the scheme design be modified to ensure effective operation of WUAs after their formation? (focus)

Q3. How can the scheme design be modified to ensure holistic implementation of other scheme components like correction of system deficiencies, reclamation of water logged areas along with the on-farm development(OFD) works and construction of field, intermediate and link drains? (focus)

Q4. How can the scheme design be modified to ensure proper implementation of micro-irrigation component? (focus)

ET2: How are scheme targets set and monitored?

### **Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. Are the monitoring mechanisms in guidelines strictly followed? Please suggest measures that may be adopted to strengthen the monitoring mechanism. (focus)

Q2. How does the Project Implementation Review Committee (PIRC) conduct overall project review and dissemination of cross learnings? Please explain in detail. (focus)

Q3. Does the Project Implementation Review Committee (PIRC) conduct site-visits? If Yes, please share some sample reports of site-visits from last year (2018-19). (focus)

Q4. How many meetings have PIRC conducted during 2016-2019? Please share the MOM of some meetings conducted during last year (2018-19).

ET3 How has the scheme performed against scheme objectives and annual targets?

### **Identify states that have performed well? What are the underlying reasons for such performance?**

Q1. What are key success factors contributing to effective implementation of structural interventions in Gujarat, Rajasthan and other good performing states? (focus)

Q2. What are the good practices that may be replicated across states to hasten the pace of CAD works, and for effective maintenance of assets and functioning of WUAs. (focus)

### **Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q1. What are the main issues responsible for low progress under CADWM particularly in states like Andhra Pradesh, Chhattisgarh, Jharkhand, Punjab, Telangana and Uttar Pradesh? (focus)

### **What are the key bottlenecks, issues & challenges in the implementation of the scheme?**



Q1. What are the main implementation challenges faced in construction of field channels, on-farm development (OFD works), reclamation of water-logging areas and correction of system deficiencies?

(focus)

Q2. What do you suggest for improving the technical competency of the field staff? Do you suggest any additional budget for trainings/ workshops? (focus)

Q3. What do you suggest for improving the monitoring/ physical validation of the scheme outputs? (focus)

**What is the planning process proposed under the scheme? Is the planning process adequately and effective followed? If not, what improvements are desirable**

Q1. What are the available mechanisms for scheme correction/ incorporation of feedbacks (like revision of targets, etc.)? Is there any grievance redressal mechanism? (focus)

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1. Do you suggest any change/ additional indicator that may be tracked in the MIS portal like indicators for measuring water use efficiency, effectiveness of WUAs formed, etc. for enhancing monitoring effectiveness? If yes, kindly mention the indicators. (focus)

**How has the scheme performed in respect of participatory irrigation management?**

Q1. Are the WUAs functioning effectively? If not, what are the interventions needed to improve their performance? (focus)

Q2. Are there any reasons for which the registered WUAs are reluctant to take over the physical system and water management? (focus)

ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. What are the negative factors that have adversely impacted scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance? (focus)

**How can the scheme design be modified to mitigate the negative factors?**

Q1. Please provide some suggestions for scheme modifications to mitigate negative influences. (focus)

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1. Do you feel the Centre revise the cost norms adequately? (focus)



Q2. Do you feel additional grants need to be allotted for any particular scheme component? If yes, please explain why. (focus)

Q3. Do you feel direct transfer of Central Assistance to Command Area Development Authorities (CADA) may improve scheme performance? If Yes, please provide some details to substantiate your claim. (focus)

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1. Are there any suggested long and short term interventions for improving structural and non-structural interventions? Please explain with supporting reasons. (focus)

## **EFFICIENCY**

EC1 Did the benefits of the scheme exceed costs?

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. What are the main direct and indirect benefits of the CADWM scheme?

Q2. Has any cost benefit analysis/ impact assessment study been done post completion of CAD works in any project? If Yes, please share some sample reports.

**What are the costs of the scheme? What is the monetary value of all costs?**

Q1. Does the scheme have any negative impacts (like on socio-economic or environmental costs)?

EC2 Can the costs of the scheme be lowered?

**Are there lower cost alternatives for achieving the scheme outcomes?**

Q1. Are there opportunities to lower the cost of projects under the scheme without impacting scheme objectives? If yes, please identify such opportunities along with approximate savings.

Q2. Can convergence with other schemes like MGNREGA result in lowering the costs?

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Q4. Do you suggest awarding large packages to contractors to benefit from economies of scale and expertise of large contractors?

Q5. Has implementation of micro-irrigation structures instead of conventional OFD works resulted in cost savings? If Yes, can you provide details of the cost savings from this.

**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1. In which areas inter-ministerial co-ordination (say between Agriculture and Water Resources Ministries, DoWR and Central Water Commission) and Centre-State co-ordination are needed? Are there any instances of lowered scheme performance owing to non-coordination among ministries? (focus)

**What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**



Q1. Do you suggest convergence with any other scheme which may be leveraged to deliver structural and non-structural interventions? If yes, explain how such convergence can be achieved and the key benefits thereof. (focus)

Q2. Do you suggest convergence with any other scheme (like soil conservation measures) which may be leveraged to prevent silting of channels? (focus)

Q3. Do you suggest convergence with any other scheme which may be leveraged to reduce the unregulated extraction of ground water? (focus)

Q4. Do you suggest convergence with any other scheme which may be leveraged to prevent unauthorized lifting of water by farmers (within or outside command area)? (focus)

Q5. Is there any possibility of utilizing CSR funds for this scheme? If yes, in which areas. (focus)

## **SUSTAINABILITY**

SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?

### **Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. Is there a need for any additional funds for maintenance? If yes, in what areas and who (Gol or state govt) should provide such funds. (focus)

Q2. Are the WUAs financially and technically sustainable? If no, identify how such sustainability can be improved? (focus)

Q3. Do you suggest any change in institutional structure or roles and responsibilities for ensuring scheme sustenance (e.g. devolution of financial and executive powers to irrigation officials while limiting role of WUAs to planning and supervision)? (focus)

SS5 Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?

### **Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1. What can be done to improve environmental and social sustainability of the scheme? Please explain with reasons. (focus)

Q2. What measures do you suggest to reduce diversion of water for 'non-irrigation' purposes unauthorized lifting of water using submerged pumps? (focus)

Q3. What measures are required to mitigate destruction of outlets owing to encroachment, developmental works (like building roads)?" (focus)

SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?

### **What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**



Q1. What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? (focus)

## **EQUITY**

EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity? Please share studies or relevant data in this regard as justification. (focus)

EQ2 Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1. Does the scheme exclude any weaker section of society that could be included? (focus)

## **RELEVANCE**

**RL1: Is the scheme relevant in the present context?**

Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?

Q1. To what extent CADWM (in 99 priority AIBP project) scheme has reduced the IPC-IPU gap during 2016-2019? Can you please share relevant data in this regard? (focus)

What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?

Q1. In addition to reduction of IPC-IPU gap and improving water efficiency, should the CADWM scheme target any other interventional gaps like maintenance of irrigation structures, conjunctive use of ground water resources or other suggested areas? Please explain with reasons. (focus)

**RL2 Is it appropriate to continue / prioritize this scheme?**

What would be the impact if the scheme were to be scaled down or stopped?

Q1. Do you suggest scaling down or up of any component of the structural interventions like on-farm development (OFD) works, construction of drains, correction of system deficiencies and reclamation of water-logged areas? (focus)



## IMPACT

IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas?**

Q1. What are the long term benefits - any noticeable improvement in socio-economic conditions? Please share studies or relevant data in this regard as justification. (focus)

## SECTION 2: CROSS SECTIONAL QUESTIONS

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION 1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Accountability & Transparency - Availability of Data Records and Reports in public domain**

**What data records are available for the scheme in public domain?**

Q1. Do you feel other indicators like crop production, farmer's income along with action plans for site-visits be included in the MIS portal?

Direct/ Indirect Employment Generation

**Quantum and kind of self-employment opportunities generated**

Q1. What are major livelihood options generated in the command area? Please mention some case studies. (focus)

Gender mainstreaming

**Gender-friendly infrastructure and policies - How has empowerment of women improved?**

Q1. Given improved access to water and better irrigation facilities, has there been any noticeable change in the division of farm labour? If Yes, have women benefitted from this change?

Q2. Please comment on the extent of women involvement in WUAs in various states. Suggest some measures to improve the involvement of women in the WUAs. (focus)

Q3. Has there been increase in livelihood options for women the command area?

Q4. Please highlight how the scheme contributed to increased women empowerment (say higher income, literacy, better decision taking roles, etc.) (focus)

Use of IT/Technology in driving efficiency

**Deployment of IT enabled mechanisms for monitoring of the Schemes - In case of a scheme to create physical assets, is geotagging and use of geotagged photographs being done?**

Q1. Mention the benefits of geo-tagging of irrigation assets (say better monitoring and maintenance, co-ordination with Agriculture department). (focus)

**How is technology being used for on-ground data collection?**

Q1. How is technology being used for on-ground data collection? (focus)



Q2. Do you envisage any other advanced technologies for data collection and monitoring purposes? (focus)

**What are the technologies being used in project implementation, service delivery?**

Q1. What are the technologies (say mobile apps, e-kiosks) being used in project implementation, service delivery? (focus)

**Which states are using the latest technologies?**

Q1. Which states are using the latest technologies?

Development, dissemination & adoption of innovative practices, technology & know-how

**Contribution of improved practices in increasing outcomes -What is the impact of innovative technologies and practices on scheme and sectoral outcomes?**

Q1. What is the impact of innovative technologies (say piped irrigation for conventional channels) and practices (micro-irrigation practices) on scheme and sectoral outcomes? May you highlight some benefits? (focus)

Stakeholder and Beneficiary behavioral change

**Mechanisms to promote and ensure behavior change - What activities are undertaken at District/Block level to promote adoption of good practices?**

Q1. What activities are undertaken at District/Block level to promote adoption of good practices?

**Challenges faced - What are the major challenges? Are there any areas which needs more attention in terms of bringing behavior change?**

Q1. What are the major challenges? Are there any areas which needs more attention in terms of bringing behavior change (in terms of adoption of new techniques for water management, crop planning, administration issues like payment of water taxes)? Mention some of the mitigating measures and best practices adopted by some states

Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme

**Private Sector Participation - What is the percentage of private investment in the clusters/programs run by the government?**

Q1. For reducing cost, do you suggest any optimum size for contract packages to be offered to private contractors?

Q2. What are the common contractor related issues during implementation?

**SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?



- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

### 3.1.4 National level stakeholder – Chief Engineer (PMO, Central Water Commission)

#### **SECTION 1: DEEP DIVE INTO CAD&WM SCHEME USING REESIE FRAMEWORK:**

RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?

**What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

Q2. Are the scheme outcomes like increase in irrigated area, changes in yield, crop pattern and crop diversity tracked at the command area level? Can you please share data on such outcomes that may be available with you? If not, could you tell us with whom such data would be available? (focus)

Q3. How is the increase in ‘irrigation potential utilized’ owing to implementation of CADWM scheme assessed (assessment methodology)? (focus)

#### **EFFECTIVENESS**

ET2: How are scheme targets set and monitored?

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. Are the monitoring mechanisms in guidelines strictly followed? If not, reasons for the laxity. (focus)

Q2. Do all the states provide Quarterly Progress Reports (QPR) to the CAD cells (CWC)? If No, please mention the reasons and the defaulting states. If Yes, please share some sample reports from last year (2018-19) (focus)



Q3. How often do the officials from regional CAD cells (CWC) visit the project sites? Have the CAD cells (CWC) provided periodic report of their site visits (containing project progress, quality of works along with recommendations) to state government, PMO and CADWM wing? If Yes, please share some sample reports from last year (2018-19) (validate)

**What information is contained in utilization certificate issued by state government? Are they credible and can they be relied upon as an indicator of scheme progress?**

Q1. Are there any issues like delay in submission of Utilization Certificates? List the reasons for delay. Mention the repeat offenders (focus)

Q2. Is there any mechanism to physically validate / cross-check the figures stated in the Utilization Certificate? (focus)

ET3 How has the scheme performed against scheme objectives and annual targets?

**What is the state wise, year wise performance against target?**

Q1. Mention the state wise performances against target (during 2016-17 to 2018-2019) of both structural and non-structural interventions.

Q2. How is the creation of physical assets (like OFD works, field channels, reclamation of water-logged areas), creation of WUAs (along with their proper functioning) verified? Are there any defined checklists?

**Identify states that have performed well? What are the underlying reasons for such performance?**

Q1. What are key success factors contributing to effective implementation of structural interventions in Gujarat, Rajasthan and other good performing states? (focus)

Q2. What are the good practices that may be replicated across states to hasten the pace of CAD works, and for effective maintenance of assets and functioning of WUAs. (focus)

**Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q1. What are the main issues responsible for low progress under CADWM particularly in states like Andhra Pradesh, Chhattisgarh, Jharkhand, Punjab, Telangana and Uttar Pradesh? (focus)

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. What are the main implementation challenges faced in construction of field channels, on-farm development (OFD works), reclamation of water-logging areas and correction of system deficiencies? (focus)

Q2. What do you suggest for improving the technical competency of the field staff? Do you suggest any additional budget for trainings/ workshops? (focus)

Q3. What do you suggest for improving the monitoring/ physical validation of the scheme outputs? (focus)

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**



Q1. Do you suggest any change/ additional indicator that may be tracked in the MIS portal like indicators for measuring water use efficiency, effectiveness of WUAs formed, etc. for enhancing monitoring effectiveness? If yes, kindly mention the indicators. (focus)

Q2. Is the performance of Social Facilitator evaluated? Are there any defined evaluation parameters? (focus)

### **How has the scheme performed in respect of participatory irrigation management?**

Q1. Are the WUAs functioning effectively? If not, what are the interventions needed to improve their performance? (focus)

Q2. Are there any reasons for which the registered WUAs are reluctant to take over the physical system and water management? (focus)

ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?

### **What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. What are the negative factors that have adversely impacted scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance? (focus)

### **How can the scheme design be modified to mitigate the negative factors?**

Q1. Please provide some suggestions for scheme modifications to mitigate negative influences. (focus)

### **Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1. May you provide examples of some projects where the implementation suffered due to delay in fund releases by the Centre during the period 2016-17 to 2018-19? (validate)

### **Was there timely utilization of available funds? If not, what were the reasons?**

Q1. What are the performances of states in relation to timely utilization of funds? Please provide data/ evidences in this respect. What are the main reasons for delay? (focus)

Q2. Are there any other cases of non-compliance by states? Please share some sample copies of Project Monitoring Report by CAD cell (CWC)

## **EFFICIENCY**

EC1 Did the benefits of the scheme exceed costs?

### **What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. What are the main direct and indirect benefits of the CADWM scheme?



Q2. Has any cost benefit analysis/ impact assessment study been done post completion of CAD works in any project? If Yes, please share some sample reports.

**What are the costs of the scheme? What is the monetary value of all costs?**

Q1. Does the scheme have any negative impacts (like on socio-economic or environmental costs)? Please provide some evidences to substantiate your answer

**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1. Q1. In which areas inter-ministerial co-ordination (say between Agriculture and Water Resources Ministries, DoWR and Central Water Commission) and Centre-State co-ordination are needed? (focus)

**What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1. Do you suggest convergence with any other scheme which may be leveraged to deliver structural and non-structural interventions? If yes, explain how such convergence can be achieved and the key benefits thereof. (focus)

**SUSTAINIBILITY**

SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. Has the central share for one-time functional grants been released to the states? If not, please mention the reasons. If yes, provide details of funds released year-wise and state-wise (validate)

SS5 Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1. What can be done to improve environmental and social sustainability of the scheme? Please explain with reasons. (focus)

SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? (focus)

**Equity - High spatial variance in surface water availability and River interlinking**

SS1: Q1 - How widespread are instances of poor water availability, especially in tail-end reaches? What measures can be taken to improve equity in water availability across the command area? (focus)



## RELEVANCE

### RL1: Is the scheme relevant in the present context?

Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?

Q1. To what extent CADWM (in 99 priority AIBP project) scheme has reduced the IPC-IPU gap during 2016-2019? Can you please share relevant data in this regard? (focus)

## IMPACT

IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas?**

Q1. What are the long term benefits - any noticeable improvement in socio-economic conditions? Please share studies or relevant data in this regard as justification. (focus)

## SECTION 3: CROSS SECTIONAL THEMES

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION 1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### Accountability & Transparency - Availability of Data Records and Reports in public domain

#### What data records are available for the scheme in public domain?

Q1. Is there any mechanism to validate the data updated in the MIS portal (both in terms of physical validation and consistency)? In case of any inconsistency, how are they resolved with state departments? (focus)

Q2. How is timely update of data in MIS portal by states ensured? Are there any incentives (penal mechanisms) for timely (non-timely) update of data in MIS portal?

Q3. Are there any states that conduct social audit for validation of CADWM works? If yes, provide details.  
Direct/Indirect Employment Generation

#### What is the women participation (%) in the Sector/Program?

Q1. Is there any data or estimate of total number of man-days of work generated due to CADWM? Mention % of women employed

Q2. Please provide data or estimate of number of women farmers benefitted

Use of IT/Technology in driving efficiency

**Deployment of IT enabled mechanisms for monitoring of the Schemes - In case of a scheme to create physical assets, is geotagging and use of geotagged photographs being done?**



Q1. Is there any state-wise data or estimate of percentages of outlets geo-tagged of total outlets covered under CADWM? Which are the good and poor performing states? (focus)

Q2. Do the states update the respective number of geo-tagged outlet in MIS portal?

Q3. Mention the benefits of geo-tagging (say better monitoring and maintenance, co-ordination with Agriculture department) (focus)

#### **How is technology being used for on-ground data collection?**

Q1. How is technology being used for on-ground data collection? (focus)

Q2. How effective are remote sensing technology for monitoring IP creation? (focus)

Q3. Do you envisage any other advanced technologies for data collection and monitoring purposes? (focus)

#### **What are the technologies being used in project implementation, service delivery?**

Q1. What are the technologies (say mobile apps, e-kiosks) being used in project implementation, service delivery? (focus)

#### **Which states are using the latest technologies?**

Q1. Which states are using the latest technologies?

Development, dissemination & adoption of innovative practices, technology & know-how

#### **Fund allocation towards promotion of innovation - What percent of total allocation is directed towards development, dissemination and adoption of innovative practices and technology? How much of it is utilized?**

Q1. What percent of total allocation is directed towards development, dissemination and adoption of innovative practices and technology? How much of it is utilized?

Q2. Has the CWC/ Department of Water Resources come up with standardized manuals for best practices (for e.g. in construction of field channels, micro-irrigation structures)?

Stakeholder and Beneficiary behavioral change

#### **Fund allocation - What percent of total allocation is directed towards Awareness generation or sensitization? What is the utilization rate? and How much impact has it been able to generate in terms of behavior change?**

Q1. What percent of total allocation is directed towards awareness generation or sensitization (say on micro-irrigation practices, cropping planning)? What is the utilization rate? How much impact has it been able to generate in terms of behavioral change? (focus)

Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme

#### **Private Sector Participation - What is the percentage of private investment in the clusters/programs run by the government?**

Q1. For reducing cost, do you suggest any optimum size for contract packages to be offered to private contractors?



Q2. What are the common contractor related issues during implementation?

**SECTION 2: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

3.1.5 National level stakeholder – Advisor, NITI Aayog

**SECTION 1: DEEP DIVE INTO CAD&WM SCHEME USING REESIE FRAMEWORK:**

**EFFECTIVENESS**

ET1: Is the scheme design appropriate to address scheme objectives?

**EFFECTIVENESS**

**Is there evidence that assumptions have been tested and are valid?**

Can you please provide an overview of the scheme in terms of its objectives?

Q1. Share reports, if any, that may have evaluated the effectiveness of interventions under CADWM (e.g. pilot studies). Also, mention the salient features of these projects. (focus)

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1. Is there any weakness in scheme design? Explain and provide evidence in this regard. (focus)

Q2. How can the scheme design be modified to ensure effective operation of WUAs after their formation? (focus)

**Identify states that have performed well? What are the underlying reasons for such performance?**



Q1. What are the good practices that may be replicated across states to hasten the pace of CAD works, and for effective maintenance of assets and functioning of WUAs. (focus)

**Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q1. What are the main issues responsible for low progress under CADWM particularly in some states like Andhra Pradesh, Chhattisgarh, Jharkhand, Punjab, Telangana and Uttar Pradesh? (focus)

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. What are the main implementation challenges faced in construction of field channels, on-farm development (OFD works), reclamation of water-logging areas and correction of system deficiencies? (focus)

Q2. What do you suggest for improving the technical competency of the field staff? Do you suggest any additional budget for trainings/ workshops? (focus)

**How has the scheme performed in respect of participatory irrigation management?**

Q1. Are the registered WUAs functioning effectively across states? If not, what are the interventions needed to improve their performance? (focus)

Q2. Are there any reasons for which the registered WUAs are reluctant to take over the physical system and water management? (focus)

ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. What are the negative factors that have adversely impacted scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance? (focus)

**How can the scheme design be modified to mitigate the negative factors?**

Q1. Please provide some suggestions for scheme modifications to mitigate negative influences. (focus)

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1. Are there any suggested long and short term interventions for improving structural and non-structural interventions? Please explain with supporting reasons. (focus)

**EFFICIENCY**

EC1 Did the benefits of the scheme exceed costs?

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**



Q1. What are the main direct and indirect benefits of the CADWM scheme?

**What are the costs of the scheme? What is the monetary value of all costs?**

Q1. Does the scheme have any negative impacts (like on socio-economic or environmental costs)? Please provide some examples/ evidences to substantiate the same.

EC2 Can the costs of the scheme be lowered?

**Are there lower cost alternatives for achieving the scheme outcomes?**

Q1. Are there opportunities to lower the cost of projects (for e.g. by converging with other government initiatives like MGNREGA, RRR scheme, etc./ adopting innovative technologies) under the scheme without impacting scheme objectives? If yes, please identify such opportunities along with approximate savings.

Q2. How can private investments be leveraged to cut down costs?

**What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1. Do you suggest convergence with any other scheme which may be leveraged to deliver structural and non-structural interventions? If yes, explain how such convergence can be achieved and the key benefits thereof. (focus)

**SUSTAINIBILITY**

SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. Is there a need for any additional funds for maintenance? If yes, in what areas and who (Gol or state govt) should provide such funds. (focus)

Q2. Are the WUAs financially and technically sustainable? If no, identify how such sustainability can be improved? (focus)

Q3. Do you suggest any change in institutional structure or roles and responsibilities for ensuring scheme sustenance (e.g. devolution of financial and executive powers to irrigation officials while limiting role of WUAs to planning and supervision)? (focus)

SS5 Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1. What can be done to improve environmental and social sustainability of the scheme? Please explain with reasons. (focus)

Q2. Given increased level of ground water owing to CADWM scheme, is there any probability of farmers resorting to unregulated ground water extraction through bore wells, tube wells or other privately-owned ground water minor irrigation structures? If yes, please provide some evidences to substantiate your answer. (focus)



Q3. Given increased access to water owing to CADWM scheme, is there any probability of farmers shifting to more water intensive crops like paddy and sugarcane? If yes, please provide some evidences to substantiate your answer. (focus)

SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? (focus)

### RELEVANCE

**RL1: Is the scheme relevant in the present context?**

Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?

Q1. To what extent CADWM (in 99 priority AIBP project) scheme has reduced the IPC-IPU gap during 2016-2019? Please provide some evidences/ examples to substantiate the same. (focus)

What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?

Q1. In addition to reduction of IPC-IPU gap and improving water efficiency, should the CADWM scheme target any other interventional gaps like maintenance of irrigation structures, conjunctive use of ground water resources or other suggested areas? Please explain with reasons. (focus)

RL2 Is it appropriate to continue / prioritize this scheme?

What would be the impact if the scheme were to be scaled down or stopped?

Q1. Should the Central Assistance for CADWM scheme be scaled down and used in other areas like maintenance of irrigation assets, enhancing on-farm water use efficiency? If yes, please provide reasons. (focus)

Q2. Do you suggest scaling down or up of any component of the structural interventions like on-farm development (OFD) works, construction of drains, correction of system deficiencies and reclamation of water-logged areas? (focus)

### IMPACT

IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas?**



Q1. What are the long term benefits - any noticeable improvement in socio-economic conditions? Please share studies or relevant data in this regard as justification. (focus)

### **SECTION 3: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

#### **Financial Accountability - What funding mechanisms are being used?**

Q1. In addition to the loans from Long Term Irrigation Fund (LTIF) from NABARD, do you suggest any other funding mechanisms (say from MFIs) that may be more beneficial?

#### **Gender mainstreaming**

##### **Gender-friendly infrastructure and policies - How has empowerment of women improved?**

Q1. Please comment on the extent of women involvement in WUAs in various states. (focus)

Q2. May you provide some examples on how the scheme contributed/ may contribute to increased women empowerment (say higher income, literacy, better decision taking roles, etc.)? (focus)

Use of IT/Technology in driving efficiency

##### **Deployment of IT enabled mechanisms for monitoring of the Schemes - In case of a scheme to create physical assets, is geotagging and use of geotagged photographs being done?**

Q1. Mention the benefits of geo-tagging (say better monitoring and maintenance, co-ordination with Agriculture department) (focus)

##### **How is technology being used for on-ground data collection?**

Q1. Do you suggest any advanced technologies that may be used for data collection and monitoring purposes? (focus)

##### **Which states are using the latest technologies?**

Q1. Which states are using the latest technologies? (focus)

##### **Technology to address key challenges**

Q1. What technologies are available to address key challenges (like project planning, contract management and financial management) facing the scheme? Are there constraints in their adoption?

Development, dissemination & adoption of innovative practices, technology & know-how

##### **Contribution of improved practices in increasing outcomes -What is the impact of innovative technologies and practices on scheme and sectoral outcomes?**

Q1. What is the impact of innovative technologies (say piped irrigation for conventional channels) and practices (micro-irrigation practices) on scheme and sectoral outcomes?

Stakeholder and Beneficiary behavioral change



**Mechanisms to promote and ensure behavior change - What activities are undertaken at District/Block level to promote adoption of good practices?**

Q1. What activities may be undertaken at District/Block level to promote adoption of good practices among beneficiaries?

**Challenges faced - What are the major challenges? Are there any areas which needs more attention in terms of bringing behavior change?**

Q1. What are the major challenges in ensuring behavioral change among beneficiaries? Are there any areas which needs more attention in terms of bringing behavior change (in terms of adoption of new techniques for water management, crop planning, administration issues like payment of water taxes)? Mention some of the mitigating measures and best practices adopted by some states

**SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

**3.1.6 State level stakeholder – Secretary, State Irrigation Department**

**SECTION 1: DEEP DIVE INTO CAD&WM SCHEME USING REESIE FRAMEWORK:  
EFFECTIVENESS**

ET1: Is the scheme design appropriate to address scheme objectives?



**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

**Q1.** Could you please provide an overview of the scheme in terms of its objectives?

Q2. Is there any dedicated Command Area Development Authority (CADA) department or are CAD works undertaken by other department? Is there any government order for establishment of CADA and PIM legislation? (focus)

Q3. Are the WUAs provided water on volumetric basis? If No, do you have any plan for introducing volumetric water supply in near future? (focus)

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1. Do you suggest any change in the scheme design? Please explain with supporting reasons. (focus)

**Identify states that have performed well? What are the underlying reasons for such performance?**

Q1. What are the good practices that may be replicated across states to hasten the pace of CAD works, and for effective maintenance of assets and functioning of WUAs. (focus)

**Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q1. What are the main issues responsible for low progress under CADWM (if applicable to that state)? (focus)

**How has the scheme performed in respect of participatory irrigation management?**

Q1. Are the WUAs functioning effectively? If not, what are the interventions needed to improve their performance? (focus)

**ET3 How has the scheme performed against scheme objectives and annual targets?**

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. What are the main implementation challenges faced in construction of field channels, on-field development (OFD) works, reclamation of water-logging areas, correction of system deficiencies? (focus)

ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1. Are the central grants adequate for completion of CAD works? (validate)

**Gaps in broad sectoral outcomes - Need for water regulator for all states and /or central**

ET4/7: Some of the negative factors affecting scheme performance include over-irrigation (mainly in head areas of canal), non-volumetric water supply to WUAs, poor pricing and collection mechanism



Q1 - What do you suggest to ensure volumetric water supply and better pricing & collection mechanism? Do you feel that establishment of state water regulator may facilitate in ensuring the above?

**EFFICIENCY**

**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1. Have you faced any co-ordination issues with any Ministries (say with respect to fund disbursal, project sanctioning, etc.) that has hampered the implementation of the scheme? If yes, please provide some details to substantiate your answer. (focus)

**What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1. Do you suggest convergence with any other scheme which may be leveraged to achieve the structural and non-structural interventions? If yes, please identify such opportunities for convergence. (focus)

**SUSTAINIBILITY**

SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. Comment on the collection efficiency of irrigation fee and what are the challenges in case of low collection efficiency. (focus)

Q2. Are the irrigation fees recovery adequate for maintaining the CADWM assets? (focus)

SS5 Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1. Are there any suggestions for ensuring environmental and social sustainability of the scheme? (focus)

Q2. What measures do you suggest to mitigate the issue of diversion of water for 'non-irrigation' purposes and unauthorized lifting of water using submerged pumps? (focus)

SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? (focus)

**RELEVANCE**

**RL1: Is the scheme relevant in the present context?**



**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1. To what extent CADWM scheme has reduced the IPC-IPU gap for the related AIBP projects (projects that fall under the 99 priority AIBP projects) during 2016-17 to 2018-19 in your state? Explain with relevant data. (focus)

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1. In addition to reduction of IPC-IPU gap and improving water efficiency, should the CADWM scheme cover any other interventional gaps like maintenance of irrigation structures, conjunctive use of ground water resources or other suggested areas? If yes, please explain why that is important. (focus)

RL2 Is it appropriate to continue / prioritize this scheme?

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1. Shall the Central Grants for CADWM scheme components be scaled down and allocated to other areas like maintenance of irrigation assets, enhancing water use efficiency, development of ground water resources? (focus)

**IMPACT**

IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas?**

Q1. What are the long term benefits - any noticeable improvement in socio-economic conditions of farmers? (focus)

**SECTION 3: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION AND 2, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population**

**Inclusion of vulnerable groups in scheme as well as sector**

Q1. Have you undertaken an activity to analyse the problems faced by SCs/STs in your State? If yes, please provide details of the findings?

Q2. Whether SCA to TSP/SCA to SCSP has been implemented in your state or not? If implemented,

- a) What are the activities/interventions being undertaken for SCs and STs which are being funded through SCSP and TSP?



- b) What are the irrigation structures being constructed by the government under SCA to TSP/SCA to SCSP?
- c) Are the farmers being provided any subsidy/incentive for irrigation under SCA to TSP/SCA to SCSP?
- d) Does Krishi Vikas Kendra (KVK) implement Hands-on training/workshops/awareness programmes? If yes, what are the skill development and other irrigation-related trainings being conducted by KVKs under SCA to TSP/SCA to SCSP?
- e) What type of Multi-sector Support and Advisory services are being provided by KVKs to farmers under SCA to TSP/SCA to SCSP?
- f) Is there any other Agriculture Research Organization apart from KVK conducting trainings under SCA to TSP/SCA to SCSP?
- g) What are the steps taken to monitor the SCA to TSP/SCA to SCSP activities at the State level?
- h) How do you measure the impact under SCA to TSP/SCA to SCSP?
- i) What are the issues in the CSS? (Probe for top 5 issues)
- j) Please share recommendations to improve the impact of SCA to TSP/SCA to SCSP?

### **Use of IT/Technology in driving efficiency**

#### **How is technology being used for on-ground data collection?**

Q1. How effective are remote sensing technology for monitoring irrigation potential creation? (focus)

Q2. Do you envisage any other advanced technologies for data collection and monitoring purposes? (focus)

#### **What are the technologies being used in project implementation, service delivery?**

Q1. Does the state use any technology for better program management including project planning, contract management and financial management?

Stakeholder and Beneficiary behavioral change

#### **Challenges faced - What are the major challenges? Are there any areas which needs more attention in terms of bringing behavior change?**

Q1. What are the major challenges in bringing behavioral change among the beneficiary farmers? Are there any areas which needs more attention in terms of bringing behavior change (in terms of adoption of new techniques for water management, crop planning, administration issues like payment of water taxes)?



#### SECTION 4: CHALLENGES AND SUGGESTIONS

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

#### 3.1.7 District level stakeholder – Superintending/ Executive Engineer [CADA]

##### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?



- o Earlier you said\_\_\_\_\_ but it also seems like\_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **CAD-WMP**. Since you are a key stakeholder in the scheme overseeing implementation at the district level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from national, state, and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## **RESEARCHER TO NOTE:**

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

## **SECTION 1: DEEP DIVE INTO CAD&WM SCHEME USING REESIE FRAMEWORK:**



## EFFECTIVENESS

### ET1 Is the scheme design appropriate to address scheme objectives?

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

**Q1.** What is your overview of the scheme in terms of its implementation?

Q1. Is there any negligence in the implementation of non-OFD works like reclamation of water-logged areas, correction of system deficiencies? Please explain with supporting reasons and evidence (validate)

Q2. What are the reasons for delay in construction of micro-irrigation infrastructure (if any)? (validate)

**Gaps in broad sectoral outcomes - Lack of focus on efficient groundwater management and technologies**

ET1: One of the components of CADWM is 'ground water development to supplement surface irrigation'

Q1- What are the activities at farm level taken under ground water development component?

**Sustainability - Increasing gap between demand and supply of water**

Q1- Is the water available through the CADWM scheme adequate for one, two or three crops in the year?

### ET2 How are scheme targets set and monitored?

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. What are the main issues affecting monitoring and supervision of CAD works? (focus)

Q2. How are the quality of works funded through CADWM scheme verified? (focus)

Q3. How frequently does the officials from regional CAD cells (Central Water Commission) visit the sites?

Please provide some details of the last visit (like date of visit, purpose of visit, recommendations received. (validate)

### ET3 How has the scheme performed against scheme objectives and annual targets?

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. What are the main implementation challenges faced in construction of field channels, on-field development (OFD) works, reclamation of water-logging areas, correction of system deficiencies? (focus)

Q2. What do you suggest to improve the technical competency of the field staff? (focus)

**How has the scheme performed in respect of participatory irrigation management?**

Q1. Mention the number of registered WUAs (along with the irrigated area covered, number of firms and number of beneficiary farmers) in the command area.

Q2. Are the WUAs functioning effectively? If No, what are the interventions needed to improve their performance? (focus)

Q3. Have the WUAs been handed over the operations and maintenance of physical system and water management? If No, mention the reasons. If Yes, mention the scope of work of WUAs (validate)



Q4. How many trainings/ workshops have been conducted for the WUAs in each year (during 2016-2019)?

Please share evidence in this regard. (validate)

Q5. Are there any reasons for which WUAs are reluctant to take over the physical system and water management? Please explain in detail. (focus)

Q6. Is there any Social Facilitator/ NGO appointed by the government who provides hand-holding support to the beneficiary farmers? If Yes, mention in details the type of support provided by them. (focus)

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. What are the negative factors that have reduced scheme performance? (focus)

Q2. Are there any instances of non-availability of water at farm level inspite of completion of CAD works? If Yes, please mention the reasons. (focus)

Q3. Are there any instances of un-authorized water-lifting using pumps by farmers (both inside and outside the command area)? (focus)

#### **Equity - High spatial variance in surface water availability and**

Q1. How widespread are instances of poor water availability, especially in tail-end reaches? What measures can be taken to improve equity in water availability across the command area? (focus)

Q2. How recurrent are instances of poor water availability below outlets owing to low water discharge in canals? What mechanisms do you feel (like river-interlinking, canal diversions) may improve discharge in main canal?

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

**Q1.** Do you face any issue in receipt of fund from the state authorities (like delay in receipt, inadequate fund)? (validate)

Q2. Is there any particular component of scheme (say enforcement of warabandi schedule) suffering due to lack of funds from govt. authorities? (validate)

Q3. Do you feel direct transfer of Centre funds to Command Area Development Authority (CADA)/ implementing agency instead of the State pool may improve scheme performance? If Yes, please provide some details to substantiate your answer? (validate)

#### **Gaps in broad sectoral outcomes – Staffing level**



ET4/4: One of the key bottlenecks for effective implementation of CADWM scheme is lack of monitoring & supervision owing to lack of field-staff in both CWC and irrigation dept.

Q1 - Do you feel the staff level at field is adequate? If no, mention which aspects of the scheme (say implementation, monitoring, etc.) are most adversely affected due to the same. Mention some mitigation measures.

## **EFFICIENCY**

### **EC1 Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**



C\_Banalysis\_CADW.  
xlsx

**The data collection template is attached here**

FOR QUESTIONS Q1 TO Q4, YOU MAY FILL THE ATTACHED TEMPLATE (IN CASE DATA IS NOT AVAILABLE WITH YOU, PLEASE REFER TO RELEVANT PERSONS)

Q1. Has there been any change in crop pattern after completion of CAD works? If Yes, can you provide relevant data to substantiate the same (like season-wise crops, percentage of irrigated area) (focus)

Q2. Has there been any change in crop yield after completion of CAD works? If Yes, can you provide relevant data to substantiate the same (both pre and post project figures) (focus)

Q3. Has there been any increase in cropping diversity after completion of CAD works? If Yes, can you provide relevant data to substantiate the same (both pre and post project figures) (focus)

Q4. Has there any been increase in irrigated area after completion of CAD works? If Yes, can you provide relevant data to substantiate the same (both pre and post project figures) (focus)

Q6. Has there been any change in employment of agricultural laborers after completion of CAD works? If Yes, can you provide relevant data (like no. of man days of employment) to substantiate the same (both pre and post project figures) (focus)

Q7. Has the incidence of water-logging decreased after completion of CAD works? If Yes, can you provide relevant data to substantiate the same (both pre and post project figures) (focus)

Q8. Has there been any increase in ground water level in the command area after completion of CAD works? If Yes, can you provide relevant data to substantiate the same (both pre and post project figures) (focus)

Q9. Has there been any increase in collection of water taxes after completion of CAD works? If Yes, can you provide relevant data to substantiate the same (both pre and post project figures) (focus)

**What are the costs of the scheme? What is the monetary value of all costs?**

FOR QUESTIONS Q1 TO Q2, YOU MAY FILL THE ATTACHED TEMPLATE

Q1. Provide details of the capital cost incurred under this scheme (in Rs/ ha) (focus)



Q2. Provide details of the O&M cost (in Rs/ha) for the facilities under CADWM and average interest cost (in Rs) (focus)

### **EC2 Can the costs of the scheme be lowered?**

#### **Are there lower cost alternatives for achieving the scheme outcomes?**

Q1. How can the cost components for CAD works may be decreased? (focus)

Q2. Can convergence with other schemes like MGNREGA result in lowering the costs? (focus)

Q3. How can private investments be leveraged to cut down costs?

Q4. Do you suggest awarding large packages to contractors to benefit from economies of scale and expertise of large contractors?

Q5. Has implementation of micro-irrigation structures (like piped irrigation) instead of conventional on-farm development (OFD) works resulted in cost savings? If Yes, can you provide relevant data to substantiate the same (both pre and post project figures)

#### **Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1. Is there any scope to further enhance the implementation of the scheme through better co-ordination with other departments say with Revenue Department for faster disbursement of funds, Land Resources Department for maintenance of outlets, Irrigation Department for maintenance of assets and water management including irrigation schedule, with the Agriculture Department for crop planning and WUAs for effective co-ordination? (focus)

### **SUSTAINIBILITY**

### **SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

#### **Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. Are WUAs responsible for collection of irrigation fees? (focus)

Q2. How willing are beneficiary farmers to pay irrigation fees? (focus)

Q3. How much of the revenue (irrigation fees collected) is ploughed back to the WUAs and what is retained by the department? (validate)

Q5. Have the WUAs received the one-time functional and infrastructural grants? (validate)

Q6. Have the farmers paid their share of 10% of the functional grant? (focus)

### **SS5 Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

#### **Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1. Are there any suggestions for ensuring environmental and social sustainability of the scheme? (focus)



Q2. What measures do you suggest to mitigate the issue of diversion of water for 'non-irrigation' purposes?  
(focus)

Q3. What measures shall be adopted to mitigate destruction of field channels owing to encroachment, developmental works (like building roads)? (focus)

### **Access – Widening IPU-IPC gap**

Q1. Are there any instances of beneficiary farmers shifting to more water-intensive crops and inefficient irrigation methods (e.g. flood irrigation) owing to increased access to irrigated water under CADWM scheme? (focus)

Q2. Is the water available through the CADWM scheme adequate for meeting irrigation needs throughout the year? If not, please mention the other primary sources of water. (focus)

### **Sustainability: Climate Change**

Q1. Are there any instances of field or intermediate channels or other CAD works getting destroyed owing to floods? May you please elaborate on the adverse effects of flood or other extreme climate change events on the CADWM scheme?

## **EQUITY**

**EQ2 Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1. Does the scheme exclude any weaker section of society that may be included? (focus)

## **IMPACT**

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. What are the long term benefits - any noticeable improvement in socio-economic conditions of farmers? (focus) (focus)

## **CROSS SECTIONAL THEMES:**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability & Transparency - Citizen Accountability**



Q1. Are there functional grievance redressal mechanisms that successfully incorporate beneficiaries' and non-beneficiaries' concerns? (focus)

### **Community institutions**

Q1. How is financial accountability of the works done by contractors ensured?

### **Direct/Indirect Employment Generation - Employment generation**

Q1. Is there any estimate of total no of man-days of work generated due to CADWM? Mention % of women employed

Q2. Provide an estimate of no of women farmers benefitted

### **Quantum and kind of Self Employment, entrepreneurship generated**

Q1. Given the increased availability of water, are there any improvement in other livelihood options like livestock keeping, new horticulture plantations? If Yes, mention the details (focus)

### **Gender mainstreaming - Gender-friendly infrastructure and policies**

Q1. Are there any specific provisions for involvement of women in WUAs (like reservation of seats)? Also mention the extent of women involvement in WUAs? Are they involved in general decision makings (apart from gender issues), conflict resolutions, O&M, etc.? (focus)

Q2. Mention how the project contributed to increased women empowerment (say higher income, literacy, better decision taking roles, etc.) (focus)

### **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population - Inclusion of vulnerable groups in scheme as well as sector**

Q1. Have you undertaken an activity to analyse the problems faced by SCs/STs in your District? If yes, please provide details of the findings?

Q2. Whether SCA to TSP/SCA to SCSP has been implemented in your district or not? If implemented -

- a) Is there any micro-project under SCA to TSP/SCA to SCSP being undertaken in your district? (Collect details of Irrigation projects, villages where SCA projects are being implemented)
- b) What are the activities/interventions being undertaken for SCs and STs which are being funded through SCSP and TSP?
- c) What are the irrigation structures being constructed by the government under SCA to TSP/SCA to SCSP?
- d) Are the farmers being provided any subsidy/incentive for irrigation under SCA to TSP/SCA to SCSP?
- e) Does Krishi Vikas Kendra (KVK) implement Hands-on training/workshops/awareness programmes? If yes, what are the skill



development and other irrigation-related trainings being conducted by KVKs under SCA to TSP/SCA to SCSP?

- f) How many farmers have been trained by KVK under SCA to TSP/SCA to SCSP?
- g) What type of Multi-sector Support and Advisory services are being provided by KVKs to farmers under SCA to TSP/SCA to SCSP? How many farmers have benefitted from such services?
- h) What are the steps taken to monitor the SCA to TSP/SCA to SCSP activities at the State/District/village level?
- i) How do you measure the impact under SCA to TSP/SCA to SCSP?
- j) What are the issues/challenges in the CSS? (Probe for top 5 issues)
- k) Please share recommendations to improve the impact of SCA to TSP/SCA to SCSP?

#### **Use of IT/Technology in driving efficiency - Deployment of IT enabled mechanisms for monitoring of the Schemes**

Q1. Have the water outlets being geo-tagged? If Yes, please provide the current status i.e. percent of total outlets that has been geo-tagged. Also, mention what are the main issues faced while geo-tagging. (validate)

Q2. How has the geo-tagging of outlets benefitted the scheme and other initiatives? (focus)

#### **Use of latest technology to improve efficiency and effectiveness of scheme implementation**

Q1. What are the technologies (say mobile apps, e-kiosks) being used in project implementation, service delivery?

#### **Stakeholder and Beneficiary behavioral change - Mechanisms to promote and ensure behaviour change**

Q1. What activities are undertaken at District/Block level to promote adoption of good practices?

#### **Challenges faced**

Q1. What are the major challenges in bringing behavioral change among beneficiary farmers? Are there any areas which needs more attention in terms of bringing behavioral change (in terms of adoption of new techniques for water management, crop planning, administration issues like payment of water taxes)?

#### **Cropping pattern**

Q1. What are the key constraints in crop planning based on local water availability with a view to reduce water intensive crops?

### **SECTION 3: CHALLENGES AND SUGGESTIONS**



- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the **suggestions and corrective measures** that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

### 3.1.8 District level stakeholder - District Agriculture Officer [state agriculture department]

#### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?



## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **CAD-WMP**. Since you are a key stakeholder in the scheme overseeing implementation at the district level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from national, state, and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

### **RESEARCHER TO NOTE:**

- 3. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
- 4. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.*

## **SECTION 1: DEEP DIVE INTO CAD&WM SCHEME USING REESIE FRAMEWORK:**



## EFFECTIVENESS

### ET1 Is the scheme design appropriate to address scheme objectives?

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

What is your overview of the scheme in terms of its implementation?

Q1. How prominent are the issues of water-logging in the farms? Is the implementation of CADWM components like reclamation of water-logged areas, correction of system deficiencies adequate to address the issue? Please explain with supporting reasons and evidence. (validate)

Q2. How effectively is the CADWM component 'construction of micro-irrigation structures' (like sumps, pumps, HDPE pipelines) implemented at the field level? Please provide some suggestions for improvements (if any) (validate)

#### **Water Security -Agricultural Water use efficiency**

Q1 - Does the government conduct training on micro-irrigation and efficient water management practices for beneficiaries? If yes, provide some details of trainings conducted in last year (2018-19) like number of trainings, number of participants, topic, trainer details, etc.

### ET3 How has the scheme performed against scheme objectives and annual targets?

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. Are there any instances of non-availability of water at farm level inspite of completion of CAD works? If Yes, please mention the reasons. (validate)

Q2. Are there any instances of un-authorized water-lifting using pumps by farmers (both inside and outside the command area)? (validate)

#### **Equity - High spatial variance in surface water availability**

SS1: Q1 - How widespread are instances of poor water availability at supply outlets, especially in tail-end reaches? What measures can be taken to improve equity in water availability across the command area? (validate)

## EFFICIENCY

### EC1 Did the benefits of the scheme exceed costs?

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

FOR QUESTIONS Q1 TO Q4, YOU MAY FILL THE ATTACHED COST-BENEFIT TEMPLATE





C\_Banalysis\_CADW  
M.xlsx

Q1. Has there been any change in crop pattern after completion of CAD works? If Yes, can you provide relevant data to substantiate the same (like season-wise crops, percentage of irrigated area) (focus)

Q2. Has there been any change in crop yield after completion of CAD works? If Yes, can you provide relevant data to substantiate the same (both pre and post project figures) (focus)

Q3. Has there been any increase in cropping diversity after completion of CAD works? If Yes, can you provide relevant data to substantiate the same (both pre and post project figures) (focus)

Q4. Has there any been increase in irrigated area after completion of CAD works? If Yes, can you provide relevant data to substantiate the same (both pre and post project figures) (focus)

Q5. Has there been any change in employment of agricultural laborers after completion of CAD works? If Yes, can you provide relevant data (like no. of man days of employment) to substantiate the same (both pre and post project figures). If you don't have the data, kindly refer to relevant persons. (focus)

Q6. Has the incidence of water-logging decreased after completion of CAD works? If Yes, can you provide relevant data to substantiate the same (both pre and post project figures) (focus)

Q7. Have the incidences of migration of agricultural laborers decreased after implementation of the CADWM scheme? If Yes, can you provide relevant data (like figures for temporary and permanent migration in the command area during 2016-17 to 2018-19) to substantiate the same (both pre and post project figures). If you don't have the data, kindly refer to relevant persons. (focus)

#### **What are the costs of the scheme? What is the monetary value of all costs?**

FOR QUESTION Q1, YOU MAY FILL THE ATTACHED TEMPLATE

Q1. Provide details of the agricultural input cost (in Rs/ ha) (like expenditure incurred for land preparation, seed, fertilizer, pesticides, manure, plant protection, labor, irrigation) (focus)

#### **Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1. Is there any scope to further enhance the implementation of the scheme through better co-ordination with other departments say with Irrigation Department for better water management including irrigation schedule and crop planning, etc.? (focus)

### **SUSTAINIBILITY**

**SS5 Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**



Q1. What measures do you suggest to mitigate the issue of diversion of water for 'non-irrigation' purposes?  
(focus)

### **Access – Widening IPU-IPC gap**

Q1. Are there any instances of beneficiary farmers shifting to more water-intensive crops and inefficient irrigation methods (e.g. flood irrigation) owing to increased access to irrigated water under CADWM scheme? (focus)

Q2. Is the water available through the CADWM scheme adequate for meeting irrigation needs throughout the year? If not, please mention the other primary sources of water. (focus)

## **EQUITY**

**EQ2 Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1. Does the scheme exclude any weaker section of society that may be included? (focus)

## **IMPACT**

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. What are the long term benefits - any noticeable improvement in socio-economic conditions of farmers? (focus)

## **CROSS SECTIONAL THEMES:**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Quantum of Self Employment, entrepreneurship generated**

Q1. Given the increased availability of water, are there any improvement in other livelihood options like livestock keeping, new horticulture plantations? If Yes, mention the details (focus)

### **Institutional barriers**

Q1. Are there institutional barriers to employment generation (say poor access to markets for horticulture products)? (focus)

### **Gender mainstreaming - Gender-friendly infrastructure and policies**



Q1. Given improved access to water and better irrigation facilities; has there been any noticeable change in the division of farm labor? If Yes, have the women benefitted from this change? (focus)

**Use of IT/Technology in driving efficiency - Deployment of IT enabled mechanisms for monitoring of the Schemes**

Q1. Does the CADA/ irrigation department share any list of geo-tagged outlets with you? If Yes, please share a copy of the list. (validate)

Q2. Mention how the agriculture department and/ or farmers benefitted from geo-tagging. (focus)

**Challenges faced**

**Superintending Engineer (CADA), District Agriculture Officer, NGOs/ Social Facilitators**

Q1. What are the major challenges in bringing behavioral change among beneficiary farmers? Are there any areas which needs more attention in terms of bringing behaviour change (in terms of adoption of new techniques for water management, crop planning, administration issues like payment of water taxes)?

**Cropping pattern**

Q1. What are the key constraints in crop planning based on local water availability with a view to reduce water intensive crops?

**SECTION3 : CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

**3.1.9 Village level stakeholder – Empanelled Social Facilitators**

**GENERAL GUIDELINES:**



- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organization in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **CAD-WMP**. Since you are a key stakeholder in the scheme implementation at the village level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from national, state, district and level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.



- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

### **RESEARCHER TO NOTE:**

5. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
6. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.*

## **SECTION 1: DEEP DIVE INTO CAD&WM SCHEME USING REESIE FRAMEWORK:**

### **EFFECTIVENESS**

#### **ET2 How are scheme targets set and monitored?**

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. Could you please provide an overview of the scheme in terms of its implementation?

Q2. What are the scope your activities in regard to the non-structural interventions?

Q3. How do you promote Participatory Irrigation Management? (focus)

Q4. What are the activities for which you provide hand-holding support to the farmers in the command area? How many trainings have you conducted during the period 2016-17 to 2018-19? Please share some details of the training like number of participants, topic of training, etc. (focus)

Q5. How frequently do you carry out field level monitoring of non-structural interventions (interventions introduced for effective functioning of WUAs, knowledge management, etc.)? Do you use any checklist for measuring the effectiveness of the non-structural interventions? If Yes, please share the checklist (focus)

Q6. Do you submit any periodic Evaluation Report on the status of non-structural interventions to the State Government/ Ministry? If yes, please share some sample reports. Mention some of the key recommendations highlighted in these reports. (validate)

#### **ET3 How has the scheme performed against scheme objectives and annual targets?**

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**



Q1. What are the major challenges in implementing the non-structural interventions like handing over assets and water management by WUAs, conducting regular trainings/ workshops.? (focus)

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.** Q1. Are there any suggested long term and short term interventions for improving non-structural interventions?

#### **EFFICIENCY**

**EC1 Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. What are the main socio-economic changes after completion of CAD works and establishment of WUAs? Please provide some evidences to substantiate your answer.

Q2. Has there been any change in skill level of farmers after implementation of the scheme? If Yes, please provide some evidences to substantiate your answer. (focus)

Q3. Has there been improvement in the employment rate of the agricultural laborers after implementation of the scheme? If Yes, please provide some evidences/ data to substantiate your answer. (focus)

Q4. Have the incidences of migration of agricultural laborers decreased after implementation of the CADWM scheme? If Yes, can you provide relevant data (like figures for temporary and permanent migration in the command area during 2016-17 to 2018-19) to substantiate the same (both pre and post project completion figures) (focus)

**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1. Is there any scope to further enhance the implementation of the scheme through better co-ordination between departments say between Skill Development Department and WUAs for honing the skills of farmers in relation to other livelihood options, etc.? (focus)

**SS5 Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1. Are there any suggestions for ensuring social sustainability of the scheme?



## **EQUITY**

**EQ2 Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1. Does the scheme exclude any weaker section of society that may be included? (focus)

## **IMPACT**

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. What are the long term benefits - any noticeable improvement in socio-economic conditions of farmers? (focus)

### **CROSS SECTIONAL THEMES:**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

#### **Accountability & Transparency - Citizen Accountability**

Q1. Are there functional grievance redressal mechanisms that successfully incorporate beneficiaries' and non-beneficiaries' concerns? (focus)

#### **Direct/Indirect Employment Generation - Employment generation**

Q1. Is there any estimate of total no of man-days of work generated due to CADWM? Mention percentage of women employed

Q2. Provide an estimate of no of women farmers benefitted

#### **Quantum of Self Employment, entrepreneurship generated**

Q1. Given the increased availability of water, are there any improvement in other livelihood options like livestock keeping, new horticulture plantations? If Yes, mention the details

#### **Institutional barriers**

Q1. Are there institutional barriers to employment generation (say poor access to markets for horticulture products)? (focus)

#### **Gender mainstreaming - Gender-friendly infrastructure and policies**



Q1. Given improved access to water and better irrigation facilities, has there been any noticeable change in the division of farm labor? If Yes, have the women benefitted from this change? (focus)

Q2. Are there any specific provisions for involvement of women in WUAs (like reservation of seats)? Also mention the extent of women involvement in WUAs? Are they involved in general decision makings (apart from gender sensitive issues), conflict resolutions, O&M, etc.? (focus)

Q3. Is there any specific training offered for women to enhance incomes? If Yes, mention the number of trainings conducted in last 3 financial years (i.e. during 2016-17 to 2018-19) (focus)

Q4. Has there been any increase in women employment in the command area? If Yes, please provide data/ evidences to substantiate the same. (focus)

Q5. Mention how the project contributed to increased women empowerment (say higher income, literacy, better decision taking roles, etc.) (focus)

### **Decision making by women**

Q1. Are women empowered to take important decisions at household, village levels? If Yes, please highlight some notable improvements after implementation of the scheme.

Q2. Do women have adequate control over agricultural and household resources? If Yes, please provide some examples to substantiate the same.

Q3. Do women have adequate access to financial resources? If Yes, please provide some evidences to substantiate the same.

Q4. Has there been any shift of women from domestic activities to income-generating activities after implementation of this scheme? If Yes, please provide data/ evidences to substantiate the same.

Q5. Has the health status of women in the command area improved after implementation of this scheme? If Yes, please provide data/ evidences to substantiate the same.

Q6. Has there been improvement in skill level of women? If Yes, please provide data/ evidences to substantiate the same.

### **Stakeholder and Beneficiary behavioral change - Mechanisms to promote and ensure behaviour change**

Q1. What activities are undertaken at District/Block level to promote adoption of good practices?

### **Challenges faced**

Q1. What are the major challenges? Are there any areas which needs more attention in terms of bringing behavior change (in terms of adoption of new techniques for water management, crop planning, administration issues like payment of water taxes)?

### **Cropping pattern**

Q1. What are the key constraints in crop planning based on local water availability with a view to reduce water intensive crops?

## **SECTION 3: CHALLENGES AND SUGGESTIONS**



- Broadly, what are the main challenges/ limitations that you see in this scheme from an implementation point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



## 3.2 Discussion Guide for FGD

### 3.2.1 FGD: WUAs and Beneficiary farmers (where WUAs not formed)

#### GENERAL GUIDELINES for FGDs:

- The topics and questions below should be used to guide the Focus Group Discussion. Please keep in mind, while conducting the FGDs, do respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- During FGDs, group dynamics are common so it must be ensured that every respondent gets a chance to speak, one person should not be allowed to dominate the discussion. Also, be aware of any power dynamics that may be at play. Please ensure that all respondents speak one by one so that the audio recording is clear.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- **Seek more detail or explanation of a response.** For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- **Explore the reasons** behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- **Seek clarity and check for inconsistencies.** For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the FGD:
- I am ....., working with Ipsos, a global research organization. We regularly carry out research on various social issues. Currently we are implementing a study on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog along with KPMG a consultancy firm.
- The current study is an evaluation of Centrally Sponsored Schemes in the Water Resources sector in various states including yours. We would like to seek your opinion on certain topics related to the scheme **Command Area Development and Water Management Practices (CAD-WMP)**. One aspect of the evaluation is to meet the beneficiaries of these schemes to understand the



benefits received, how the benefits have impacted different aspects of their life- social, economic, and any other. Your views are beneficial to assess the experiences, challenges if any associated with this project. Discussion with your group as well as others will also help us identify recommendations and suggestions to improve the next phase of implementation of similar projects.

- Inform the respondents of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged that will lead to identification of individual responses that they give during this discussion.
- Explain that there are no right/ wrong answers and obtaining opinion and perception and their individual experience is critical.

• **NOTE TO THE TEAM:**

- AT THE VILLAGE LEVEL, RESEARCHER NEEDS TO FIRST MEET THE SARPANCH OF THE VILLAGE
- NO BENEFICIARIES ARE TO BE MET FOR ANY SCHEME/ PROJECT RELATED INTERVIEW/FGD BEFORE MEETING THE SARPANCH

**RESEARCHER TO NOTE:**

7. *All the questions inside boxes font are only for reference of the researcher to gauge if the larger question has been answered. These questions are not to be asked directly to the respondents.*
8. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, RESEARCHER should add additional probes to help answer those questions.*

**Warm up:**

5. Can you give me some information about the village how many households live here, which is the nearest town, mode of transport etc.
6. What are the different occupations that people are engaged in? What percentage of the households are involved in agriculture/ agriculture related activities?



7. Do you all own your own land or you work on others' land? How many members of your family are currently involved in agriculture related work? What crops do you grow?
8. What are some of the most common problems that farmers in your village face? Note to RESERACHERS- DO NOT DWELL EXTENSIVELEY ON PROBLEMS HERE, THIS IS JUST TO UNDERSTAND INFRASTRUCTURE, WATER/ IRRIGATION, AND MARKET ACCESS RELATED ISSUES IF THEY ARE ON TOP OF MIND.

### **Awareness about different schemes and projects implemented in their village**

3. What are the different irrigation and/or agriculture related projects that have been implemented in your village in last five years?
4. Can you please elaborate on these projects in terms of how they have benefitted you/ others in the village and/ or how do they address the common issues that you face?
5. What are the type of works undertaken? According to you, which ones are working well for the village and you? Why do you say so? (Note to researcher: To get a brief understanding here and not get into details at this stage)

### **SECTION 1: DEEP DIVE INTO CAD&WM SCHEME USING REESIE FRAMEWORK:**

#### **We are would like to ask you questions specifically about one particular project/ government scheme – Command area development and water management practices**

Q1. Are you aware that this project was developed under which scheme/ project? Have you heard about this scheme/yojana/ project? What do you know about it? From where did you hear about the scheme/ project?

Q2. In your view, what is the purpose of this scheme/ project? When was this created, how much time did it take to complete the project since it was announced?

Q3. When did you start benefitting from this project? How is it helping you in agriculture? PROBE TO UNDERSTAND THROUGH EXAMPLES OF WHAT THE BENEFITS EXPERIENCE ARE, WHERE POSSIBLE GET CONCRETE FACTS AND FIGURES.

### **EFFECTIVENESS**

#### **ET1 Is the scheme design appropriate to address scheme objectives?**

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

#### **INSTITUTIONAL STRUCTURE**

Q1. Are there any registered Water user associations in your village?

Q2. How many members are there in the WUA?



Q3. Are there any criteria for membership to WUA? Are there any incentives available for members like concessions on water rates, freedom of crop choices in comparison to non-members?

Q4. Is the Panchayat Representative a part of WUA?

Q5. What are the terms of memberships? How is the Chairman selected? Is there any provision for revoking membership in case of non-performance?

Q6. Are the roles of Distributary Committees, WUAs and CADA/ line depts. clearly demarcated? Please mention the current scope of responsibility and power of the WUAs

Q7. Name the NGO/ social facilitator responsible for training and hand-holding.

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1. What are the issues affecting the handing over of management of assets to WUAs? Are there any issues for which WUAs are reluctant to take charge of the water management of the irrigation structures?

**Sustainability - High dependency on groundwater for irrigation**

Q1. Are there any other water sources you use for irrigation? If yes, please mention the sources in terms of priority. What are the reasons for using other sources? Also ask if all are using other water sources or only some are using other water sources.

Q2. If No, please mention the water sources (if applicable) you were using before completion of CAD works, what were the difficulties then in using that water source- understand about quantity of water available to all, equity, and any other issues?

**Sustainability - Increasing gap between demand and supply of water**

Q1. Is the water available through the CADWM scheme adequate for one, two or three crops in the year?

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q5. Under CADWM scheme, which are the major activities undertaken at farm level? TO probe on the following: construction of field channels, intermediate and link drains, reclamation of waterlogged areas/ drainage, renovation & desilting of existing tanks/ control structures, enforcement of warabandi, land levelling and shaping, realignment of field boundaries/ consolidation of holdings, strengthening of extension services/ correction of system deficiencies, etc.

**Gaps in broad sectoral outcome - Lack of focus on efficient groundwater management and technologies**

Q1. What are the activities at farm level taken under ground water development component?

**ET3 How has the scheme performed against scheme objectives and annual targets?**

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. What are the main implementation challenges faced in construction of field channels, on-field development (OFD) works, reclamation of water-logging areas, correction of system deficiencies?



## **ET2 How are scheme targets set and monitored?**

### **Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. Approximately, in what percentage of the command area has CAD works been completed?

Q2. How is the quality of work undertaken under CADWM scheme verified? How frequently are site visits undertaken by state irrigation officials and officials from Central Ministry? How frequently are site visits undertaken by the Social Facilitators? (validate)

### **How has the scheme performed in respect of participatory irrigation management?**

Q1. Is there any registered WUA in the area? If Yes, answer Qs 2 to Qs. 5

Q3. Have you/ WUA in the area got any recommendations from the government officials? If yes, please mention some of the key recommendations (validate)

Q4. Are the WUAs responsible for supervision of the CAD works? If yes, please mention in detail like type of works supervised, mechanisms for financial supervision, methods of escalation. (validate)

Q3. Are there any reasons for which WUAs are reluctant to take over the physical system and water management? Please explain in detail. (focus)

Q4. Are local contractors member of the WUA? If Yes, please mention his/ her designation in the WUA. (validate)

Q2. What are the interventions needed to improve the performance of the WUA? (focus)

Water Security - Agriculture water use efficiency

Q2. Does the government conduct training on micro-irrigation, efficient water management practices, crop planning etc. for beneficiaries? Provide some details (like trainers, topic, etc.) of the trainings conducted in last 3 years (i.e. during 2016-17 to 2018-19)

### **How has the scheme performed in respect of participatory irrigation management?**

Q4. How many trainings/ workshops have been conducted for the WUAs in each year (during 2016-2019)? Please share examples in this regard. (validate)

Q5. Is there any Social Facilitator/ NGO appointed by the government who provides hand-holding support to the beneficiary farmers? If Yes, Please mention in details the type of support provided by them and state examples in which areas you benefitted. Is the hand-holding support provided by the Social Facilitator adequate? If No, please provide some details to substantiate your claim. (validate)

Q3. Could you please name some of the techniques/ guidelines you have learnt from the above trainings and implemented at the farm?



**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and Please mention the relative impact of each factor on performance?**

Q3. What are the negative factors (like political, technical, social, financial) affecting scheme implementation? (focus)

Q2. Is water available at the supply outlets through the year? Are there any instances when you need to lift water using pumps due to non-availability of adequate water at outlets? (validate)

Q4. Is there any instance of non-availability of water at field level inspite of completion of CAD works? If yes, please mention the key causes for the same. (validate)

Q1. Please mention the top three reason for water-logging in the fields.

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1. Are the grants received from Centre and State adequate and timely for completion and maintenance of CAD works? Please provide some details to substantiate your answer. (validate)

#### **EFFICIENCY**

**EC1 Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. What are the main changes in the agriculture, farming practices after completion of CAD works and establishment of WUAs?

Q2. Has there been any enhancement in skill level of farmers? Have the trainings organized by social facilitator benefitted you? If yes, please provide some examples. (validate)

Q3. Has there been any change in the number of man-days of employment for agricultural labors after implementation of the scheme? If Yes, could you please provide some numbers to substantiate? (validate)

Q5. Has there been any change in soil quality (like decrease in salinity/ alkalinity) after the implementation of the scheme? If Yes, please provide data/ examples to substantiate the same. (validate)

Q6. Has there been any change in ground water level in the command area after the implementation of the scheme? If Yes, please provide data/ examples to substantiate the same. (validate)

Q7. Please mention the changes in agricultural outcomes like crop pattern, cropping intensity, crop yields including increase in irrigated area etc. (validate)

Q8. Has there been any change in instances of water-logging in the farms after completion of CAD works? (validate)



Q4. What do you think about incidences of migration (both temporary and permanent) of the beneficiaries (including agricultural laborers) in the command area in the last 3 years? Could you please provide approximate percentage of residents who migrated during last 3 years? Are majority of the migrations – seasonal or permanent? Can you tell who migrates- what is their profile – in terms of age, social status, land ownership, type of farming practices, what do you think are the key reasons for migration? (validate)

#### **Quality - Quality related issues for groundwater**

Q1. Has there been any improvement in quality of ground water? (validate)

### **EC2 Can the costs of the scheme be lowered?**

#### **Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1. Have you faced any co-ordination issues with the CADA, irrigation departments, land resources departments, agriculture department or any other state government departments in relation to this scheme (say disbursal of funds, water management and irrigation schedule, fees collection, maintenance of outlets, crop planning, etc.)? If Yes, please provide some examples. Also, if you could suggest how co-ordination in such areas may be improved in future.

### **SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

#### **What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. What are the key risks that may adversely affect the benefits from the scheme over the long term?

#### **Sustainability - Unregulated extraction of groundwater and Access – widening IPC-IPU gap**

Q1 - Given increased availability of groundwater resources in your field, would you prefer to shift to ground water based minor-irrigation structures like tube wells, bore wells, etc.? Why, why not?

Q2. Given the increased access to water is there any plan to shift to water intensive crops like paddy, sugarcane, etc.?

SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?

#### **Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. Does the WUA collect any irrigation fee? what percentage of the fees collected are retained by the WUAs? How is financial accountability ensured? (validate)

Q2. Are the collected fees and funds received enough to sustain maintenance of field channels, drains, intermediate links, correction of system deficiencies like de-silting works, strengthening of banks? (focus)

Q3. Are there any incentives for timely payment of fees? Are you willing to pay higher fees in case of reliable water supply is ensured? (focus)

Q4. Has the WUA received the one-time functional and infrastructural grants? (validate)



Q5. Have all the members paid their share of 10% of the functional grant? If not, please mention the reasons

## **EQUITY**

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Is equitable distribution of water among farmers ensured after the implementation of scheme? Please provide reasons.

Q2. Is warabandi schedule (rotational supply of water based on a pre-determined schedule) ensured?

Q3. Are there any regulatory/ control measures for water distribution installed by CADA/ respective line department?

## **IMPACT**

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. What are the long term benefits - any noticeable improvement in socio-economic condition of village and the beneficiaries? Probe on: Overall household income, Health standards, Education, Condition of female farmers of villagers in CAD area? Please provide some examples. (focus)

Q2. Has the scheme resulted in any change in health standards? If Yes, please provide some examples to substantiate the same

Q3. Has the scheme resulted in any change in literacy rates? If Yes, please provide some examples to substantiate the same

Q4. Has the scheme resulted in any change in other livelihood options for farmers? If Yes, please provide some examples to substantiate the same (focus)

Q5. Has the scheme resulted in any change in quality of drinking water? If Yes, please provide some examples to substantiate the same

## **CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**DIRECT/INDIRECT EMPLOYMENT: EMPLOYMENT GENERATION**



Q1. Is there any estimate of total number of man-days of work generated due to CADWM? Please mention % of women employed.

Q2. Could you please provide an estimate of number of women farmers benefitted from the CADWM scheme?

### **Institutional barriers**

Q1. Are there institutional barriers to employment generation (for example, poor access to markets for horticulture products)? (focus)

### **Gender mainstreaming - Gender-friendly infrastructure and policies**

Q1. Given improved access to water and better irrigation facilities; has there been any noticeable change in the division of farm labor? What sort of farm activities are women generally involved in? If Yes, have the women benefitted from this change? (focus)

Q2. Are there any specific provisions for involvement of women in WUAs (like reservation of seats)? Also Please mention the extent of women involvement in WUAs. Are they involved in general decision makings (apart from gender issues), conflict resolutions, O&M, etc.? (validate)

Q3. Is there any specific training offered for women to enhance incomes? If Yes, Please mention the nos. conducted in last 3 financial years (validate)

## **SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges that you have faced and limitations that you see in this scheme?
- What are some of the suggestions that you would like to point out in order to improve this scheme so that it can give better results on the ground level for you?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



## Annexure 4 Primary Survey Guide – RRR

The primary survey guide for ‘Repair, Renovation and Restoration’ is provided below.

### 4.1 Discussion Guide for KII

#### 4.1.1 National level stakeholder - Senior Joint Commissioner: Department of Water Resources (DoWR) (MI Division)

##### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

##### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India’s policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **RRR**. Since you are a key



stakeholder in the scheme overseeing planning and implementation at the national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH RRR SCHEME**

#### **RESEARCHER TO NOTE:**

3. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
4. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

### **SECTION 1: DEEP DIVE INTO RRR SCHEME USING REESIE FRAMEWORK:**

#### **RELEVANCE**

#### **RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

**What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

Q1. Is there any output-outcome framework at RRR scheme level? If yes, please explain in detail.

Q2. Do all the scheme objectives like access to drinking water, capacity building, etc. have corresponding outcome parameters?

Q3. Which of the outcome parameter are tracked? What is the frequency of such tracking? Please provide tracking report.

**Do the scheme objectives as stated in the EFC note appear in the scheme guidelines?**



Q1. Are the scheme guidelines in alignment with scheme objectives in EFC note?

**Please share the EFC note for RRR.**

## EFFECTIVENESS

### **ET1: Is the scheme design appropriate to address scheme objectives?**

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1. Can you specify the key inputs, activities, outputs, and outcomes and impacts expected from the scheme?

Q2. What are the assumptions linking scheme outputs on one hand to realization of outcomes and impacts?

### **ET3 How has the scheme performed against scheme objectives and annual targets?**

**What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable?**

Q1. What is proposed planning process for the implementation of the scheme?

Q2. What measures are taken to ensure timely and effective planning process?

Q3. What are the limitations of the ongoing planning process?

Q4. What could be the desired improvements in the planning process? Please provide supporting evidence / case studies that may be the basis of your suggestions.

Q5. Are there any processes for mid-level course correction and incorporating feedbacks? If yes, provide details.

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1. Apart from the currently monitored structural and non-structural indicators, shall any indicator related to quality of water be included?

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1. Have there been any instances of delayed/ inadequate release of Central Assistance? If yes, mention the reasons

Q2. What are the positive and/ or negative factors relating to fund flow that have impacted scheme performance?



Q3. What are the reasons behind delay of central grants (if any)?

#### EFFICIENCY

##### **EC 2 Can the costs of the scheme be lowered?**

###### **Are there lower cost alternatives for achieving the scheme outcomes?**

Q1. How can the project cost be reduced without impacting the scheme objectives?

Q2. How can private sector (including CSR efforts, PPP) be leveraged to achieve scheme objectives?

###### **Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1. How is coordination ensured among central ministry, CWC field offices and state departments and districts to aid in convergence? Provide details.

###### **What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1. What measures could be taken to achieve convergence with other schemes like WDC, MGNREGA, MPLADS, restoration schemes under JNNURM, or with private sector / CSR funds etc.?

#### SUSTAINABILITY

##### **SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

###### **Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. What is the mechanism in place to ensure financial and institutional sustainability of the scheme?

Q2. How much funds have been spent on O&M state-wise in the last five years?

Q3. What are the funds available for O&M after project implementation and are they adequate?

##### **SS5 Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

###### **Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1. How is the environmental and social sustainability of the scheme ensured?

Q2. How can environmental and social sustainability be improved?

##### **SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

###### **What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. What are the main risks towards scheme realization under the following heads? Please provide details.

- Technical



- Institutional
- Financial
- Economic
- Social
- Political
- Environmental

Q2. Identify risk that have high probability of occurrence and / or high impact if the risk materializes.

Q3. What is the underlying mechanism to continued service under scheme in case of failure/breakdown?

### **Sustainability - Lack of micro level information on all depleted aquifers**

In addition to mapping of water bodies through WRIS and ongoing 6th Minor Irrigation Census, how do you suggest to monitor the condition of the restored water bodies over years?

## RELEVANCE

### **RL1: Is the scheme relevant in the present context?**

#### **Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1. Which key challenges does the RRR scheme address in respect of the water and agriculture sector in India?

Q2. Is the successful implementation of the scheme contributing towards SDG 2.3 (i.e. by 2030 double the agricultural productivity and the incomes of small-scale food producers, particularly women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment) and SDG 6 (Clean Water and sanitation)? Can you provide relevant data and / or studies that may have been done in this respect?

#### **What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1. What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) with respect to water and agriculture: sectoral challenge, beneficiary need, national priority and SDG?

### **Sustainability - Climate Change**

Q1. Do you think the scheme implementation would help in mitigating extreme climate events like flooding by creating additional storage? Provide evidence/ instance of any such evaluation.

Q2. Do you think there is a need for complementary measures like floodplain zoning? Please explain.

### **Quality - Lack of wastewater reuse & pollution abatement measures**

Q1. Do you think provisions for wastewater reuse and pollution abatement measures shall be incorporated in the scheme guidelines?



**RL2 Is it appropriate to continue / prioritize this scheme?**

**From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**

Q1. Are there any areas of priority that are not addressed by the scheme?

Q2. Why do you think the areas identified by you are of higher priority? Please explain with supporting reasons.

IMPACT

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. What are the expected long- term benefits of the scheme? Has DoWR conducted any impact assessment study after project completion?

If Yes, collect the reports

EQUITY

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Please share some evidence

Q2. Does the scheme have any significant impact in reducing societal equity? Please share some evidence

**EQ2 Is any weaker section of society excluded/accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1. Given that the scheme has no special provision for small and marginal farmers, is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits?

If so, what modifications are necessary to scheme design or implementation



## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability & Transparency - Monitoring Mechanisms**

Q1. Have there been instances of data inconsistencies during monitoring by independent agencies? How are such issues resolved?

### **Accountability and Transparency – Beneficiary involvement**

Q1. What are the steps undertaken to ensure beneficiary involvement across project planning, execution, monitoring and evaluation?

Q2. Has there been adequate level of involvement? Provide evidence.

### **Gender mainstreaming - Inclusiveness in scheme design/planning**

Q1. Does the scheme provide for any targeted action for the benefit of women, to promote societal equity? If yes, share some evidence depicting how RRR has promoted gender equity?

### **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population**

Q1. Is there a designated fund allocated for TSP and SCSP? To what extent was it utilised for RRR between 2015-19?

### **Use of IT/Technology in driving efficiency - Deployment of IT enabled mechanisms for monitoring of the Schemes**

Q1. Does RRR include a provision of geotagging of physical assets created/repared (eg: desilting)? To what extent is it implemented?

Provide evidence

Q2. Enlist the states that are using latest technologies for the implementation of RRR?

Provide details of the technologies being used and its outcome.

### **Use of IT/Technology in driving efficiency -Use of latest technology to improve efficiency and effectiveness of scheme implementation**

Q1. Enlist the technologies being used in the implementation and service delivery of RRR?

### **Stakeholder and Beneficiary behavioral change - Fund Allocation**

Q1. Is there a specifically allocated fund, within the scheme towards awareness generation and sensitization?

Q2. What percentage of it was utilized between 2015-19? Provide evidence.

Q3. What has been its direct impact on behavioral change? Can you provide an evidence/case study depicting the significance of behavioral change and awareness generation towards the success of RRR?

### **Research & Development - Fund Allocation**



Q1. What percentage of the total fund allocation within RRR is directed towards R&D?

Q2. How much of this percentage is currently being utilized for R&D?

**Reforms, Regulations - Adoption of models acts and reforms at governance, institutional and administrative level**

Q1. What measures are being undertaken to ensure effective implementation and compliance of adopted acts/rule/regulations within RRR?

(like in areas of safety, accountability, transparency etc.). Provide evidence/ best practices.

**Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme - Public-Private Partnership**

Q1 - Is there any ongoing PPP model with respect to RRR scheme? If yes, how well has that functioned and what are the challenges?

If no, could it be used to increase the scheme efficiency and realize its outcomes?

**Development, dissemination & adoption of innovative practices, technology & know-how - Fund allocation towards promotion of innovation**

Q1. What percentage of the total funds is allocated towards development, dissemination and adoption of innovative technologies? How much of it is utilized?

**SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner? How do you suggest prioritisation of these measures?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



## 4.1.2 National level stakeholder - Chief Engineer: Central Water Commission (Irrigation Management Organization)

### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **RRR**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.



- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH RRR SCHEME**

#### **RESEARCHER TO NOTE:**

5. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
6. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

### **SECTION 1: DEEP DIVE INTO RRR SCHEME USING REESIE FRAMEWORK:**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

#### **EFFECTIVENESS**

#### **ET1: Is the scheme design appropriate to address scheme objectives?**

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1. Considering irrigation management, can you mention the limitations of the scheme design and underlying assumptions? Please elaborate with examples and relevant data.

Q2. Do you suggest any change in the result chains (like inputs, activities, outputs, outcomes, impacts) for a more effective irrigation management?

#### **ET3 How has the scheme performed against scheme objectives and annual targets?**

**What is the planning process proposed under the scheme? Is the planning process adequately and effective followed? If not, what improvements are desirable?**

Q1. After the provision of RRR and water availability through structures repaired/renovated/restored under the scheme, is conjunctive water-use planning done for irrigation? If yes, how is it ensured? Give details. If not, what are the reasons?

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**



Q1. With emphasis on irrigation management, what have been the key bottlenecks, issues & challenges in the implementation of the scheme? Please explain them in some detail.

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1. Apart from the currently monitored structural and non-structural indicators, what additional indicators should be included to assess progress of the scheme, with respect to providing access to irrigation?

Q2. Do you think there is a need to include any indicator related to quality of water?

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (state or time period) and mention the relative impact of each factor on performance?**

Q1. What are the positive factors that have enhanced scheme performance, with regards to increased agricultural productivity, groundwater recharge and increased storage in surface water bodies?

Categorize them as universal (across states, across years) and specific (state or time period) and mention the relative impact of each factor on performance with supporting evidence?

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1. Apart from above mentioned factors, what additional factors could be undertaken to improve the scheme performance? Provide rationale for your suggestions.

Q2. What would be the potential impact of these interventions and how should they be prioritized for maximum impact?

**How can the scheme design be modified to recognize/ replicate the positive factors and enhance performance?**

Q1. Which positive factors can be replicated to enhance the scheme performance:

- a) De-siltation
- b) Catchment area development
- c) Command area development
- d) Any other factors

Provide success stories.



**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (state or time period) and mention the relative impact of each factor on performance?**

Q1. What are the negative factors that have reduced scheme performance under the following heads:

- a) Increased agricultural productivity
- b) Groundwater recharge
- c) Increased storage in surface water bodies

Categorize the negative factors into universal (across states, across years) and specific (state or time period) and mention the relative impact of each factor on performance?

**How can the scheme design be modified to mitigate the negative factors?**

Q1. What modifications in the scheme design can mitigate the negative factors? Provide justifications

EFFICIENCY

**EC 2 Can the costs of the scheme be lowered?**

**Are there lower cost alternatives for achieving the scheme outcomes?**

Q1. How can the project cost be reduced without impacting the scheme objectives?

Q2. How can private sector (including CSR efforts, PPP) be leveraged to achieve scheme objectives?

SUSTAINABILITY

**SS5 Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1. How is the environmental and social sustainability of the scheme ensured?

Q2. How can environmental and social sustainability be improved?

RELEVANCE

**RL1: Is the scheme relevant in the present context?**

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1. Which key challenges does the RRR scheme address with respect to irrigation disparities and its management?

Q2. Is the successful implementation of the scheme contributing towards SDG 2.3 (i.e. by 2030 double the agricultural productivity and the incomes of small-scale food producers, particularly women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other



productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment) and SDG 6 (Clean Water and sanitation)?

Can you provide relevant data and / or studies that may have been done in this respect?

### **Access – Gap in irrigation coverage**

Q1. Is the irrigation type (rainfed/irrigated) in the catchment area considered while selecting sites for RRR?

Q2. Are areas under rainfed irrigation given a priority?

### **What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1. What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes), considering national priority with respect to irrigation?

## **RL2 Is it appropriate to continue / prioritize this scheme?**

### **What would be the impact if the scheme were to be scaled down or stopped?**

Q1. Considering irrigation management, what would be the impact of continuation/ acceleration or shutting up/ scaling down of the scheme? Please explain your answer with supporting evidence.

Q2. Are there any alternative schemes having similar impact on irrigation? If yes, can you share some data/information about it?

Q3. Have there been any instances of duplication of activities with other schemes? If no, how are the interventional areas segregated? If yes, how can the duplication be avoided?

### **From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**

Q1. Are there any areas of priority with respect to irrigation management that are not addressed by the scheme?

Q2. Why do you think the areas identified by you are of higher priority? Please explain with supporting reasons.

#### **IMPACT**

Q3. Have there been any studies to assess the impact of the scheme on:

- a) SDG 2.3
- b) SDG 6
- c) Water conservation
- d) Preventing soil erosion
- e) Increasing ground water levels
- f) Increasing employment
- g) Improving water quality
- h) Income augmentation of farmers
- l) Increasing crop productivity and promoting agricultural diversification



## EQUITY

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Does the scheme have any significant impact in impacting societal equity, with regards to irrigation?  
Can you provide some example?

**EQ2 Is any weaker section of society excluded/accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1. Given that the scheme has no special provision for small and marginal farmers, is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits, with emphasis on access to minor irrigation?  
If so, what modifications are necessary to scheme design or implementation

## SECTION 2: CROSS SECTIONAL THEMES

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability and Transparency – Beneficiary involvement**

Q1. What are the steps undertaken to ensure beneficiary involvement during project monitoring? Are the scheme guidelines which ensure adequate involvement of the beneficiary ensured? (Eg: Social audit to be done by the Gram Sabha)

Q2. Has there been adequate level of involvement? Could you help us understand this better by some instances and evidence?

### **Sustainability - Climate Change**

Q1. Do you think the scheme, based on its current guidelines, would be an aid in mitigating extreme climate events like flooding and droughts? Provide reasons?

Q2. Do you think there is a need for complementary measures like floodplain zoning? Please explain.

### **Quality - Lack of wastewater reuse & pollution abatement measures**



Q1. Do you see the need to incorporate provisions for wastewater reuse and pollution abatement measures in the scheme guidelines? Give reasons.

### Sustainability - Climate Change

Q1. To what extent do you think the scheme has helped in providing sustainable irrigation during extreme climatic conditions like floods and droughts?

Provide evidence/ instance of any such evaluation.

### SECTION 3: CHALLENGES AND SUGGESTIONS

- Broadly, what are the main challenges/ limitations that you see in this scheme, **considering irrigation management?**
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner? How do you suggest its prioritisation?

SUGGESTIONS AND CORRECTIVE MEASURES	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

### 4.1.3 National level stakeholder - Advisor: NITI Aayog

#### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_



- Can you give an example of \_\_\_\_?
- What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_ that made you decide to \_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

### **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **RRR**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.



## PROFILE OF THE STAKEHOLDER

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH RRR SCHEME

### RESEARCHER TO NOTE:

7. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
8. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

## SECTION 1: DEEP DIVE INTO RRR SCHEME USING REESIE FRAMEWORK:

Q1. Could you please provide an overview of the scheme in terms of its objectives?

### RELEVANCE

#### RL1: Is the scheme relevant in the present context?

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1. Which key challenges does the RRR scheme address in respect of the water and agriculture sector in India?

Q2. Is the successful implementation of the scheme contributing towards SDG 2.3 (i.e. by 2030 double the agricultural productivity and the incomes of small-scale food producers, particularly women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment) and SDG 6 (Clean Water and sanitation)? Can you provide relevant data and / or studies that may have been done in this respect?

#### **What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1. What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) with respect to water and agriculture: sectoral challenge, beneficiary need, national priority and SDG?

#### RL2 Is it appropriate to continue / prioritize this scheme?

**From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**

Q1. Are there any areas of priority that are not addressed by the scheme?



Q2. Why do you think the areas identified by you are of higher priority? Please explain with supporting reasons.

## SECTION 2: CROSS SECTIONAL THEMES

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### Quality - Lack of wastewater reuse & pollution abatement measures

Q1. Do you think there is a need to incorporate provisions for wastewater reuse and measures for pollution abatement in the scheme guidelines?

### Sustainability - Climate Change

Q1. Do you think the scheme, based on its current guidelines, would be an aid in mitigating extreme climate events like flooding and droughts? Provide reasons?

Q2. Do you think there is a need for complementary measures like floodplain zoning? Please explain.

## SECTION 3: CHALLENGES AND SUGGESTIONS

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner? How do you suggest prioritisation of these measures?

*to the questions we have asked?*

SUGGESTIONS AND CORRECTIVE MEASURES	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

### 4.1.4 National level stakeholder - FAO Representative in India

#### GENERAL GUIDELINES:



- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **RRR**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.



## PROFILE OF THE STAKEHOLDER

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH RRR SCHEME

### RESEARCHER TO NOTE:

9. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.
10. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.

## SECTION 1: DEEP DIVE INTO RRR SCHEME USING REESIE FRAMEWORK:

Q1. Could you please provide an overview of the scheme in terms of its objectives?

### EFFECTIVENESS

#### ET1: Is the scheme design appropriate to address scheme objectives?

Q1. Based on data available at/ collected by FAO, has the implementation of RRR scheme resulted in:

- a) Enhancement in yield/productivity for Rabi/Kharif and other crops
- b) Increase in the income of farmers, separately for Rabi and Kharif/other crops?
- c) Change in power consumption separately for Rabi/Kharif/other crops
- g) Employment generation (skilled as well as unskilled, especially unemployed youth for installation and maintenance of RRR system)
- h) Increase in surface and ground water storage?

If yes, mention some pilot studies/ best practices. Collect case study report.

### RELEVANCE

#### RL1: Is the scheme relevant in the present context?

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1. Which key challenges does the RRR scheme address in respect of the water and agriculture sector in India?

Q2. Is the successful implementation of the scheme contributing towards SDG 2.3 (i.e. by 2030 double the agricultural productivity and the incomes of small-scale food producers, particularly women, indigenous



peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment) and SDG 6 (Clean Water and sanitation)? Can you provide relevant data and / or studies that may have been done in this respect?

**RL2 Is it appropriate to continue / prioritize this scheme?**

**From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**

Q1. Are there any areas of priority that are not addressed by the scheme?

Q2. Why do you think the areas identified by you are of higher priority? Please explain with supporting reasons.

**SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Quality - Lack of wastewater reuse & pollution abatement measures**

Q1. Do you think there is a need to incorporate provisions for wastewater reuse and measures for pollution abatement in the scheme guidelines?

**Sustainability - Climate Change**

Q1. Do you think the scheme, based on its current guidelines, would be an aid in mitigating extreme climate events like flooding and droughts? Provide reasons?

Q2. Do you think there is a need for complementary measures like floodplain zoning? Provide supporting literature/research studies if any?

**SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design and convergence point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner? How do you suggest prioritisation of these measures?



<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

### **THANK AND END**

#### 4.1.5 National level stakeholder - Officer, IWMI, India Officer

##### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

##### **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO),



NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **RRR**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

#### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH RRR SCHEME**

##### **RESEARCHER TO NOTE:**

11. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.

12. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.

#### **SECTION 1: DEEP DIVE INTO RRR SCHEME USING REESIE FRAMEWORK:**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

##### EFFECTIVENESS

**ET1: Is the scheme design appropriate to address scheme objectives?**

Q1. Based on data available at/ collected by IWMI, has the implementation of RRR scheme resulted in:

a) Enhancement in yield/productivity for Rabi/Kharif and other crops



- b) Increase in the income of farmers, separately for Rabi and Kharif/other crops?
  - c) Change in power consumption separately for Rabi/Kharif/other crops
  - g) Employment generation (skilled as well as unskilled, especially unemployed youth for installation and maintenance of RRR system)
  - h) Increase in surface and ground water storage?
- If yes, mention some pilot studies/ best practices. Collect case study report

## RELEVANCE

### **RL1: Is the scheme relevant in the present context?**

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1. Which key challenges does the RRR scheme address in respect of the water and agriculture sector in India?

Q2. Is the successful implementation of the scheme contributing towards SDG 2.3 (i.e. by 2030 double the agricultural productivity and the incomes of small-scale food producers, particularly women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment) and SDG 6 (Clean Water and sanitation)? Can you provide relevant data and / or studies that may have been done in this respect?

### **RL2 Is it appropriate to continue / prioritize this scheme?**

**From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**

Q1. Are there any areas of priority that are not addressed by the scheme?

Q2. Why do you think the areas identified by you are of higher priority? Please explain with supporting reasons.

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Quality - Lack of wastewater reuse & pollution abatement measures**

Q1. Do you think there is a need to incorporate provisions for wastewater reuse and measures for pollution abatement in the scheme guidelines?

### **Sustainability - Climate Change**

Q1. Do you think the scheme, based on its current guidelines, would be an aid in mitigating extreme climate events like flooding and droughts? Provide supporting literature/research if any?



Q2. Do you think there is a need for complementary measures like floodplain zoning? Please explain.

**SECTION 3: CHALLENGES AND SUGGESTIONS**

1. Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
2. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

4.1.6 State level stakeholder - Chief Engineer, Irrigation and Water Resources Department

**GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?



- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said\_\_\_\_\_ but it also seems like\_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **RRR**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH RRR SCHEME**

### **RESEARCHER TO NOTE:**

*13. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*

*14. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.*



## SECTION 1: DEEP DIVE INTO PDMC SCHEME USING REESIE FRAMEWORK:

Q1. Could you please provide an overview of the scheme in terms of its objectives?

EFFECTIVENESS

### ET1: Is the scheme design appropriate to address scheme objectives?

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

**Is there evidence that assumptions have been tested and are valid?**

Q1. Has the implementation of RRR scheme resulted in positive outcomes in the state:

- Enhancement in yield/productivity for Rabi/Kharif and other crops
- Increase in the income of farmers, separately for Rabi and Kharif/other crops?
- Change in power consumption separately for Rabi/Kharif/other crops
- g) Employment generation (skilled as well as unskilled, especially unemployed youth for installation and maintenance of RRR system)
- h) Increase in surface and ground water storage?

Mention some pilot studies/ best practices. Collect case study report.

Q2. Were any capacity building trainings conducted as a part of scheme implementation? Provide evidence.

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1. Can you mention the limitations of the scheme design and underlying assumptions? Please elaborate with examples and relevant data.

Q2. Do you suggest any change in the result chains (like inputs, activities, outputs, outcomes, impacts) for more effective implementation?

### ET2: How are scheme targets set and monitored?

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. What are the scheme target in the state and who is responsible for setting these targets? As indicated in the scheme guidelines, were the ground water levels and hydrological features in the region considered while selecting the water bodies?

If yes, collect report of the study.

Q2. How and by whom is the scheme monitored?

Q3. Has state Irrigation Department/ Water Resources department conducted any impact assessment study after project completion?

If Yes, collect the reports



Q4. How frequently CWC field officers conduct site visits to monitor the targets achieved by the state? Is the frequency and depth of monitoring adequate?

Q5. How is the physical validation of IPC and storage created validated?

Q6. Are project level data maintained or does the states only provide cluster/ state level data?

Q7. Does the project implementation schedule, monitoring & evaluation and arrangement for use and maintenance of the restored water bodies aligns with what is mentioned in the DPR?

**Collect DPR, reports on implementation, M&E report of sample completed project.**

**What information is contained in utilization certificate issued by state govt? Are they credible and can they be relied upon as an indicator of scheme progress?**

Q1. What information is contained in the utilization certificate? Is it mandatorily submitted to the center before seeking assistance?

**Collect a utilization certificate.**

Q2. What are the common checks carried out to ensure that money was actually utilised for the purpose intended?

### **ET3 How has the scheme performed against scheme objectives and annual targets?**

**What is the year wise scheme targets, if any, for the period 2015-16 onwards?**

Q1. What was the target in terms of irrigation potential, repair, renovation & restoration of water sources etc., at state level, for 2015-2019 period?

Q2. What was the physical and financial target, at state level, for 2015-2019 period?

**What is the state wise, year wise performance against target?**

Q1. What is the performance of the state against target? **Collect progress report**

Q2. How have the districts performed in terms of irrigation potential, repair, renovation & restoration of water sources etc. during 2015-2019 period?

Q3. How have the districts performed in terms of financial target during 2015-2019 period?

**Identify states that have performed well? What are the underlying reasons for such performance? (Rajasthan)**

Q1. What have been the underlying reasons for good performance of the RRR scheme in your state (if applicable)?

**Identify states that have performed poorly? What are the underlying reasons for such performance? (Tamil Nadu, Uttar Pradesh)**

Q1. What have been the underlying reasons for slow pace of work under RRR schemes in your state (if applicable)?

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. What are the key bottlenecks, issues & challenges in the implementation of the scheme? Please explain them in some detail.



Q2. Have there been any issues of resource crunches (like fund, manpower)? Please provide supporting evidence with respect to your answer.

Q3. Has there been any issue in constitution and formation of District Level Implementation Agency? Please share some information.

**What is the planning process proposed under the scheme? Is the planning process adequately and effective followed? If not, what improvements are desirable.**

Q1. Does the current planning in the state, strictly follow the scheme guidelines?

Q2. Was the technical advisory committee constituted to select and approve the detailed project? Provide evidence.

Q3. How do you suggest improvements in the planning process?

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1. Apart from the currently measured structural and non-structural indicators, what could be additional indicators for assessing the progress of the scheme?

Q2. Do you think there is a need to include an indicator related to quality of water? Explain.

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (state or time period) and mention the relative impact of each factor on performance?**

Q1. What are the positive factors that have enhanced scheme performance specifically in your state? Can you mention evidence based relative impact of each factor on performance?

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1. Apart from above mentioned factors, what additional factors could be undertaken to improve the scheme?

Q2. What would be the potential impact of these interventions and how should they be prioritized for maximum impact? Provide reasons

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1. Which positive factors can be replicated in other states to enhance the scheme across:

a) De-siltation



b) Catchment area development

c) Command area development

**Could you help us understand better with some success stories?**

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. What are the negative factors that have reduced scheme performance in the state? Mention the relative impact of each factor on performance?

**How can the scheme design be modified to mitigate the negative factors?**

Q1. What modifications in the scheme design do you suggest to mitigate the negative factors?

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1. Provide project-wise details on:

- a) When was the fund requested from center?
- b) When were the funds received by state?
- c) When were the funds released by state to the district?

Q2. Has there been any instance of delayed/ inadequate release of Central Assistance? If yes, mention the reasons?

Q3. What are the positive and / or negative financial factors that have impacted scheme performance? Provide evidence

Q4. What are the reasons behind delay of fund flow (If any):

- a) Central Assistance
- b) State share

Q5. As per the scheme guidelines, did the state government transfer the grant received by the GOI to the project implementing authority within 15 days of its receipt? Provide evidence.

**Was there timely utilization of available funds? If not, what were the reasons?**

Q1. What are the details of the fund utilized at the end of each year and the timeline between release and utilization?

Q2. Was there timely utilization of available funds? If not, what were the reasons? Have there been instance of the grant component being converted to loan due to delay in fund utilization?

Q3. Did the state government provide the audit of the expense incurred within 9 months of the assistance release by the central government provided?

Please share the audit report.

EFFICIENCY

**EC 1 Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**



Q1. Was the cost benefit analysis conducted by the state? **If yes**, can you share the report and mention the methodology you followed.

**Can you fill the following template on projected C-B analysis?**

Cost Components			
Agricultural Input Cost		RRR (Post project)	Conventional (Pre-project)
Human Resource (Labour)	Rabi		
	Kharif		
	Other Crops		
Irrigation costs (water and electricity)	Rabi		
	Kharif		
	Other Crops		
Pesticides/Insecticides	Rabi		
	Kharif		
	Other Crops		
Fertilizer and Manure	Rabi		
	Kharif		
	Other Crops		
Seeds	Rabi		
	Kharif		
	Other Crops		
Other costs (Land preparation and harvesting)	Rabi		
	Kharif		
	Other Crops		
Total		0	0
<b>Expenditure towards RRR</b>			
Cost of RRR			
Depreciation @ 10%			
Interest @ 10%			
Repair & Maintenance @ 2%			



<b>Total Annual Expenses towards RRR System</b>			
Total Annual Expenditure			
<b>Benefit Components</b>			
<b>Output</b>		<b>RRR (Post project)</b>	<b>Conventional (Pre-project)</b>
Cost incurred for access to drinking water			
Yield (kg/ha)	Rabi		
	Kharif		
	Other Crops		
Rate (Rs/kg)	Rabi		
	Kharif		
	Other Crops		
Irrigated area of the crop (ha)	Rabi		
	Kharif		
	Other Crops		
Income (Rs.)	Rabi		
	Kharif		
	Other Crops	0	0
Savings (Income - input cost)	Rabi	0	0
	Kharif		
	Other Crops		
<b>Additional Benefit due to RRR</b>		0	
<b>Additional cost due to RRR</b>		0	
<b>Gross Benefit-Cost Ratio</b>			

Q2. What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?

Q3. Has there been any state-specific study to assess the impact of the scheme on agricultural outcomes?

If yes, share the report/data.

**What are the costs of the scheme? What is the monetary value of all costs?**



Q1. Were the socio-economic and environmental costs calculated for the scheme? If yes, please share details/reports.

## **EC 2 Can the costs of the scheme be lowered?**

### **Are there lower cost alternatives for achieving the scheme outcomes?**

Q1. How can the project cost be reduced without impacting the scheme objectives?

Q2. Have there been any instance of private sector (including CSR efforts, PPP) involvement to achieve scheme objectives?

### **Is there adequate coordination between ministries (or departments as applicable) in the execution of such that resources are used efficiently?**

Q1. How is convergence across various ongoing schemes and different departments like water resources, rural development, municipal corporations etc. ensured?

Q2. As specified under RRR guidelines:

a) Are ODF villages and towns/ villages covered under Saansad Adarsh Gram Yojana given a priority for RRR implementation? **Provide evidence**

b) Are water bodies whose catchment areas falls under treated/proposed to be treated under IWMP in the next 2 years given a priority? **Provide evidence**

c) Is convergence sought with any other ongoing scheme? **Provide evidence**

Q3. What are the gaps in the level of coordination/conflicts between center, state and district, which limit convergence?

### **What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

1. What could be efforts to achieve convergence with other schemes like WDC, MGNREGA, MPLADS, restoration schemes under JNNURM, etc.?

SUSTAINABILITY

## **SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

### **Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. What is the mechanism in place to ensure financial and institutional sustainability of the scheme?

Q2. Who is responsible for O&M during and after project implementation?

Q3. How much funds have been spent on O&M project-wise in the last five years in the state?

Q4. What are the funds available for O&M after project implementation and are they adequate?



**SS5 Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1. What provisions are undertaken to ensure the environmental and social sustainability of the scheme ensured?

Q2. How do you suggest environmental and social sustainability be improved?

**SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. What have been the main reasons behind project failures under the following heads. Please provide details.

- a) Technical
- b) Institutional
- c) Financial
- d) Economic
- e) Social
- f) Political
- g) Environmental

Q2. Identify risks that have high probability of occurrence and / or high impact if the risk materializes.

Q3. What is the underlying mechanism to continued service under scheme in case of failure/breakdown?

**Sustainability - Poor O&M and lack of financing**

Q1. What measures have been taken to ensure adequate O&M and sustainability of assets created?

Q2. Has there been any instance where water body refurbished under RRR became dysfunctional due to poor O&M? If yes, give reasons for the same.

Q3. Are there measures that can be taken to make the scheme financially sustainable (e.g. provision of recreation activities, etc.)?

**Quality - Lack of wastewater reuse & pollution abatement measures**

Q1. Are there pollution abatement measures under place to check deteriorating water quality in the water bodies? Is yes, explain with supporting evidence.

**Sustainability – Poor O&M and lack of financing**



Q1. Though institutional strengthening is a major component of the scheme, has there been any instance where water body refurbished under RRR became dysfunctional due to poor O&M?

If yes, give reasons for the same.

Q2. Do you see the scheme as financially sustainable without any external aid? Give reasons

## RELEVANCE

### **RL1: Is the scheme relevant in the present context?**

#### **Access - Gap in irrigation coverage**

Q1. Is the irrigation type (rain-fed/irrigated) in the catchment area considered while selecting sites for RRR?

Q2. Are areas under rain-fed irrigation given a priority? If yes, please explain the reasons and provide evidence in support.

### **RL2 Is it appropriate to continue / prioritize this scheme?**

#### **What would be the impact if the scheme were to be scaled down or stopped?**

Q1. What would be the state-specific impact of continuation/ acceleration or shutting up/ scaling down of the scheme? Please explain your answer with supporting evidence.

Q2. Are there any alternative schemes, serving similar purpose in the state? If yes, can you share some data/information about it?

Q3. Is there any duplication of activities under difference schemes in this state? If no, how the interventional areas are different across these different schemes? If yes, how can the duplication be avoided?

## IMPACT

### **IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

#### **Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas?**

Q1. Have there been any state-specific studies to assess the impact of the scheme on:

- a) SDG 2.3
- b) SDG 6
- c) Water conservation
- d) Preventing soil erosion
- e) Increasing ground water levels
- f) Increasing employment
- g) Improving water quality



- h) Income augmentation of farmers
- l) Increasing crop productivity and promoting agricultural diversification

## EQUITY

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Has the scheme had any significant impact in reducing societal equity? Please share some evidence.

**EQ2 Is any weaker section of society excluded/accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1. Have there been instances of any weaker section of society being excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits?

If so, what modifications do you suggest to scheme design or implementation?

## SECTION 2: CROSS SECTIONAL THEMES

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability & Transparency – Monitoring mechanism**

Q1. Was any external agency engaged for scheme monitoring by the state? If yes, provide details of its findings?

Q2. Have there been any instances of inconsistencies between the data reported by the district to state and what was found by independent agencies? In any such case, how is it resolved?

### **Beneficiary involvement**

Q1. What are the steps undertaken to ensure beneficiary involvement across project planning, execution, monitoring and evaluation?

Q2. Has there been adequate level of involvement? Provide evidence.

### **Financial Accountability**



Q1. Have there been any instances of using innovative funding mechanisms in the state: Example use of CSR funds, utilizing funds under National Rural Employment Guarantee act? If yes, provide details.

Q2. What additional funding mechanism can be used for the realization of scheme objectives?

### **Beneficiary involvement**

Q1. What are the steps undertaken to ensure beneficiary involvement across project planning, execution, monitoring and evaluation?

Q2. Has there been adequate level of involvement? Provide evidence.

### **Gender mainstreaming - Inclusiveness in scheme design/planning**

Q1. Does the scheme provide for any targeted action for the benefit of women to promote societal equity? Can you provide an evidence/case study depicting successful implementation of RRR and how it has led to gender equity?

### **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population - Inclusion of vulnerable groups in scheme as well as sector**

Q1. Have you undertaken an activity to analyse the problems faced by SCs/STs in your State? If yes, please provide details of the findings?

Q2. Whether SCA to TSP/SCA to SCSP has been implemented in your state or not? If implemented,

- a) What are the activities/interventions being undertaken for SCs and STs which are being funded through SCSP and TSP?
- b) What are the irrigation structures being constructed by the government under SCA to TSP/SCA to SCSP?
- c) Are the farmers being provided any subsidy/incentive for irrigation under SCA to TSP/SCA to SCSP?
- d) Does Krishi Vikas Kendra (KVK) implement Hands-on training/workshops/awareness programmes? If yes, what are the skill development and other irrigation-related trainings being conducted by KVKs under SCA to TSP/SCA to SCSP?
- e) What type of Multi-sector Support and Advisory services are being provided by KVKs to farmers under SCA to TSP/SCA to SCSP?
- f) Is there any other Agriculture Research Organization apart from KVK conducting trainings under SCA to TSP/SCA to SCSP?



- g) What are the steps taken to monitor the SCA to TSP/SCA to SCSP activities at the State level?
- h) How do you measure the impact under SCA to TSP/SCA to SCSP?
- i) What are the issues in the CSS? (Probe for top 5 issues)
- j) Please share recommendations to improve the impact of SCA to TSP/SCA to SCSP?

### **Use of IT/Technology in driving efficiency - Deployment of IT enabled mechanisms for monitoring of the Scheme**

Q1 - Is geotagging and use of geotagged photographs being done at your state for water bodies refurbished under RRR? Please provide some evidences.

### **Use of latest technology to improve efficiency and effectiveness of scheme implementation**

Q1. What technologies are being used to improve the efficiency and implementation of RRR in the state? Can you provide supporting evidence/case study?

### **Technology to address key challenge**

Q1. What technologies are available to address the key challenges facing RRR in the state? Are there any constraints towards its adoption? Provide evidence

### **Contribution of improved practices in increasing outcomes**

Q1. What are the direct impacts of technology adoption on scheme and sector outcomes? Provide evidence.

### **Reforms, Regulations - Adoption of models acts and reforms at governance, institutional and administrative level**

Q1. What measures are being undertaken at state level to ensure effective implementation and compliance of adopted acts/rule/regulations within RRR?  
(like in areas of accountability and transparency)

### **Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme- Public-Private Partnership**

Q1 - Is there any ongoing PPP model towards realization of RRR scheme?  
If yes, how well has that functioned and what are the challenges?  
If no, could it be used to increase the scheme efficiency and realize its outcomes?

### **FPOs/SHGs/Cooperative's Participation**

Q1. Have any community/ collective/ cooperatives/ civil society in the state availed benefit within RRR? If yes, how many? Could you please provide some details?

### **Any best practice**



Q1. Can you provide an evidence/case study depicting the role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society towards successful implementation of RRR?

**SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the state-specific challenges/ limitations that you see in this scheme of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

**4.1.7 State level stakeholder - Secretary: Irrigation and Water Resources Department**

**GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_that made you decide to\_\_\_\_\_?



- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said\_\_\_\_\_ but it also seems like\_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **RRR**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH RRR SCHEME**

### **RESEARCHER TO NOTE:**

15. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.

16. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.



## SECTION 1: DEEP DIVE INTO PDMC SCHEME USING REESIE FRAMEWORK:

Q1. Could you please provide an overview of the scheme in terms of its objectives?

### EFFECTIVENESS

#### **ET3 How has the scheme performed against scheme objectives and annual targets?**

##### **What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. What are the key bottlenecks, issues & challenges in the implementation of the scheme? Please explain them in some detail.

Q2. Have there been any issues of resource crunches (like fund, manpower)? Please provide supporting evidence with respect to your answer.

Q3. Has there been any issue in constitution and formation of District Level Implementation Agency? Please share some information.

#### **ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

##### **Was there timely utilization of available funds? If not, what were the reasons?**

Q1. What are the details of the fund utilized at the end of each year and the timeline between release and utilization?

Q2. Was there timely utilization of available funds? If not, what were the reasons? Have there been instance of the grant component being converted to loan due to delay in fund utilization?

Q3. Did the state government provide the audit of the expense incurred within 9 months of the assistance release by the central government provided?

Please share the audit report.

### EFFICIENCY

#### **EC 1 Did the benefits of the scheme exceed costs?**

Q1. What has been the impact of the scheme on agricultural outcomes?

Q2. Has there been noticeable increase in ground water level, after scheme implementation?

Q3. Has there been noticeable increase in access to quantity and quality of drinking water?

### SUSTAINABILITY



**SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

- Q1. What is the mechanism in place to ensure financial and institutional sustainability of the scheme?
- Q2. What are the funds available for O&M after project implementation and are they adequate?

RELEVANCE

**RL1: Is the scheme relevant in the present context?**

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

- Q1. Does RRR tackle any key challenges across water and agriculture in the state? Please explain how?
- Q2. Is the successful implementation of the scheme contributing towards SDG 2.3 (i.e. -by 2030 double the agricultural productivity and the incomes of small-scale food producers, particularly women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment) and SDG 6 (**Clean Water and sanitation**)?  
Can you provide relevant data and / or studies that may have been done in your state in this respect?

**RL2 Is it appropriate to continue / prioritize this scheme?**

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

- Q1. Are there any state-specific interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority and SDG?

**From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**

- Q1. Considering your state, what are the priority areas in the sector, which are more important than those addressed by the scheme?
- Q2. Why are these with more priority over those addressed by the scheme?

**Sustainability – Climate Change**

- 1. To what extent do you think the scheme has helped in mitigating extreme climate events like flooding? Provide evidence/ instance of any such evaluation.
- 2. Do you think there is a need for complementary measures like floodplain zoning?

**SECTION 2: CROSS SECTIONAL THEMES**



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**Development, dissemination & adoption of innovative practices, technology & know-how - Fund allocation towards promotion of innovation**

Q1. What percentage of the total funds is allocated towards development, dissemination and adoption of innovative technologies? How much of it is utilized?

**Stakeholder and Beneficiary behavioral change - Fund Allocation**

Q1. Did center allocate fund specifically for awareness generation and sensitization within the scheme?

Q2. What percentage of it was utilized between 2015-19? Provide evidence.

Q3. What has been its direct impact on behavioural change?

**Reforms, Regulations - Adoption of models acts and reforms at governance, institutional and administrative level**

Q1. What measures are being undertaken at state level to ensure effective implementation and compliance of adopted acts/rule/regulations within RRR?

(like in areas of accountability and transparency)

**SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the state-specific challenges/ limitations that you see in this scheme, considering irrigation and water management at the state?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



#### 4.1.8 State level stakeholder - Director: State Watershed Department

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  - What happened next?
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- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

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### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH RRR SCHEME**

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### **SECTION 1: DEEP DIVE INTO PDMC SCHEME USING REESIE FRAMEWORK:**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

#### EFFECTIVENESS

#### **ET3 How has the scheme performed against scheme objectives and annual targets?**

##### **What is the state wise, year wise performance against target?**

Q1. What is the performance of the state against target? **Collect progress report**

Q2. How have the districts performed in terms of watershed development during 2015-2019 period?

Q3. How have the districts performed in terms of financial target during 2015-2019 period?

##### **What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1. Apart from the currently measured structural and non-structural indicators, what could be additional indicators for assessing the progress of the scheme?

Q2. Do you think there is a need to include an indicator related to quality of water? Explain.

#### RELEVANCE

#### **RL1: Is the scheme relevant in the present context?**

##### **Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**



## Sustainability – Climate Change

Q1. To what extent do you think the scheme has helped in mitigating extreme climate events like flooding?

Provide evidence/ instance of any such evaluation.

Q2. Do you think there is a need for complementary measures like floodplain zoning?

### **RL2 Is it appropriate to continue / prioritize this scheme?**

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

## Quality- Lack of wastewater reuse and pollution abatement measures

Q1. Do you think provisions for wastewater reuse and pollution abatement measures shall be incorporated in the scheme guidelines?

### SECTION 2: CHALLENGES AND SUGGESTIONS

1. Broadly, what are the state-specific challenges/ limitations that you see in this scheme, considering irrigation and water management at the state?
2. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

## 4.1.9 State level stakeholder - Secretary, Agriculture Department

### GENERAL GUIDELINES:



- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **RRR**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.



## PROFILE OF THE STAKEHOLDER

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH RRR SCHEME

### RESEARCHER TO NOTE:

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20. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.

### SECTION 1: DEEP DIVE INTO PDMC SCHEME USING REESIE FRAMEWORK:

Q1. Could you please provide an overview of the scheme in terms of its objectives?

#### EFFECTIVENESS

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

#### Water security – Agriculture Sector contribution

Q1. Have the number of private borewell connections increased after scheme implementation

How can the scheme design be modified to mitigate the negative factors?

Q2. What modifications in the scheme design can mitigate the negative factors?

#### EFFICIENCY

**EC 1 Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. What has been the impact of the scheme on agricultural outcomes? Provide evidence.

Q2. Has there been noticeable increase in ground water level, after scheme implementation? How had that impacted agricultural yield?

#### EQUITY

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**



**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Has the scheme had any significant impact in reducing societal equity, with respect to agriculture?  
Please share some evidence

**SECTION 2: CHALLENGES AND SUGGESTIONS**

1. Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
2. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



#### 4.1.10 State level stakeholder - Chief Engineer: State Groundwater Department

##### GENERAL GUIDELINES:

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- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH RRR SCHEME**

#### **RESEARCHER TO NOTE:**

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### **SECTION 1: DEEP DIVE INTO PDMC SCHEME USING REESIE FRAMEWORK:**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

#### **Water security – Agriculture Sector contribution**

Q1. What has been the change in groundwater levels since the scheme implementation? Provide evidence.

Q2. Does the groundwater data capture seasonal fluctuation before and after scheme implementation?

Q3. Have the number of private borewell connections increased after scheme implementation

How can the scheme design be modified to mitigate the negative factors?

Q4. What modifications in the scheme design can mitigate the negative factors?

### **SECTION 2: CHALLENGES AND SUGGESTIONS**

1. Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
2. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?



<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

### **THANK AND END**

#### 4.1.11 District level stakeholder - District Level Implementation Agency (DLIA)

##### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
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Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **RRR**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the district level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
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- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

#### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH RRR SCHEME**

##### **RESEARCHER TO NOTE:**

*23. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*

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#### **SECTION 1: DEEP DIVE INTO PDMC SCHEME USING REESIE FRAMEWORK:**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

##### EFFECTIVENESS

#### **ET3 How has the scheme performed against scheme objectives and annual targets?**

##### **What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. What are the key bottlenecks, issues & challenges faced by DLIA in the implementation of the scheme?



**What is the planning process proposed under the scheme? Is the planning process adequately and effective followed? If not, what improvements are desirable?**

Q1. According to you, what are the limitations of the ongoing planning process?

Q2. What could be the desired improvements in the planning process?

**How has the scheme performed in respect of participatory irrigation management?**

Q1. Provide data on:

a) Number of WUAs formed at district level?

b) Date of formation?

c) Number of meeting conducted by WUAs?

d) What were the decisions / actions taken by the WUAs? Pls share minutes of some of the meetings?

Q2. How are community engagement and capacity building activities tracked?

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (state or time period) and mention the relative impact of each factor on performance?**

Q1. What are the positive factors that have enhanced scheme performance specifically in your district?

Can you mention evidence based relative impact of each factor on performance?

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1. Apart from above mentioned factors, what additional factors could be undertaken to improve the scheme?

Q2. What would be the potential impact of these interventions and how should they be prioritized for maximum impact?

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1. Which positive factors can be replicated to enhance the scheme performance across:

a) De-siltation

b) Catchment area development

c) Command area development

d) Any other factors

Please provide success stories.



**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. What are the negative factors that have reduced scheme performance? Mention evidence-based impact of each factor on scheme performance.

**How can the scheme design be modified to mitigate the negative factors?**

Q1. What modifications in the scheme design can mitigate the negative factors? Provide justification.

EFFICIENCY

**EC 1 Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. What are the direct and indirect benefits of the scheme? Give details.

Q2. What has been the impact of the scheme on agricultural outcomes? Provide evidence.

Q3. Has there been noticeable increase in ground water level? Provide groundwater monitoring data in support.

Q4. Has there been noticeable increase in access to quantity and quality of water? Explain.

**What are the costs of the scheme? What is the monetary value of all costs?**

Q1. Were the project-wise socio-economic and environmental costs calculated at district level under the scheme?

**EC 2 Can the costs of the scheme be lowered?**

**Is there adequate coordination between ministries (or departments as applicable) in the execution of such that resources are used efficiently?**

Q1. How is convergence across various ongoing schemes and different departments like water resources, rural development, municipal corporations etc. ensured?

Q2. As specified under RRR guidelines:

a) Are ODF villages and towns/ villages covered under *Saansad Adarsh Gram Yojana* given a priority for RRR implementation? Provide evidence

b) Are water bodies whose catchment areas falls under treated/proposed to be treated under IWMP in the next 2 years given priority? Provide evidence

c) Is convergence sought with any other ongoing scheme? Please help us understand more with some evidence.

Q3. What are the gaps in the level of coordination/conflicts between center, state and district, which limit convergence?



### **What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1. What could be efforts to achieve convergence with other schemes like WDC, MGNREGA, MPLADS, restoration schemes under JNNURM, etc.?

### **Equity-High spatial variance in surface water availability and River interlinking**

1. Given the eligibility criteria (inclusion of proposals of only those water bodies in which catchment area treatment works have started or would be started under IWMP and high spatial variance of surface water), are there any instances of water bodies in drought prone areas being not covered under this scheme?

## SUSTAINABILITY

### **SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

#### **Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. What is the mechanism under place to ensure financial and institutional sustainability of the scheme?

Q2. Is DLIA involved in O&M after scheme completion or is it handed over to WUA? Explain in detail.

Q3. Have there been instances of fund inadequacy, delaying O&M? If yes, explain in detail.

### **SS5 Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

#### **Sustainability - High dependency on groundwater for irrigation**

Q1. What has been the change in groundwater levels since the scheme implementation? Provide evidence. Does the data capture seasonal fluctuation before and after scheme implementation?

Q2. Given the enhanced ground water level, has there been a substantial increase in ground water based minor irrigation structures like private borewell, tube wells?

### **SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

#### **What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. What have been the main reasons behind project failures under the following heads:

- a) Technical
- b) Institutional
- c) Financial
- d) Economic



- e) Social
- f) Political
- g) Environmental

Q2. Identify risks that have high probability of occurrence and / or high impact if the risk materializes.

Q3. What is the underlying mechanism to continued service under scheme in case of failure/breakdown?

**Sustainability - More focus on water-intensive crop**

Q1. Is there any tendency among farmers to switch towards water intensive crops and poor irrigation practices like flood irrigation, given the increased availability of water? Explain.

Q2. Is any awareness generation program/training conducted for farmers focusing on sustainable agriculture and better water management?

RELEVANCE

**RL1: Is the scheme relevant in the present context?**

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1. What percentages of total irrigation water needs are met with the restored water bodies? What are the other sources?

Support with data/evidence.

Q2. Water for what other purposes are met by the restored water bodies?

**RL2 Is it appropriate to continue / prioritize this scheme?**

**Is it appropriate to continue / prioritize this scheme?**

Q1. Are there any alternative schemes, providing similar outcomes in the district? If yes, can you share some data/information about it? What would be the impact on the district of continuation/ acceleration or shutting up/ scaling down of the scheme? Please explain your answer with supporting evidence.

Q2. Is there any duplication of activities under difference schemes in this area? If no, how the interventional areas are different across these different schemes? If yes, how can the duplication be avoided at implementation level?

EQUITY

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Has/would the scheme implementation lead to reduction in societal equity? Please share some evidence.



**EQ2 Is any weaker section of society excluded/accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1. Have there been instances of any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If yes, provide details.

If so, what modifications are necessary to scheme design or implementation?

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability & Transparency - Beneficiary involvement**

Q1. What are the steps undertaken to ensure beneficiary involvement across project planning, execution, monitoring and evaluation?

Q2. Does the District Level Implementation Agency consult the Panchayat while deciding the project area and beneficiary?

Q3. As per the scheme guidelines, the implementation at water body level should be done by local panchayat/WUA or external agency? Has there been adequate level of involvement? Provide evidence.

### **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population - Inclusion of vulnerable groups in scheme as well as sector**

Q1. Have you undertaken an activity to analyse the problems faced by SCs/STs in your District? If yes, please provide details of the findings?

Q2. Whether SCA to TSP/SCA to SCSP has been implemented in your district or not? If implemented -

- a) Is there any micro-project under SCA to TSP/SCA to SCSP being undertaken in your district? (Collect details of Irrigation projects, villages where SCA projects are being implemented)
- b) What are the activities/interventions being undertaken for SCs and STs which are being funded through SCSP and TSP?



- c) What are the irrigation structures being constructed by the government under SCA to TSP/SCA to SCSP?
- d) Are the farmers being provided any subsidy/incentive for irrigation under SCA to TSP/SCA to SCSP?
- e) Does Krishi Vikas Kendra (KVK) implement Hands-on training/workshops/awareness programmes? If yes, what are the skill development and other irrigation-related trainings being conducted by KVKs under SCA to TSP/SCA to SCSP?
- f) How many farmers have been trained by KVK under SCA to TSP/SCA to SCSP?
- g) What type of Multi-sector Support and Advisory services are being provided by KVKs to farmers under SCA to TSP/SCA to SCSP? How many farmers have benefitted from such services?
- h) What are the steps taken to monitor the SCA to TSP/SCA to SCSP activities at the State/District/village level?
- i) How do you measure the impact under SCA to TSP/SCA to SCSP?
- j) What are the issues/challenges in the CSS? (Probe for top 5 issues)
- k) Please share recommendations to improve the impact of SCA to TSP/SCA to SCSP?

#### **Use of IT/Technology in driving efficiency - Deployment of IT enabled mechanisms for monitoring of the Scheme**

Q1 - Is geotagging and the use of geotagged photographs done at your district? Please provide some evidences

#### **Any Best Practices**

Q1. Can you provide an evidence/case study depicting the use of IT/Technology to improve the efficiency of the implementation of RRR?

#### **Development, dissemination & adoption of innovative practices, technology & know-how – Technology to address key challenges**

Q1. What technologies are available to address the key challenges facing the scheme?

Are there any constraints towards its adoption?

Provide evidence

#### **Stakeholder and Beneficiary behavioral change - Fund Allocation**



Q1. Were any capacity building trainings conducted as a part of scheme implementation? Could you please provide us some evidence?

**Stakeholder and Beneficiary behavioral change -Mechanisms to promote and ensure behavior change**

Q1. What activities are undertaken at district and block level to promote adoption of good practices? Provide evidence

**Stakeholder and Beneficiary behavioral change - Challenges faced**

Q1 - What are the major challenges faced by DLIA towards promoting stakeholders and beneficiary behavioral change?

Q2. Are there any areas which need more attention in terms of bringing behavior change?

**Any Best Practices**

Q1. Can you provide an evidence/case study depicting the significance of behavioral change and awareness generation towards the success of RRR?

**SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from an implementation point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

4.1.12 District level stakeholder - CEO: Zila Parishad

**GENERAL GUIDELINES:**



- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
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- Seek more detail or explanation of a response. For example:
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  - Can you give an example of \_\_\_\_\_?
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- Explore the reasons behind a response. For example:
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  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

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- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.



## PROFILE OF THE STAKEHOLDER

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH RRR SCHEME

### RESEARCHER TO NOTE:

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### SECTION 1: DEEP DIVE INTO PDMC SCHEME USING REESIE FRAMEWORK:

Q1. Could you please provide an overview of the scheme in terms of its objectives?

#### EFFECTIVENESS

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1. Provide project-wise details on:

- a) When were the funds received from the state?
- b) When were the funds utilized for the intended purpose?

Q2. Have there been any instance of delayed/ inadequate release of Central Assistance? If yes, mention the reasons?

Q3. What are the positive and / or negative financial factors that have impacted scheme performance?

Provide evidence

**Was there timely utilization of available funds? If not, what were the reasons?**

Q1. What are the details of the fund utilized at the end of each year and the timeline between release and utilization at district level?

Q2. What is the reason behind delay in fund utilization (if any)?

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1. What factors/interventions could be undertaken to improve the scheme?



Q2. What would be the potential impact of these interventions and how should they be prioritized for maximum impact?

**How can the scheme design be modified to mitigate the negative factors?**

Q1. What modifications in the scheme design can mitigate the negative factors? Provide justification.

EFFICIENCY

**EC 2 Can the costs of the scheme be lowered?**

**What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1. What could be efforts to achieve convergence with other schemes like WDC, MGNREGA, MPLADS, restoration schemes under JNNURM, etc.?

SUSTAINABILITY

**SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. What is the mechanism under place to ensure financial and institutional sustainability of the scheme?

Q2. Is DLIA involved in O&M after scheme completion or is it handed over to WUA? Explain in detail.

Q3. Have there been instances of fund inadequacy, delaying O&M? If yes, explain in detail.

**SS5 Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1. Do you think the scheme based on its current guidelines is environmentally and socially sustainable? What measures do you suggest to improve its sustainability?

RELEVANCE

**RL2 Is it appropriate to continue / prioritize this scheme?**

**Is it appropriate to continue / prioritize this scheme?**

Q1. Are there any alternative schemes, providing similar outcomes in the district? If yes, can you share some data/information about it? What would be the impact on the district of continuation/ acceleration or shutting up/ scaling down of the scheme? Please explain your answer with supporting evidence.

Q2. Is there any duplication of activities under difference schemes in this area? If no, how the interventional areas are different across these different schemes? If yes, how can the duplication be avoided at implementation level?



**From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**

Q1. Are there any areas of priority that are not addressed by the scheme?

Q2. Why do you think the areas identified by you are of high priority? Please explain with supporting reasons.

IMPACT

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. Have there been any studies at district level to assess the impact of the scheme on:

- a) SDG 2.3
- b) SDG 6
- c) Water conservation
- d) Preventing soil erosion
- e) Increasing ground water levels
- f) Increasing employment
- g) Improving water quality
- h) Income augmentation of farmers
- i) Increasing crop productivity and promoting agricultural diversification

**If yes, please share reports/data.**

**SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Use of IT/Technology in driving efficiency - Deployment of IT enabled mechanisms for monitoring of the Scheme**

**Technology to address key challenge**

Q1. What technologies are available to address the key challenges facing the scheme?

Are there any constraints towards its adoption? Please help us understand this better through some evidence

**Reforms, Regulations - Adoption of models acts and reforms at governance, institutional and administrative level**



Q1. What measures are being undertaken to ensure effective implementation and compliance of adopted acts/rule/regulations within RRR? (like in areas of accountability and transparency). Can you provide supporting evidence/case study.

**SECTION 3: CHALLENGES AND SUGGESTIONS**

1. Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
2. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

**4.1.13 Village level stakeholder - Members: Panchayati Raj Institutions and Gram Sabha**

**GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:



- What makes you say that?
- What was it about \_\_\_\_ that made you decide to \_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said\_\_\_\_\_ but it also seems like\_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **RRR**. Since you are a key stakeholder in the scheme in implementation or at the receive it at the village level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHS/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH RRR SCHEME**

### **RESEARCHER TO NOTE:**

*27. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*



28. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.

## **SECTION 1: DEEP DIVE INTO PDMC SCHEME USING REESIE FRAMEWORK:**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

### **EFFECTIVENESS**

#### **ET1: Is the scheme design appropriate to address scheme objectives?**

##### **Is there evidence that assumptions have been tested and are valid?**

Q1. Provide details on the work done under RRR in the village:

- Number of projects executed in the between 2015-2019
- Types of work undertaken under RRR: Desiltation, Command Area Development/ Catchment Area Development.
- Irrigation potential created (IPC) under the scheme
- Irrigation potential utilised (IPU) after the project completion

##### **What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1 – What changes do you suggest in the scheme for it to achieve increased capacity of tank storage (through improvement and restoration).

#### **ET2: How are scheme targets set and monitored?**

##### **Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. Does the local panchayat conduct any monitoring activities?

Q2. As per the scheme guidelines, was the Gram Sabha consulted by DLIA while selecting project area, beneficiary and deciding capacity building components of the scheme?

##### **How has the scheme performed in respect of participatory irrigation management?**

Q1. Was any capacity building workshops (for sensitization and better water management) organized under RRR scheme? If yes, how many

#### **ET3: How has the scheme performed against scheme objectives and annual targets?**

##### **What are the key bottlenecks, issues & challenges in the implementation of the scheme**

Q1. Do you face any challenges during scheme implementation at village level? Provide details.

##### **How has the scheme performed in respect of participatory irrigation management?**



Q1. Has there been any capacity building workshops (for sensitization and better water management) organized under RRR scheme?

## **EFFICIENCY**

### **EC 1 Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. What are the direct and indirect benefits of the scheme?

Q2. Did the scheme have any positive impact on:

- a) agricultural outcomes?
- b) ground water level?
- c) access to drinking water
- d) quality of water
- e) environmental benefits
- f) tourism and cultural activities

Are there any documented studies at Gram Sabha level? If yes, please share.

## **SUSTAINABILITY**

### **SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. Have there been any cases of breakdown of structures created under RRR? What were the reasons behind it?

Q2. Are the community capacity building activities adequate?

Q3. Is the maintenance activity conducted by the implementing agency or has it been handed over to the village level management body?

Q4. Have there been the any project failures under RRR? Provide reasons?

### **SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. Is there a willingness to pay in the community to access physical structure repaired/renovated under RRR? If yes, how much?

Q2. According to, what measures can be taken to ensure long-term maintenance of the scheme



## **IMPACT**

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. According to you, what are the long -term benefits of the scheme?

## **EQUITY**

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Has there been any increase in the number of SC/ST/women/other disadvantaged section of the society gaining access to structures repaired/renovated under RRR?

**EQ2 Is any weaker section of society excluded/accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1. Have there been any instances of the weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits in the village?

Provide details.

If so, what modifications are necessary to scheme design or implementation?

## **SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from an implementation point of view in the village?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme?



<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



## 4.2 Discussion Guide for FGD

### 4.2.1 FGD: Project Beneficiaries

#### GENERAL GUIDELINES for FGDs:

- The topics and questions below should be used to guide the Focus Group Discussion. Please keep in mind, while conducting the FGDs, do respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- During FGDs, group dynamics are common so it must be ensured that every respondent gets a chance to speak, one person should not be allowed to dominate the discussion. Also, be aware of any power dynamics that may be at play. Please ensure that all respondents speak one by one so that the audio recording is clear.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- **Seek more detail or explanation of a response.** For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- **Explore the reasons** behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- **Seek clarity and check for inconsistencies.** For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the FGD:
- I am ....., working with Ipsos, a global research organization. We regularly carry out research on various social issues. Currently we are implementing a study on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog along with KPMG a consultancy firm.
- The current study is an evaluation of Centrally Sponsored Schemes in the Water Resources sector in various states including yours. We would like to seek your opinion on certain topics related to the scheme **Repair, Renovation & Restoration (RRR)**. One aspect of the evaluation is to meet the beneficiaries of these schemes to understand the benefits received, how the benefits have impacted different aspects of their life- social, economic, and any other. Your views are beneficial



to assess the experiences, challenges if any associated with this project. Discussion with your group as well as others will also help us identify recommendations and suggestions to improve the next phase of implementation of similar projects.

- Inform the respondents of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged that will lead to identification of individual responses that they give during this discussion.
- Explain that there are no right/ wrong answers and obtaining opinion and perception and their individual experience is critical.

- **NOTE TO THE TEAM:**
- AT THE VILLAGE LEVEL, RESEARCHER NEEDS TO FIRST MEET THE SARPANCH OF THE VILLAGE
- NO BENEFICIARIES ARE TO BE MET FOR ANY SCHEME/ PROJECT RELATED INTERVIEW/FGD BEFORE MEETING THE SARPANCH

**RESEARCHER TO NOTE:**

29. All the questions inside boxes font are only for reference of the researcher to gauge if the larger question has been answered. These questions are not to be asked directly to the respondents.
30. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, RESEARCHER should add additional probes to help answer those questions.

**Warm up:**

9. Can you give me some information about the village how many households live here, which is the nearest town, mode of transport etc.
10. What are the different occupations that people are engaged in? What percentage of the households are involved in agriculture/ agriculture related activities?
11. Do you all own your own land or you work on others' land? How many members of your family are currently involved in agriculture related work? What crops do you grow?



12. What are some of the most common problems that farmers in your village face? Note to RESERACHERS- DO NOT DWELL EXTENSIVELEY ON PROBLEMS HERE, THIS IS JUST TO UNDERSTAND INFRASTRUCTURE, WATER/ IRRIGATION, AND MARKET ACCESS RELATED ISSUES IF THEY ARE ON TOP OF MIND.

**Awareness about different schemes and projects implemented in their village**

- 6. What are the different irrigation and/or agriculture related projects that have been implemented in your village in last five years?
- 7. Can you please elaborate on these projects in terms of how they have benefitted you/ others in the village and/ or how do they address the common issues that you face?
- 8. What are the type of works undertaken? According to you, which ones are working well for the village and you? Why do you say so?

**SECTION 1: DEEP DIVE INTO RRR SCHEME USING REESIE FRAMEWORK:**

**We are would like to ask you questions specifically about one particular project/ government scheme – Command area development and water management practices**

Q1. Are you aware that this project was developed under which scheme/ project? Have you heard about this scheme/yojana/ project? What do you know about it? From where did you hear about the scheme/ project?

Q2. In your view, what is the purpose of this scheme/ project? When was this created, how much time did it take to complete the project since it was announced?

Q3. When did you start benefitting from this project? How is it helping you in agriculture? PROBE TO UNDERSTAND THROUGH EXAMPLES OF WHAT THE BENEFITS EXPERIENCE ARE, WHERE POSSIBLE GET CONCRETE FACTS AND FIGURES.

EFFECTIVENESS

**ET1 Is the scheme design appropriate to address scheme objectives?**

**Is there evidence that assumptions have been tested and are valid?**

Q1 – How have the following parameters changed due to adoption of RRR between 2015-19: (attached template):

Could you please help us fill the template.

Yield/Productivity							
S r.	Crop Name	Crop Type - Rabi/Kh arif	Field/Horti cultue	Irrigate d Area of the	Yield (kg/ha)		Cha nge in
					Before RRR	After RRR	



				crop (ha)			yield (%)
1							
2							
3							
4							
5							
6							

Change in access to drinking water				
		Per capita drinking water availability		
Sr.	Habitation name	Without RRR	With RRR	Change in availability of drinking water after the introduction of RRR (%)
1				
2				
3				

Average Increase in Farmer's Income										
			System							
Sr.	Crop	Crop Type -	Before RRR	After RRR	Total Input*	Total Yield	Rate per	Total Inco	Total Savi	Additional benefi



		Rabi/Kharif			(Rs. Per ha)	(Quintal/ha)	Quintal	me (Rs per ha)	ngs (Rs per ha)	t by RRR (Rs per ha)
1										
2										
3										
4										
* Input costs include expenditure over Human Resource, Leveling, Seeds, Irrigation, Fertilizer, Pesticide, etc										

New Employment Opportunities					
Sr.	Habitat name	Direct/Indirect	Skilled/Unskilled	Type of new work	No. or % of new employment opportunities created
1					
2					
3					
4					

Change in ground water table	
	Ground water table (in m)



Sr.	Habitation name	Crop type	Before RRR	After RRR	Change in ground water table after the introduction of RRR (%)
1					
2					
3					

Q2 - How many scientific knowledge & awareness campaigns (trainings) have been conducted between 2015 to 2019?

Q3 - What % of beneficiaries have received training sessions between 2015 to 2019?

Q4 - How many capacity building activities have been conducted between 2015 to 2019?

#### Access - Gap in irrigation coverage

Q1. Has there been any shift from rainfed to irrigated agriculture after scheme implementation?

#### ET3 How has the scheme performed against scheme objectives and annual targets?

##### What are the key bottlenecks, issues & challenges in the implementation of the scheme?

Q1 - Do you face any challenges in getting required support from the Govt during scheme implementation?

If yes, please share some information

Q2 - What are the other issues & challenges which limit you from availing scheme benefits?

#### ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?

##### What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?

Q1. What are the negative factors (like political, social, financial) that have affected scheme implementation?



Q2. Do you feel there is a need use other complementing irrigation techniques like lift irrigation, despite of the presence of structures created under RRR? Give reasons.

#### EFFICIENCY

##### **EC 1 Did the benefits of the scheme exceed costs?**

##### **What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. What are the main socio-economic changes after completion of RRR works and establishment of WUAs?

Q2. Has there been any enhancement in skill level of farmers? Have the trainings organized by social facilitator benefitted you?

Q3. How many people from your household have migrated after the project under RRR was implemented, compared to before?

Q4. Has there been any change in the number of days of employment per year for you or other members of your household after the project under the RRR scheme was implemented?

Specify by how many days has employment increased / decreased?

Q5. Has there been any improvement in soil quality (like decrease in salinity/ alkalinity)?

Q6. Has there been any improvement in ground water level in the command area?

Q5. What has been an impact on access and availability of drinking water after scheme implementation?

Q7. Have there been an enhancement in tourism and cultural activities after scheme implementation?

##### **EC 2 Can the costs of the scheme be lowered?**

##### **Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1. Have you faced any co-ordination issues with different depts. like irrigation departments, water resources departments? If yes, give details.

#### SUSTAINABILITY

##### **SS5 Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

##### **Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1. Do you think the scheme is long lasting, considering environmental (eg: rainfall disparity) and social (eg: conflicts within village) aspects? How is it ensured?

Q2. What measures can be taken to ensure the scheme is long lasting?



## RELEVANCE

### **RL1: Is the scheme relevant in the present context?**

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

1. Is the scheme helpful in provision of clean drinking water?
2. Is the scheme helpful to increasing access to irrigation and agricultural productivity?

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1. Do you think that the scheme could be improved to address any other needs? If yes, please specify and mention why it is important

## IMPACT

### **IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. According to you, what are the long- term benefits of the scheme?

## EQUITY

### **EQ2 Is any weaker section of society excluded/accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1. What is the process of selection of scheme beneficiaries? Was there adequate involvement of Panchayats while selection of beneficiaries and water bodies, as mentioned in the scheme document?

Q2. Is there a special weightage given to beneficiaries from marginalized sections of society?

Q3. Is there a fair representation of marginalized in the WUA? How is this inclusiveness ensured?

## 4.2.2 FGD: WUA

GENERAL GUIDELINES for FGDs:



- The topics and questions below should be used to guide the Focus Group Discussion. Please keep in mind, while conducting the FGDs, do respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- During FGDs, group dynamics are common so it must be ensured that every respondent gets a chance to speak, one person should not be allowed to dominate the discussion. Also, be aware of any power dynamics that may be at play. Please ensure that all respondents speak one by one so that the audio recording is clear.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- **Seek more detail or explanation of a response.** For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- **Explore the reasons** behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- **Seek clarity and check for inconsistencies.** For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

## INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the FGD:
- I am ....., working with Ipsos, a global research organization. We regularly carry out research on various social issues. Currently we are implementing a study on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog along with KPMG a consultancy firm.
- The current study is an evaluation of Centrally Sponsored Schemes in the Water Resources sector in various states including yours. We would like to seek your opinion on certain topics related to the scheme **Repair, Renovation & Restoration (RRR)**. One aspect of the evaluation is to meet the beneficiaries of these schemes to understand the benefits received, how the benefits have impacted different aspects of their life- social, economic, and any other. Your views are beneficial to assess the experiences, challenges if any associated with this project. Discussion with your group as well as others will also help us identify recommendations and suggestions to improve the next phase of implementation of similar projects.



- Inform the respondents of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged that will lead to identification of individual responses that they give during this discussion.
- Explain that there are no right/ wrong answers and obtaining opinion and perception and their individual experience is critical.

- **NOTE TO THE TEAM:**
- AT THE VILLAGE LEVEL, RESEARCHER NEEDS TO FIRST MEET THE SARPANCH OF THE VILLAGE
- NO BENEFICIARIES ARE TO BE MET FOR ANY SCHEME/ PROJECT RELATED INTERVIEW/FGD BEFORE MEETING THE SARPANCH

**RESEARCHER TO NOTE:**

31. *All the questions inside boxes font are only for reference of the researcher to gauge if the larger question has been answered. These questions are not to be asked directly to the respondents.*
32. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, RESEARCHER should add additional probes to help answer those questions.*

**Warm up:**

13. Can you give me some information about the village how many households live here, which is the nearest town, mode of transport etc.
14. What are the different occupations that people are engaged in? What percentage of the households are involved in agriculture/ agriculture related activities?
15. Do you all own your own land or you work on others' land? How many members of your family are currently involved in agriculture related work? What crops do you grow?
16. What are some of the most common problems that farmers in your village face? Note to RESERACHERS- DO NOT DWELL EXTENSIVELEY ON PROBLEMS HERE, THIS IS JUST TO UNDERSTAND INFRASTRUCTURE, WATER/ IRRIGATION, AND MARKET ACCESS RELATED ISSUES IF THEY ARE ON TOP OF MIND.

**Awareness about different schemes and projects implemented in their village**



9. What are the different irrigation and/or agriculture related projects that have been implemented in your village in last five years?
10. Can you please elaborate on these projects in terms of how they have benefitted you/ others in the village and/ or how do they address the common issues that you face?
11. What are the type of works undertaken? According to you, which ones are working well for the village and you? Why do you say so?

### **SECTION 1: DEEP DIVE INTO RRR SCHEME USING REESIE FRAMEWORK:**

#### **We are would like to ask you questions specifically about one particular project/ government scheme – Command area development and water management practices**

12. Q1. Are you aware that this project was developed under which scheme/ project? Have you heard about this scheme/yोजना/ project? What do you know about it? From where did you hear about the scheme/ project?
13. Q2. In your view, what is the purpose of this scheme/ project? When was this created, how much time did it take to complete the project since it was announced?
14. Q3. When did you start benefitting from this project? How is it helping you in agriculture?  
PROBE TO UNDERSTAND THROUGH EXAMPLES OF WHAT THE BENEFITS EXPERIENCE ARE, WHERE POSSIBLE GET CONCRETE FACTS AND FIGURES.

#### EFFECTIVENESS

<b>ET1: Is the scheme design appropriate to address scheme objectives?</b>
--

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

#### INSTITUTIONAL STRUCTURE

- Q1. Are there any criteria for membership to WUA? Are there any incentives for members like concessions on water rates, freedom of crop choices in comparison to non-members?
- Q2. Is the Panchayat Representative a part of WUA?
- Q3. What are the terms of memberships? How is the Chairman selected? Is there any provision for revoking membership in case of non-performance?
- Q4. Are the roles of Distributary Committees, WUAs and other line depts. clearly demarcated?  
provide details
- Q5. Name the NGO/ social facilitator responsible for training and hand-holding

#### **How has the scheme performed in respect of participatory irrigation management?**

- Q1. How many workshops/ trainings have been conducted in each year for members of WUAs/ distributary committees on *warabandi*, crop rotations, water management, maintenance of field channels, etc.? List the topics of trainings and details of trainers (like institution)



Q2. Does the social facilitator provide adequate support? In what areas the support by social facilitator can be enhanced?

Q3. Has the WUA received any one-time functional grant from government?

Q4. Do you feel there is undue influence of large contractors in functioning of WUAs?

Q5. Has the WUA been handed over the operation and management of the physical system and water management? If not, mention the reasons.

Q6. What has been the level of community engagement during the planning (DPR preparation), execution (repair and restoration works) and maintenance stages?

## SUSTAINABILITY

### **SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

#### **Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1 - Who is responsible for O&M during and after project implementation?

Q2. What are the funds available for O&M after project implementation and are they adequate?

Q3. Is there an existing community level institution to ensure O&M?

Q4. Do you think WUA is financially and institutionally capable of O&M of the physical system and water management? If not, how can it be ensured?

### **SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

#### **What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. What have been the main reasons behind project failures under the following heads:

- a) Technical
- b) Institutional
- c) Financial
- d) Economic
- e) Social
- f) Political
- g) Environmental

Q2. Amongst the risks you have identified, what is most probable and what has highest impact?

Q3. What is done to ensure continued service in the event of failure/breakdown in project assets?

## **SECTION 2: CROSS SECTIONAL THEMES**



**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Accountability & Transparency-Monitoring Mechanisms**

Q1. Does the local panchayat conduct any monitoring activities? If yes, what is the frequency of this monitoring?

**Challenges faced**

Q1. Are there any areas which need attention in terms of bringing behaviour change?

Q2 - What are the major challenges towards promoting stakeholders and beneficiary behavioural change?



### 4.2.3 FGD: SC/ST Beneficiaries

#### GENERAL GUIDELINES for FGDs:

- The topics and questions below should be used to guide the Focus Group Discussion. Please keep in mind, while conducting the FGDs, do respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- During FGDs, group dynamics are common so it must be ensured that every respondent gets a chance to speak, one person should not be allowed to dominate the discussion. Also, be aware of any power dynamics that may be at play. Please ensure that all respondents speak one by one so that the audio recording is clear.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- **Seek more detail or explanation of a response.** For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- **Explore the reasons** behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- **Seek clarity and check for inconsistencies.** For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the FGD:
- I am ....., working with Ipsos, a global research organization. We regularly carry out research on various social issues. Currently we are implementing a study on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog along with KPMG a consultancy firm.
- The current study is an evaluation of Centrally Sponsored Schemes in the Water Resources sector in various states including yours. We would like to seek your opinion on certain topics related to the scheme **Repair, Renovation & Restoration (RRR)**. One aspect of the evaluation is to meet the beneficiaries of these schemes to understand the benefits received, how the benefits have impacted different aspects of their life- social, economic, and any other. Your views are beneficial to assess the experiences, challenges if any associated with this project. Discussion with your



group as well as others will also help us identify recommendations and suggestions to improve the next phase of implementation of similar projects.

- Inform the respondents of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged that will lead to identification of individual responses that they give during this discussion.
- Explain that there are no right/ wrong answers and obtaining opinion and perception and their individual experience is critical.

- **NOTE TO THE TEAM:**
- AT THE VILLAGE LEVEL, RESEARCHER NEEDS TO FIRST MEET THE SARPANCH OF THE VILLAGE
- NO BENEFICIARIES ARE TO BE MET FOR ANY SCHEME/ PROJECT RELATED INTERVIEW/FGD BEFORE MEETING THE SARPANCH

**RESEARCHER TO NOTE:**

33. All the questions inside boxes font are only for reference of the researcher to gauge if the larger question has been answered. These questions are not to be asked directly to the respondents.
34. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, RESEARCHER should add additional probes to help answer those questions.

**Warm up:**

17. Can you give me some information about the village how many households live here, which is the nearest town, mode of transport etc.
18. What are the different occupations that people are engaged in? What percentage of the households are involved in agriculture/ agriculture related activities?
19. Do you all own your own land or you work on others' land? How many members of your family are currently involved in agriculture related work? What crops do you grow?
20. What are some of the most common problems that farmers in your village face? Note to RESERACHERS- DO NOT DWELL EXTENSIVELEY ON PROBLEMS HERE, THIS IS JUST TO



UNDERSTAND INFRASTRUCTURE, WATER/ IRRIGATION, AND MARKET ACCESS RELATED ISSUES IF THEY ARE ON TOP OF MIND.

**Awareness about different schemes and projects implemented in their village**

- 15. What are the different irrigation and/or agriculture related projects that have been implemented in your village in last five years?
- 16. Can you please elaborate on these projects in terms of how they have benefitted you/ others in the village and/ or how do they address the common issues that you face?
- 17. What are the type of works undertaken? According to you, which ones are working well for the village and you? Why do you say so?

**SECTION 1: DEEP DIVE INTO RRR SCHEME USING REESIE FRAMEWORK:**

**We are would like to ask you questions specifically about one particular project/ government scheme – Command area development and water management practices**

- 18. Q1. Are you aware that this project was developed under which scheme/ project? Have you heard about this scheme/yojana/ project? What do you know about it? From where did you hear about the scheme/ project?
- 19. Q2. In your view, what is the purpose of this scheme/ project? When was this created, how much time did it take to complete the project since it was announced?
- 20. Q3. When did you start benefitting from this project? How is it helping you in agriculture?

PROBE TO UNDERSTAND THROUGH EXAMPLES OF WHAT THE BENEFITS EXPERIENCE ARE, WHERE POSSIBLE GET CONCRETE FACTS AND FIGURES.

EQUITY

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

- Q1. Has RRR promoted uniform access to water resources across all sections of the society? Please provide some information
- Q2. How is inclusiveness within WUA ensured? Is there any provision for reserving seats for disadvantaged/weaker section of the society/ women in WUA?
- Q3. Does it have any significant impact in reducing inequity? Please provide some evidence

**SECTION 3: CHALLENGES AND SUGGESTIONS**



- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



# Annexure 5 Primary Survey Guide – SMI

The primary survey guide for ‘Surface Minor Irrigation’ is provided below.

## 5.1 Discussion Guide for KII

### 5.1.1 National level stakeholder - Senior Joint Commissioner: Department of Water Resources, River Development and Ganga Rejuvenation (Minor Irrigation Division)

#### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India’s policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **SMI**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the national level, your



insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH SMI SCHEME**

#### **RESEARCHER TO NOTE:**

*35. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*

*36. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

### **SECTION 1: DEEP DIVE INTO SMI SCHEME USING REESIE FRAMEWORK:**

#### EFFECTIVENESS

#### **ET1: Is the scheme design appropriate to address scheme objectives?**

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1 - Can you specify the key inputs, activities, outputs, outcomes and impacts from the scheme?

Q2 - Was there any change in any of these (especially 'outcomes and impacts' actually achieved vis-à-vis what was planned? If yes, can you share some data/information around it?

Q3 - What are the key assumptions linking outputs on one hand to realization of outcomes and impacts?



**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1 - What are the gaps / weakness in the assumptions with respect to SMI? Please elaborate with example and relevant data around it.

Q2. Are there any other limitations in the scheme design for SMI? Please explain with evidence.

Q3 – How can the scheme design be modified to make it more effective?

Q4 - Is there any separate funding allocation required for awareness campaign and capacity building activities? Please provide some justifying evidence.

**ET2: How are scheme targets set and monitored?**

**What information is contained in utilization certificate issued by state govt? Are they credible and can they be relied upon as an indicator of scheme progress?**

Q1. Is the issuance of Utilization Certificate mandatorily required prior to the release of central assistance?

Q2. How credible are the 'list of checks' mentioned in the Utilization Certificate?

Q3. Can UC be regarded as an indicator of scheme progress?

**ET3: How has the scheme performed against scheme objectives and annual target?**

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1 - What are the existing indicators to measure scheme performance?

Q2. Are there any additional performance indicators (over and above those currently tracked) that may be adopted to effectively monitor scheme performance? If yes, please explain why they are important.

**Equity - High spatial variance in surface water availability and River interlinking**

Q1. Does the scheme account for the presence of relatively high-price diesel as an energy source in eastern India as compared to dominant and relatively cheap electricity in western and peninsular areas? If yes, How? Give evidence.

Q2. What percentage of SMI schemes are solar operated? How have they performed till date? Provide evidence.

**ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**



**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1. Provide project-wise details on:

- a) When was the fund requested?
- b) When were the funds released by center to the state?

Q2. Is the fund flow adequate at each level? If not, explain.

Q3. What are the reasons behind delay of fund flow (if any)?

- a) Central grants
- b) State share

**Was there timely utilization of available funds? If not, what were the reasons?**

Q1. Comment on the timeline of release and utilization of funds? Which states are performing poorly on this account and what are the underlying issues?

Q2. Was any time extension granted for project completion? What were the reason?

**Gaps in broad sectoral outcomes - Project Management issues and Slow project execution**

Q1. Previous studies stated that delay in fund release caused delay in project progress. Why so? How can it be improved?

**Water security – Using recycled water for agriculture**

Q1. Why recycled waste water is not used as water source for MI? How can it be implemented? What challenges do you find in this regard?

**Access - Widening IPC-IPU Gap**

Q1. Given the high dependence on ground water irrigation, what is the mechanism at place to encourage farmers to switch towards SMI? To what extent have you been successful? Provide evidence.

EFFICIENCY

**EC2: Can the costs of the scheme be lowered?**

**Are there lower cost alternatives for achieving the scheme outcomes?**

Q1 - Are there lower cost alternatives for achieving the scheme outcomes?

Q2. Is investment by private sector proposed under SMI? How can private sector (including CSR efforts, PPP) be leveraged to achieve scheme objectives?



**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1. How is coordination ensured among central ministry, CWC field offices and state departments and districts to aid in convergence?

Q2. Have there been instances of inadequate coordination between different departments/ center, state and district, which hampers scheme progress? If yes, provide details.

**What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1 - Is there any other scheme that aims to achieve similar outcomes?

Q2 - Is there any other scheme (e.g. apart from MGNREGA) that can complement this scheme?

Q3. Which states provide instances of convergence vis-à-vis SMI:

- Convergence with other schemes of central and state government
- Convergence with private sector/ CSR.

What good practices from such states be replicated in other states?

Q4. Which states are performing poorly, considering convergence for implementation of SMI? What are the reasons?

Q5. What measures could be taken to achieve convergence with other schemes like WDC, MGNREGA, MPLADS, restoration schemes under JNNURM, or with private sector / CSR funds etc.?

**Convergence - Need for scheme convergence**

Q1. Do you see expected convergence of activities undertaken by this scheme with those by other schemes like - MGNREGA? Is there any duplication of the activities? Please provide details.

SUSTAINABILITY

**SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. What is the mechanism under place to ensure financial and institutional sustainability of the scheme?

Q2. Who is responsible for O&M during and after project implementation?

Q3. What are the funds available for O&M after project implementation and are they adequate?

**SS5: Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**



Q1. How is the environmental and social sustainability of the scheme ensured?

Q2. How can environmental and social sustainability be improved?

**SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. What have been the main reasons behind project failures under the following heads. Please provide details:

a) Technical

b) Institutional

c) Financial

d) Economic

e) Social

f) Political

g) Environmental

Q2 - Have such reasons been studied and documented? If yes, please share the same?

Q3. Identify risks that have high probability of occurrence and / or high impact if the risk materializes.

Q4. What is the underlying mechanism for continued service under scheme in case of failure/breakdown?

### **Access – Widening IPC-IPU gap**

Q1. Is any mechanism to promote water efficient agriculture at place, like inlet discharge control at place? If yes, provide evidence

### RELEVANCE

**RL1: Is the scheme relevant in the present context?**

**Provide details of the relevant sectoral challenge, beneficiary need, national priority, SDG that pertain to the area in which the scheme is operating?**

Q1. What are the key challenges and priorities with respect to water and agriculture in India? Explain with supporting evidence/ studies.

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**



Q1. As per our understanding, the scheme is operating to reduce the IPC-IPU gap as well as gap in irrigation coverage (UIP-IPC). Is there any other sectoral challenge, beneficiary need, national priority, SDG with respect to water and agriculture sector in India where the scheme is operating?

Eg: SDG 2.3 (i.e. by 2030 double the agricultural productivity and the incomes of small-scale food producers, particularly women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment) and SDG 6 (Clean water and sanitation).

Can you provide relevant data and / or studies that may have been done in this respect?

Q2 - There are other schemes like - MGNREGA, WDC-PMKSY, which also focus on water source creation. So, is their duplication of activities undertaken by these Govt. initiatives vis-à-vis SMI? If not, how the interventional areas are different across these different schemes?

Q3 - What was the target for reduction of IPC-IPU gap at the time of scheme design?

Q4 - What was the target for irrigation productivity increase at the time of scheme design?

#### **Sustainability – Climate\_Change**

Q1. Do you think SMI is helpful in mitigating extreme effects of climate change on agriculture in India like increased frequency and intensity of hydrological droughts?

Is the scheme helpful in mitigating any other effects of climate change?

Explain in detail with supporting evidence.

#### **What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1 - Are there any interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority and SDG? If yes, please provide some information around them.

Q2 - Can waste water reuse (e.g. for agriculture) be included as part of the scheme? If yes, how can it be implemented?

#### **Equity – High loss in irrigation coverage**

1. SMI scheme has no reference of high water losses (evaporation and percolation) in surface water bodies. Do you visualise this as an interventional gap? Please explain

2. Has there been any comparative study on the water balance before and after scheme implementation? If yes, please provide such reports

IMPACT

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**



Q1. What are the expected long- term benefits of the scheme? Has DoWR conducted any impact assessment study after project completion?

If Yes, collect the reports

EQUITY

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Please share some evidence.

SECTION 2: CROSS SECTION THEMES

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

#### **Accountability & Transparency - Monitoring Mechanisms**

Q1. Have there been instances of data inconsistencies during monitoring by independent agencies? How are such issues resolved?

#### **Citizen Accountability**

Q1. Is there an existing and functional system to address the grievances of the citizens?

Provide evidence.

#### **Beneficiary involvement**

Q1. What are the steps undertaken to ensure beneficiary involvement across project planning, execution, monitoring and evaluation?

Q2. Has there been adequate level of involvement? Provide evidence.

#### **Gender mainstreaming – Inclusiveness in scheme design/ planning**

Q1. Does the scheme provide for any targeted action for the benefit of women to promote societal equity?

If yes, share some evidence

#### **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population- Funds allocated under TSP/ SCSP and other provisions for vulnerable communities**

Q1. Is there a designated fund allocated for TSP and SCSP? To what extent was it utilized for SMI between 2015-19?

#### **Use of IT technology in driving efficiency - Development, dissemination & adoption of innovative practices, technology & know-how- Fund allocation towards promotion of innovation**



Q1. Is geotagging of the physical assets created and use of geotagged photographs done?

Q2. What percentage of the total funds is allocated towards development, dissemination and adoption of innovative technologies? How much of it is utilized?

#### **Use of latest technology to improve efficiency and effectiveness of scheme implementation**

Q1. Enlist the technologies being used in the implementation and service delivery of SMI?

Q2. Enlist the states that are using latest technologies for the implementation of SMI?

Provide details of the technologies being used and its outcome.

#### **Climate change & sustainability including adoption of climate-change resilient practices & diversifications- Climate impact**

Q1. What is the projected impact of climate change on SMI scheme?

Q2. Given that based on climate change projections, most of India is likely to experience 5–20% increase in annual run-off, less soil moisture in summer and higher crop evapotranspiration (Shah, 2009); is there a need for modification in scheme design/ complementary measures?

#### **Development, dissemination & adoption of innovative practices, technology & know-how – fund allocation towards promotion of innovation**

Q1. What percentage of the total funds is allocated towards development, dissemination and adoption of innovative technologies? How much of it is utilized?

#### **Contribution of improved practices in increasing outcomes**

Q1. What are the direct impacts of the adoption of innovative technologies and practices on scheme and sector outcomes?

#### **Stakeholder and Beneficiary behavioral change- Fund Allocation**

Q1- Is there any separate allocation required for awareness campaign and capacity building activities?

Please provide some supporting evidence/reasons.

Q2. If yes, what percentage of it was utilized between 2015-19? Provide evidence.

Q3. What has been its direct impact on behavioral change? Give supporting evidence/ success stories.

#### **Research & Development- Fund Allocation**

Q1. What percentage of the total fund allocation within SMI is directed towards R&D?

Q2. How much of this percentage is currently being utilized for R&D?

#### **Reforms, Regulations- Adoption of models acts and reforms at governance, institutional and administrative level**

Q1. What measures are being undertaken to ensure effective implementation and compliance of adopted acts/rule/regulations within SMI? (like in areas of accountability, transparency etc.). Can you provide an evidence/case study depicting best practices?

#### **Public-Private Partnership**

Q1 - Is there any ongoing PPP model towards realization of SMI scheme?

If yes, how well has that functioned and what are the challenges?



If no, could it be used to increase the scheme efficiency and realize its outcomes? Provide best practices with respect to PPP in support of your response.

**SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



## 5.1.2 National level stakeholder - Chief Engineer: Central Water Commission (Project Monitoring Organization)

### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **SMI**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.



- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

**PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

**SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH SMI SCHEME**

**RESEARCHER TO NOTE:**

37. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.

38. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.

**SECTION 1: DEEP DIVE INTO SMI SCHEME USING REESIE FRAMEWORK:**

RELEVANCE

RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?

**What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**

Q1. Do all the scheme objectives like enhancing physical access to water on farm, expanding cultivable area under assured irrigation and introduction of sustainable water conservation practices have corresponding outcome parameters? Please share details.

Q2. Can you share the output-outcome framework for SMI scheme?

**Do the scheme objectives as stated in the EFC note appear in the scheme guidelines?**

Q1 - Can you share the EFC note for this scheme since we need to assess the scheme guidelines with respect to the objectives covered in EFC note?

EFFECTIVENESS

**ET1: Is the scheme design appropriate to address scheme objectives?**



**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1 - Can you specify the key inputs, activities, outputs, outcomes and impacts from the scheme?

Q2 - Was there any change in any of these (especially 'outcomes and impacts' actually achieved vis-à-vis what was planned? If yes, can you share some data/information around it?

Q3 - What are the key assumptions linking outputs on one hand to realization of outcomes and impacts?

**Is there evidence that assumptions have been tested and are valid?**

Q1 – Based on the data available at/collected by PMO, how have the following parameters changed due to adoption of SMI (between 2015-2019)

a) Yield/productivity

b) income of farmers

c) Irrigation potential created (IPC)

d) Irrigation potential utilized (IPU)

e) Generation of employment

Please share relevant data with us.

**ET2: How are scheme targets set and monitored?**

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1 - How are the scheme targets set? Is it those purely financial targets or are they in terms of outputs or outcomes?

Q2 - Which department sets the targets?

Q3 - Is there mechanism to independently verify the progress reported by the supervising entity through audits or other methods? If yes, please provide some information around it. If no, are you planning to bring such mechanism and what is the timeline for that?

Q4. Are GIS maps strictly used during monitoring (as specified in the scheme document). Give evidence.

Q5. Is the stipulated date of project completion i.e. 2 years from the release of financial year of release of central assistance followed? If not, what are the challenges?

Q6. What are the consequences of delays in project completion? Please explain in detail and share relevant data in this regard.

Q7 - Are there any states which do not regularly upload progress data over MIS system? If yes, why is it happening?

**ET3: How has the scheme performed against scheme objectives and annual target?**



**Could you please identify states that have performed well? What are the underlying reasons for such performance?**

Q1 - Identify the states that have performed well

Q2. What are the key reasons/factors that have an impact on such scheme performance?

**Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q1 - Identify states that have performed poorly

Q2. What are the key reasons/factors that have an impact on such scheme performance?

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1 - Has the progress been reported regularly and accurately? If no, what are the challenges with respect to monitoring the scheme? Also, can you share any progress reports?

Q2 - Is M&E by 3rd party conducted by states as per scheme guidelines? If no, what is the reason behind that?

Q3. Have there been any issues of resource constraints (like fund, manpower)? If yes, give instances

Q4 - What are the other bottlenecks, issues & challenges in the implementation of the scheme?

**Overall nature and responsiveness of Water sector planning - Greater coordination between the various central government level organisations and the state government departments**

Q1. Did you witness any gaps/setbacks/delays in scheme implementation due to poor coordination between central government and state level organisation? Please explain

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1 - What are the existing indicators to measure scheme performance?

Q2. What additional performance indicators (over and above those currently tracked) may be added to effectively monitor scheme performance? Explain why they are important?

**ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (state or time period) and mention the relative impact of each factor on performance?**



Q1. What are the positive factors that have enhanced scheme performance? Categorize them as universal (across states, across years) and specific (state or time period).

Q2. Mention the relative impact of each factor on performance with supporting evidence?

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1. Which positive factors can be replicated to enhance the scheme performance across:

- Enhancing physical access to water on-farm
- Expanding cultivable area under assured irrigation
- Improving on-farm water use efficiency
- Sustainable water conservation practices
- Any other factors

Provide supporting success stories/rationale.

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1 - What are the negative factors that have reduced scheme performance across:

- Enhancing physical access to water on-farm
- Expanding cultivable area under assured irrigation
- Improving on-farm water use efficiency
- Sustainable water conservation practices
- Any other factors

Categorize them into universal (across states, across years) and specific (state or time period) and mention the relative impact of each factor on performance.

**How can the scheme design be modified to mitigate the negative factors?**

Q1. Based on the monitoring data, what modifications in the scheme design can mitigate the negative factors? Provide justifications

EFFICIENCY

**EC1: Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. Did the states submit cost-benefit analysis before project commencement (as per guidelines)?

If yes, provide reports



**What are the costs of the scheme? What is the monetary value of all costs?**

Q1 - What are the different cost factors (including socio-economic and environmental costs) associated with this scheme? Provide reports of such analysis.

SUSTAINABILITY

**SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. How much funds have been spent on O&M (state-wise) in the last five years?

**SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. What have been the main reasons behind project failures under the following heads. Please provide details:

- a) Technical
- b) Institutional
- c) Financial
- d) Economic
- e) Social
- f) Political
- g) Environmental

Q2 - Have such reasons been studied and documented? If yes, please share the same?

Q3. Identify risks that have high probability of occurrence and / or high impact if the risk materializes.

**RELEVANCE**

**RL2: Is it appropriate to continue / prioritize this scheme?**

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1. Based on the monitoring results, what would be the impact of continuation/ acceleration or shutting up/ scaling down of the scheme?

Q2 Are there any alternative schemes? Further, are such alternative schemes, if any, more effective than SMI, considering IPC and reducing gap between IPC-IPU? If yes, can you share some data/information about it?



## IMPACT

### **IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

#### **Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. Is any data available with PMO to assess the impact of the scheme on:

- a) IPC-IPU gap
- b) Physical access to water on farm
- b) SDG 2.3
- c) SDG 6
- d) Cultivable area under assured irrigation
- e) Sustainable water conservation and on-farm water use efficiency
- f) Preventing soil erosion
- g) Increasing ground water levels
- h) Increasing employment opportunities
- i) Income augmentation of farmers
- j) Resilience to climate- change

If yes, provide data / reports for the same.

#### SECTION 2: CROSS SECTION THEMES

[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]

#### **Evaluation Mechanisms**

Q1. Is the stipulated date of project completion i.e. 2 years from the release of financial year of release of central assistance followed by the states? If not, why?

What are the consequences of delays in project completion?

#### **Direct/Indirect Employment Generation- Women participation (%) in the Sector/Program**

Q1. Is there a specific study pointing out how women participation has increased after the implementation of SMI?

#### **Gender mainstreaming- Inclusiveness in scheme design/planning**

Q1. Does the scheme provide for any targeted action for the benefit of women to promote societal equity? If yes, please share some evidence.

#### SECTION 3: CHALLENGES AND SUGGESTIONS

1. Broadly, what are the main challenges/ limitations that you see in this scheme, **considering project monitoring?**



2. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



### 5.1.3 National level stakeholder - Chief Engineer: Central Water Commission (Irrigation Management Organization)

#### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **SMI**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.



- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

**PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

**SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH SMI SCHEME**

**RESEARCHER TO NOTE:**

39. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.

40. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.

**SECTION 1: DEEP DIVE INTO SMI SCHEME USING REESIE FRAMEWORK:**

EFFECTIVENESS

**ET1: Is the scheme design appropriate to address scheme objectives?**

**Is there evidence that assumptions have been tested and are valid?**

Q1 – How have the following parameters changed due to adoption of SMI (between 2015-2019)

- a) Yield/productivity
- b) Irrigation potential created (IPC)
- c) Irrigation potential utilized (IPU)

Please share relevant studies to support your answer.

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1 - What are the gaps / weakness in the assumptions with respect to SMI? Please elaborate with example and relevant data around it.

Q2. Are there any other limitations in the scheme design for SMI? Please explain with evidence.

Q3 – How can the scheme design be modified to make it more effective?

Q4 - Is there any separate funding allocation required for awareness campaign and capacity building activities? Please provide some justifying evidence.



**ET3: How has the scheme performed against scheme objectives and annual target?**

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. What are the key issues and challenges in scheme implementation, considering irrigation management?

Q2. Have there been any issues of resource constraints (like fund, manpower)? If yes, give instances

**Overall nature and responsiveness of Water sector planning - Greater coordination between the various central government level organizations and the state government departments**

Q1. Did you witness any gaps/setbacks/delays in scheme implementation due to poor coordination between central government and state level organization? Please explain.

**ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1 - What are the positive factors that have enhanced scheme performance?

Q2 - Categorize them as universal (across states, across years) and specific (state or time period) and mention the relative impact of each factor on performance with supporting evidence.

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1 - What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Provide rationale for your suggestions.

Q2 - What could be the potential impact of each such intervention, to aid in prioritization?

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1. Which positive factors can be replicated to enhance the scheme performance across:

- Enhancing physical access to water on-farm
- Expanding cultivable area under assured irrigation
- Improving on-farm water use efficiency
- Sustainable water conservation practices
- Any other factors

Provide supporting success stories/rationale.



**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1 - What are the negative factors that have reduced scheme performance across:

- Enhancing physical access to water on-farm
- Expanding cultivable area under assured irrigation
- Improving on-farm water use efficiency
- Sustainable water conservation practices
- Any other factors

Categorize them into universal (across states, across years) and specific (state or time period) and mention the relative impact of each factor on performance.

**How can the scheme design be modified to mitigate the negative factors?**

Q1. What modifications in the scheme design can mitigate the negative factors? Provide justifications

SUSTAINABILITY

**SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**Access - Widening IPC-IPU Gap**

Q1. Given the high dependence on ground water irrigation, what is the mechanism at place to encourage farmers to switch towards SMI? To what extent have you been successful? Provide evidence.

EFFICIENCY

**EC2: Can the costs of the scheme be lowered?**

**Are there lower cost alternatives for achieving the scheme outcomes?**

Q1 - Are there lower cost alternatives for achieving the scheme objectives?

Q2. Do you think inclusion of private sector (including CSR efforts, PPP) investment would aid in achieving SMI scheme objectives? Give reasons.

**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1. Have there been instances of inadequate coordination between different departments/ center, state and district, which hampers irrigation management under the scheme? If yes, provide details.

**What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1 - Is there any other scheme that aims to achieve similar outcomes?

Q2 - Is there any other scheme (e.g. apart from MGNREGA) that can complement this scheme?



Q3. Which states provide instances of convergence vis-à-vis SMI:

- Convergence with other schemes of central and state government
- Convergence with private sector/ CSR.

What good practices from such states be replicated in other states?

Q4. Which states are performing poorly, considering convergence for irrigation management? What are the reasons?

Q5. What measures could be taken to achieve convergence with other schemes like WDC, MGNREGA, MPLADS, restoration schemes under JNNURM, or with private sector / CSR funds etc.?

### **Convergence - Need for scheme convergence**

Q1. Do you see expected convergence of activities undertaken by this scheme with those by other schemes like - MGNREGA? Is there any duplication of the activities? Please provide details to justify your logic.

### **Access – Widening IPC-IPU gap**

Q1. Is any mechanism to promote water efficient agriculture at place, like inlet discharge control at place? If yes, provide evidence

RELEVANCE

#### **RL1: Is the scheme relevant in the present context?**

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

### **Access – Gap in irrigation coverage**

Q1. Is the irrigation type (rain fed/irrigated) in the catchment area considered while selection for SMI?

Q2. Are areas under rain fed irrigation given a priority?

#### **RL2: Is it appropriate to continue / prioritize this scheme?**

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1. What would be the impact of continuation/ acceleration or shutting up/ scaling down of the scheme on irrigation?

Q2 Are there any alternative schemes? Further, are such alternative schemes, if any, more effective than SMI, considering IPC and reducing gap between IPC-IPU? If yes, can you share some data/information about it?

**From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**



Q1. What are the priority areas in the water and agriculture sector, which are more important than those addressed by the scheme?

Q2. Why are these the priority over those addressed by the scheme? Explain with supporting data/evidence.

IMPACT

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. Is any study conducted by Irrigation Management Organisation to assess the impact of the scheme on:

- a) IPC-IPU gap
- b) Physical access to water on farm
- b) SDG 2.3
- c) SDG 6
- d) Cultivable area under assured irrigation
- e) Sustainable water conservation and on-farm water use efficiency
- f) Preventing soil erosion
- g) Increasing ground water levels
- h) Increasing employment opportunities
- i) Income augmentation of farmers
- j) Resilience to climate- change

If yes, provide data / reports for the same.

**Sustainability - More focus on water-intensive crop**

Q1. Is any awareness generation program/training conducted for farmers focusing on sustainable agriculture? Provide details.

**Water Security - Agriculture water use efficiency**

Q1. Do you think introduction of SMI has increased water use efficiency? If yes, please explain with evidence.

Q2. How do you think the storage losses (as water moves from reservoir), conveyance losses (as it is conveyed and delivered at farm gate), distribution losses (during application to farm), application losses (when it is stored in soil) and crop management losses (when it is finally consumed by crops) have changed after introduction of SMI? Please provide relevant data / evidence from other studies in this regard.



## EQUITY

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Does the scheme have any significant impact in promoting societal equity, with regards to access to on-farm irrigation? Please share some success story/case study.

**EQ2 Is any weaker section of society excluded/accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1. Given that the scheme has no special provision for small and marginal farmers, is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying benefits under SMI?

If so, what modifications do you suggest in scheme design or implementation.

## SECTION 2: CROSS SECTION THEMES

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Inclusion of vulnerable groups in scheme as well as sector**

Q1. Has contributed towards the inclusion of vulnerable group, considering access to irrigation?

Q2. Is there an evidence of any weaker section of society being excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits?

If so, what modifications do you suggest to scheme design or implementation?

### **Any Best Practices**

Can you provide an evidence/case study depicting how successful implementation of SMI has contributed towards mainstreaming of Tribal and Scheduled Caste population?

### **Use of latest technology to improve efficiency and effectiveness of scheme implementation**

Q1. What technologies being used in the implementation and service delivery of SMI? Provide instances.

### **Potential areas for synergy**



1. What could be efforts to achieve convergence with other schemes like WDC, MGNREGA, MPLADS, restoration schemes under JNNURM, etc.?

### SECTION 3: CHALLENGES AND SUGGESTIONS

1. Broadly, what are the main challenges/ limitations that you see in this scheme, **considering irrigation management?**
2. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

#### 5.1.4 National level stakeholder - Advisor: NITI Aayog

##### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:



- Can you explain what you mean by....?
- Earlier you said\_\_\_\_\_ but it also seems like\_\_\_\_\_. Can you explain?

### **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **SMI**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHS/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.



## PROFILE OF THE STAKEHOLDER

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH SMI SCHEME

### RESEARCHER TO NOTE:

41. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.

42. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.

## SECTION 1: DEEP DIVE INTO SMI SCHEME USING REESIE FRAMEWORK:

### RELEVANCE

Q1. Could you please provide an overview of the scheme in terms of its objectives?

#### **RL1: Is the scheme relevant in the present context?**

**Provide details of the relevant sectoral challenge, beneficiary need, national priority, SDG that pertain to the area in which the scheme is operating?**

Q1. What are the key challenges and priorities with respect to water and agriculture in India? Explain with supporting evidence/ studies.

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1 -Considering the key challenges with respect to water and agriculture in India, do you think, the scheme in its current design would be helpful in improving irrigation coverage as well as enhancing irrigation productivity? Give reasons/ supporting evidence.

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1 – According to you, are there any gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority and SDG? If yes, please provide some information around them.

**From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**

Q1. What are the priority areas in the water and agriculture sector, which are more important than those addressed by the scheme?



Q2. Why are these the priority over those addressed by the scheme? Please explain with relevant data/studies.

**RL2: Is it appropriate to continue / prioritize this scheme?**

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1. Do you think waste water reuse (e.g. for agriculture) should be included as a part of the scheme? If yes, why and how can it be implemented?

**Quality - Lack of wastewater reuse & pollution abatement measures**

Q1. Do you think there is a need to incorporate provisions for wastewater reuse for irrigation?

SECTION 2: CROSS SECTION THEMES

[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]

**Climate change & sustainability including adoption of climate-change resilient practices & diversifications- Climate impact**

Q1. What is the projected impact of climate change on SMI scheme?

Q2. Given that based on climate change projections, most of India is likely to experience 5–20% increase in annual run-off, less soil moisture in summer and higher crop evapotranspiration (Shah, 2009); is there a need for modification in scheme design/ complementary measures?

SECTION 3: CHALLENGES AND SUGGESTIONS

1. Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
2. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



## 5.1.5 National level stakeholder - FAO, India representative

### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **SMI**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.



- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.



## PROFILE OF THE STAKEHOLDER

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH SMI SCHEME

### RESEARCHER TO NOTE:

43. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.

44. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.

## SECTION 1: DEEP DIVE INTO SMI SCHEME USING REESIE FRAMEWORK:

### RELEVANCE

Q1. Could you please provide an overview of the scheme in terms of its objectives?

### EFFECTIVENESS

#### ET1: Is the scheme design appropriate to address scheme objectives?

##### Is there evidence that assumptions have been tested and are valid?

Q1. Based on data available at/ collected by FAO, has the implementation of SMI resulted in:

- a) Increase in agricultural yield/productivity
- b) Increase in income of farmers
- c) Creation of irrigation potential
- d) Reduction in IPC-IPU gap
- e) Generation of employment

If yes, mention some pilot studies/ best practices. Collect case study report.

### RELEVANCE

#### RL1: Is the scheme relevant in the present context?

##### Provide details of the relevant sectoral challenge, beneficiary need, national priority, SDG that pertain to the area in which the scheme is operating?

Q1. What are the key challenges and priorities with respect to water and agriculture in India? Explain with supporting evidence/ studies.

##### Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?

Q1. Considering the key challenges with respect to water and agriculture in India, do you think, the scheme in its current design would be helpful in improving irrigation coverage as well as enhancing irrigation



productivity? Are there any other priorities/challenges/SDGs that SMI addresses? Give reasons/ supporting evidence.

### **Sustainability – Climate Change**

Q1. Do you think SMI is helpful in mitigating extreme effects of climate change on agriculture in India like increased frequency and intensity of hydrological droughts?

Is the scheme helpful in mitigating any other effects of climate change?

Explain in detail with supporting evidence.

### **What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1 - Are there any interventional gaps which are not addressed by the scheme? Please explain with relevant data/studies.

Q2 – Do you think waste water reuse (e.g. for agriculture) should be included as a part of the scheme? If yes, why and how can it be implemented?

### **Equity – High loss in irrigation coverage**

1. SMI scheme has no reference of high water losses (evaporation and percolation) in surface water bodies.

Do you visualise this as an interventional gap? Please explain

2. Has there been any comparative study on the water balance before and after scheme implementation?

If yes, please provide such reports

### **RL2: Is it appropriate to continue / prioritize this scheme?**

### **From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**

Q1. What are the priority areas in the water and agriculture sector, which are more important than those addressed by the scheme?

Q2. Why are these the priority over those addressed by the scheme? Explain with supporting data/evidence/studies.

### **SECTION 2: CROSS SECTION THEMES**

[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]

### **Climate change & sustainability including adoption of climate-change resilient practices & diversifications- Climate impact**

Q1. What is the projected impact of climate change on SMI scheme?

Q2. Given that based on climate change projections, most of India is likely to experience 5–20% increase in annual run-off, less soil moisture in summer and higher crop evapotranspiration (Shah, 2009); is there a need for modification in scheme design/ complementary measures? Can you provide relevant literature/studies in support of your suggestion?



### SECTION 3: CHALLENGES AND SUGGESTIONS

1. Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
2. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

#### 5.1.6 National level stakeholder - Officer IWMI, India office

##### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
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- Seek more detail or explanation of a response. For example:
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  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?



- Earlier you said\_\_\_\_\_ but it also seems like\_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

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- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.



## PROFILE OF THE STAKEHOLDER

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH SMI SCHEME

### RESEARCHER TO NOTE:

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## SECTION 1: DEEP DIVE INTO SMI SCHEME USING REESIE FRAMEWORK:

### RELEVANCE

Q1. Could you please provide an overview of the scheme in terms of its objectives?

### EFFECTIVENESS

#### ET1: Is the scheme design appropriate to address scheme objectives?

##### Is there evidence that assumptions have been tested and are valid?

Q1. Based on data available at/ collected by IWMI, has the implementation of SMI resulted in:

- a) Increase in agricultural yield/productivity
- b) Increase in income of farmers
- c) Creation of irrigation potential
- d) Reduction in IPC-IPU gap
- e) Generation of employment

If yes, mention some pilot studies/ best practices. Collect case study report.

#### RL1: Is the scheme relevant in the present context?

##### Provide details of the relevant sectoral challenge, beneficiary need, national priority, SDG that pertain to the area in which the scheme is operating?

Q1. What are the key challenges and priorities with respect to water and agriculture in India? Explain with supporting evidence/ studies.

##### Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?

Q1. Considering the key challenges with respect to water and agriculture in India, do you think, the scheme in its current design would be helpful in improving irrigation coverage as well as enhancing irrigation productivity? Are there any other priorities/challenges/SDGs that SMI addresses? Give reasons/ supporting evidence.



### **Sustainability – Climate Change**

Q1. Do you think SMI is helpful in mitigating extreme effects of climate change on agriculture in India like increased frequency and intensity of hydrological droughts?

Is the scheme helpful in mitigating any other effects of climate change?

Explain in detail with supporting evidence.

### **What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1 - Are there any interventional gaps which are not addressed by the scheme? Please explain with relevant data/studies.

Q2 – Do you think waste water reuse (e.g. for agriculture) should be included as a part of the scheme? If yes, why and how can it be implemented?

### **Equity – High loss in irrigation coverage**

1. SMI scheme has no reference of high water losses (evaporation and percolation) in surface water bodies.

Do you visualise this as an interventional gap? Please explain

2. Has there been any comparative study on the water balance before and after scheme implementation?

If yes, please provide such reports

### **RL2: Is it appropriate to continue / prioritize this scheme?**

### **From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**

Q1. What are the priority areas in the water and agriculture sector, which are more important than those addressed by the scheme?

Q2. Why are these the priority over those addressed by the scheme? Explain with supporting data/evidence/studies.

## SECTION 2: CROSS SECTION THEMES

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Climate change & sustainability including adoption of climate-change resilient practices & diversifications- Climate impact**

Q1. What is the projected impact of climate change on SMI scheme?

Q2. Given that based on climate change projections, most of India is likely to experience 5–20% increase in annual run-off, less soil moisture in summer and higher crop evapotranspiration (Shah, 2009); is there a need for modification in scheme design/ complementary measures? Can you provide relevant literature/studies in support of your suggestion?

## SECTION 3: CHALLENGES AND SUGGESTIONS



1. Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
2. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

### 5.1.7 State level stakeholder - Chief Engineer: Irrigation and Water Resources Department

#### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
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  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?



## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
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- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH SMI SCHEME**

### **RESEARCHER TO NOTE:**

*47. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*

*48. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.*

## **SECTION 1: DEEP DIVE INTO SMI SCHEME USING REESIE FRAMEWORK:**

Q1. Could you please provide an overview of the scheme in terms of its objectives?



## EFFECTIVENESS

### **ET1: Is the scheme design appropriate to address scheme objectives?**

#### **Is there evidence that assumptions have been tested and are valid?**

Q1 – Has the implementation of SMI resulted in positive outcomes in the state (between 2015-2019):

- a) Yield/productivity
- b) income of farmers
- c) IPC-IPU
- d) Generation of employment

Mention some pilot studies/ best practices. Collect case study report.

What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?

Q1 According to you, what are the gaps / weakness in the assumptions and / or scheme design? Can you share some examples around it?

Q2. Do you suggest any changes in scheme design to make it more effective?

Q3. Is there any separate allocation required for awareness campaign and capacity building activities?

Please provide some evidence to justify your logic

Q4. Are there any other limitations in the assumptions and scheme design of SMI?

#### **What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1. As per your perspective, what are the limitations of the scheme design and underlying assumptions?

Please elaborate with examples and relevant data.

Q2. Do you suggest any change in the result chains (like inputs, activities, outputs, outcomes, impacts) for more effective implementation?

### **ET2: How are scheme targets set and monitored**

#### **Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. How are scheme targets set at the state and by whom?

#### **What information is contained in utilization certificate issued by state govt? Are they credible and can they be relied upon as an indicator of scheme progress?**

Q1. What information is contained in the UC? Is it mandatorily submitted to the center before issuance of central assistance?

Please share sample UC.

### **ET3: How has the scheme performed against scheme objectives and annual targets?**



### **What are the year wise scheme targets, if any, for the period 2015-16 onwards**

Q1. What was the target in terms of irrigation potential and water source creation, at state level, for 2015-2019 period?

Q2. As stated in the scheme guidelines, were the DPRs taken from Technical Advisory Committee (TAC), followed by State Level Sanctioning Committee (SLSC) before seeking central assistance?

Q3. How frequently CWC field officers conduct site visits to monitor the targets achieved?

### **What is the state wise, year wise performance against target**

Q1. What is the state-wise, year wise performance against target?

Q2. How has the state performed in terms of irrigation potential and water source creation during 2015-2019 period? Please provide supporting data.

Q2. How has the state performed in terms of financial target during 2015-2019 period? Please provide supporting data.

Q3. How is the physical validation of IPC and storage created done?

Q4. Are project level data maintained or does the states only provide cluster/ state level data?

Q5. Does the implementation schedule, monitoring & evaluation and arrangement for use and maintenance of the restored water bodies aligns with what is mentioned in the DPR?

### **Collect DPR, reports on implementation, M&E report of a completed project.**

#### **Identify states that have performed well? What are the underlying reasons for such performance?**

Q1. What have been the underlying reasons for good performance of the SMI scheme in your state (if applicable)?

#### **Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q1. What have been the underlying reasons for slow pace of work under SMI schemes in your state (if applicable)?

#### **What are the key bottlenecks, issues & challenges in the implementation of the scheme**

Q1. Since different departments (like water resources, irrigation, regional offices of CWC etc.) are involved at state level, is there proper synergy amongst them? Provide evidence of convergence

Q2. Have there been any issues of resource crunches (like fund, manpower)? If yes, give instances

Q3. What are the other bottlenecks, issues & challenges in the implementation of the scheme?

#### **Equity – High spatial variance in surface water availability and river interlinking**

##### **[to be asked for Himachal and Manipur only]**

Q1. Has the inclusion of North eastern and hilly areas in the special category states helped in addressing spatial variations? If yes, to what extent? Provide evidence

Q2. Does the scheme account for the presence of relatively high-priced diesel as an energy source in eastern India as compared to dominant and relatively cheap electricity in western and peninsular areas? If yes, How? Give evidence.

Q3. What percentage of SMI schemes are solar operated? How have they performed till date?



Provide evidence.

**What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable.**

Q1 –Is the proposed planning process (as per the scheme guidelines) currently being adhered to? If not, what are the areas in the planning process that are not being adhered to?

Q2 - How can the planning process be improved?

Q3 - What is mechanism for incorporating feedback/course corrections to the scheme?

For e.g. regarding District Irrigation Plans (DIP) - what are the reasons for delay in their formulation, status of their implementation and available datasets therein for the decision-makers.

Q4. Did the state department consult Panchayati Raj institutions during DPR preparation (as per guidelines)? Please provide more details.

**Greater coordination between the various central government level organisations and the state government departments**

1. Did you witness any gaps/setbacks/delays in scheme implementation due to poor coordination between central government and state level organisation? Please explain

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1. Are there any additional performance indicators (over and above those currently tracked) that may be necessary to effectively monitor scheme performance? If yes, please share some information around it.

**How has the scheme performed in respect of participatory irrigation management?**

Q1. How many community-based institutions have been created for maintaining SMI-HKPP assets at state level?

Q2. Is there data on capacity building activities conducted for these institutions?

Q3. How many irrigation assets have been taken over by the community in the state?

Q4. Comment on the financial capacity of these institutions?

**ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (state or time period) and mention the relative impact of each factor on performance?**

Q1. What are the positive factors that have enhanced scheme performance specifically in your state? Can you mention evidence based relative impact of each factor on performance?



**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1. Apart from above mentioned factors, what additional factors could be undertaken to improve the scheme?

Q2. What would be the potential impact of these interventions and how should they be prioritized for maximum impact? Provide reasons

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1 - How can the scheme design be modified to recognize / replicate the positive factors and enhance performance in other states? Provide success stories

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1 - What are the negative factors that have reduced scheme performance in the state? Mention the relative impact of each factor on performance?

**How can the scheme design be modified to mitigate the negative factors?**

Q1 - What modifications in the scheme design do you suggest to mitigate the negative factors? Provide justification.

Q2 - How can the surface water source restoration be further improved to derive benefits from them?

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1. Provide project-wise details for the state on:

- a) When was the fund requested?
- b) When were the funds received?
- c) When were the funds released to the district level?

Q2. Have there been any instances of delayed/ inadequate release of Central Assistance? If yes, mention the reasons.

Q3. Have there been any instance of delayed fund transfer to district level? If yes, mention the reasons?

**Was there timely utilization of available funds? If not, what were the reasons?**

Q1. Can you provide details of funds unutilized at the end of each year?

Q2. Can you provide month-wise details of how available funds were used?

Q3. If there is a tendency of expenditure towards the end of the year? If yes, why?

EFFICIENCY

**EC1: Did the benefits of the scheme exceed costs?**



**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. Was cost-benefit analysis conducted before project commencement (as per guidelines)? If yes, what methodology was followed for it? Please provide reports.

Q2 - Can you please fill the following template on project for C-B analysis:

<b>Cost Components</b>			
<b>Agricultural Input Cost</b>		<b>SMI (Post project)</b>	<b>Conventional (Pre-project)</b>
Human Resource (Labour)	Rabi		
	Kharif		
	Other Crops		
Irrigation costs (water and electricity)	Rabi		
	Kharif		
	Other Crops		
Pesticides/Insecticides	Rabi		
	Kharif		
	Other Crops		
Fertilizer and Manure	Rabi		
	Kharif		
	Other Crops		
Seeds	Rabi		
	Kharif		
	Other Crops		
Other costs (Land preparation and harvesting)	Rabi		
	Kharif		
	Other Crops		
Total		0	0
<b>Expenditure towards SMI System</b>			
Cost of SMI			
Depreciation @ 10%			
Interest @ 10%			
Repair & Maintenance @ 2%			



<b>Total Annual Expenses towards RRR System</b>			
Total Annual Expenditure			
<b>Benefit Components</b>			
<b>Output</b>			
Yield (kg/ha)	Rabi		
	Kharif		
	Other Crops		
Rate (Rs/kg)	Rabi		
	Kharif		
	Other Crops		
Irrigated area of the crop (ha)	Rabi		
	Kharif		
	Other Crops		
Income (Rs.)	Rabi		
	Kharif		
	Other Crops	0	0
Savings (Income - input cost)	Rabi	0	0
	Kharif		
	Other Crops		
<b>Additional Benefit due to SMI</b>		0	
<b>Additional cost due to SMI</b>		0	
<b>Gross Benefit-Cost Ratio</b>			

**What are the costs of the scheme? What is the monetary value of all costs?**

Q1. Were the socio-economic and environmental costs included while calculating cost of the scheme? If yes, please share details/reports.

**EC2: Can the costs of the scheme be lowered?**

**Are there lower cost alternatives for achieving the scheme outcomes?**

Q1 - How do you suggest minimizing the project cost, without impacting the scheme objectives?



Q2. Have there been any instance of private sector (including CSR efforts, PPP) involvement to achieve scheme objectives in the state? If yes, please provide supporting evidence.

**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1 - How is the coordination between ministries (and departments) ensured in the execution of scheme such that resources are used efficiently? Please provide details.

Q2. Have there been instances of inadequate coordination between in the state, which hamper scheme progress? If yes, provide details.

**Convergence – Need for scheme convergence**

Q1. Do you see expected convergence of activities undertaken by this scheme with those by other schemes like – MGNREGA in the state? Please provide details.

**What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1 - Is there any other scheme that aim to achieve similar outcomes?

Q2 - Is there any other schemes (apart from MGNREGA) that can complement this scheme? (Like JNNURM)

SUSTAINABILITY

**SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. What is the mechanism under place to ensure financial and institutional sustainability of the scheme in the state?

Q2. Who is responsible for O&M during and after project implementation?

Q3. How much funds have been spent on O&M project-wise in the state in the last five years?

Q4. What are the funds available for O&M after project implementation and are they adequate?

Q5. Is there a need for mandatory provision on a certain percentage of funding to be spent towards awareness campaign and capacity building?

If yes, how much what amount would be adequate for that? If no, please share evidences showing adequate awareness campaign and capacity building activities are going on across states

**SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**



Q1. What have been the main reasons behind project failures in the state under the following heads:

- a) Technical
- b) Institutional
- c) Financial
- d) Economic
- e) Social
- f) Political
- g) Environmental

Identify risks that have high probability of occurrence and / or high impact if the risk materializes.

Q2. What is the underlying mechanism for continued service under scheme in case of failure/breakdown?

### **Sustainability – Poor O&M and lack of financing**

1. In several cases, SMI assets go out of use for lack of O&M. Is this an issue in your state? If yes, what measures are required to address them.

2. Have there been any instance where water body created under SMI became dysfunctional due to poor O&M?

If yes, give reasons for the same.

3. Do you see the scheme as financially sustainable without any external aid? Please provide details

## **RELEVANCE**

### **RL1: Is the scheme relevant in the present context?**

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1. Does SMI tackle any key challenges across water and irrigation in the state? Please explain how?

Q2. As per our understanding, the scheme is designed to improve irrigation coverage as well as enhance irrigation productivity.

Is the successful implementation of the scheme contributing towards any other area? Eg: SDG 2.3 (i.e. - by 2030 double the agricultural productivity and the incomes of small-scale food producers, particularly women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment) and SDG 6 (Clean Water and sanitation)?

Can you provide relevant data and / or studies that may have been done in your state in this respect?

Q3. What were the following targets during scheme inception:

- Reduction between IPC-IPU gap
- Increase in irrigation productivity

### **Access – Gaps in irrigation coverage**

1. Is the irrigation type (rain fed/irrigated) in the catchment area a criteria while site selection for SMI?



2. Are areas under rain fed irrigation given a priority?

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1. Are there any state-specific interventional gaps (viz. areas that are not addressed by this or other schemes), considering sectoral challenge, beneficiary need, national priority and SDG with respect to water and agriculture?

**RL2 Is it appropriate to continue / prioritize this scheme?**

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1. What would be the state-specific impact of continuation/ acceleration or shutting up/ scaling down of the scheme? Please explain your answer with supporting evidence.

Q2. Are there any alternative schemes, serving similar purpose in the state? If yes, can you share some data/information about it?

Q3. Is there any duplication of activities under different schemes in this state? If no, how the interventional areas are segregated across these different schemes? If yes, how can the duplication be avoided?

**From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**

Q1. Considering your state, are there any priority areas in the sector which are not addressed by the by SMI?

Q2. Why are these a priority over those addressed by the scheme?

IMPACT

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. Have there been any state specific studies/ data to assess the impact of this scheme on following parameters have changed as -

- a) IPC-IPU gap
- b) Physical access to water on farm
- b) SDG 2.3
- c) SDG 6
- d) Cultivable area under assured irrigation
- e) Sustainable water conservation and on-farm water use efficiency
- f) Preventing soil erosion
- g) Increasing ground water levels



- h) Increasing employment opportunities
- i) Income augmentation of farmers
- j) Resilience to climate- change

If yes, provide details.

### **Water security – Agriculture water use efficiency**

Q1. Do you think the storage losses (as water moves from reservoir), conveyance losses (as it is conveyed and delivered at farm gate), distribution losses (during application to farm), application losses (when it is stored in soil) and crop management losses (when it is finally consumed by crops) have changed after introduction of SMI? Explain.

EQUITY

**EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Has the scheme had any significant impact in promoting societal equity? Please share some evidence/case study/ success stories.

**EQ2: Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1. Is the subsidy structure appropriate to attract weaker/vulnerable section of society?

Q2. Have there been instances of any weaker section of society being excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits?

If so, what modifications do you suggest to scheme design or implementation?

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability and transparency – Beneficiary involvement**



Q1. What are the steps undertaken at state level to ensure beneficiary involvement across project planning, execution, monitoring and evaluation?

Q2. Has there been adequate level of involvement? Provide evidence.

### **Women participation (%) in the Sector/Program**

Is there a state-specific study pointing out how women participation has increased after the implementation of SMI? Provide supportive evidence.

### **Private sector involvement**

Q1. Have there been instances of private sector (including CSR efforts, NGOs) being leveraged to achieve scheme objectives in the state?

### **Gender mainstreaming- Inclusiveness in scheme design/planning**

Q1. Does the scheme provide for any targeted action for the benefit of women to promote societal equity?

If yes, share some evidence.

### **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population - Inclusion of vulnerable groups in scheme as well as sector**

Q1. Have you undertaken an activity to analyse the problems faced by SCs/STs in your State? If yes, please provide details of the findings?

Q2. Whether SCA to TSP/SCA to SCSP has been implemented in your state or not? If implemented,

- a) What are the activities/interventions being undertaken for SCs and STs which are being funded through SCSP and TSP?
- b) What are the irrigation structures being constructed by the government under SCA to TSP/SCA to SCSP?
- c) Are the farmers being provided any subsidy/incentive for irrigation under SCA to TSP/SCA to SCSP?
- d) Does Krishi Vikas Kendra (KVK) implement Hands-on training/workshops/awareness programmes? If yes, what are the skill development and other irrigation-related trainings being conducted by KVKs under SCA to TSP/SCA to SCSP?
- e) What type of Multi-sector Support and Advisory services are being provided by KVKs to farmers under SCA to TSP/SCA to SCSP?
- f) Is there any other Agriculture Research Organization apart from KVK conducting trainings under SCA to TSP/SCA to SCSP?



- g) What are the steps taken to monitor the SCA to TSP/SCA to SCSP activities at the State level?
- h) How do you measure the impact under SCA to TSP/SCA to SCSP?
- i) What are the issues in the CSS? (Probe for top 5 issues)
- j) Please share recommendations to improve the impact of SCA to TSP/SCA to SCSP?

#### **Use of IT/Technology in driving efficiency**

Q1 - Is your state using GIS map technology for data collection? Please give some evidence

Q2 - Do you face any challenges in regular uploading the data over the MIS system? If yes, what are the challenges?

Q3. Is geotagging of the physical assets created and use of geotagged photographs done being done in your state?

#### **Use of latest technology to improve efficiency and effectiveness of scheme implementation**

Q1. What technologies are being used to improve the efficiency and implementation of SMI in your state?

#### **Technology to address key challenges**

Q1. What technologies are available to address the efficiency and implementation of SMI?

Are there any constraints towards its adoption? Please provide evidence.

#### **Development, dissemination & adoption of innovative practices, technology & know-how-Fund allocation towards promotion of innovation**

Q1. What percentage of the total funds is allocated towards development, dissemination and adoption of innovative technologies? How much of it is utilized by the state? Can you provide evidence/case study in support of your response?

#### **Contribution of improved practices in increasing outcomes**

Q1. What are the direct impacts of technology adoption on scheme and sector outcomes? Provide evidence.

#### **Stakeholder and Beneficiary Behavioral Change-Fund Allocation**

Q1. Did center allocate fund specifically for awareness generation and sensitization within the scheme?

Q2. What percentage of it was utilized between 2015-19? Provide evidence.

Q3. What has been its direct impact on behavioral change? Can you provide an evidence/case study in support of your response?

#### **Reforms, regulations - Adoption of models acts and reforms at governance, institutional and administrative level**



Q1. Enlist the measures that are being undertaken to ensure effective implementation and compliance of adopted acts/rule/regulations within SMI at state level? (like in areas of accountability and transparency. Can you provide an evidence/case study depicting the adoption of models, acts and reforms at governance, institutional and administrative level towards successful implementation of SMI?

**Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the Scheme-Private Sector Participation**

Q1. Has there been any private investment within the state towards SMI?  
If yes, provide evidence.

**Public-Private Partnership**

Q1 - Is there any ongoing PPP model towards realization of SMI scheme in your state?  
If yes, how well has that functioned and what are the challenges?  
If no, could it be used to increase the scheme efficiency and realize its outcomes?

**FPOs/SHGs/Cooperative's Participation**

Q1. Have any community/ collective/ cooperatives/ civil society availed benefit within SMI?  
If yes, how many? Please provide details. Can you provide an evidence/case study depicting the role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society towards successful implementation of SMI?

**SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the state-specific challenges/ limitations that you see in this scheme from an implementation point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



## 5.1.8 State level stakeholder - Director, Monitoring, Central Water Commission Regional Office

### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **SMI**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.



- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH SMI SCHEME**

#### **RESEARCHER TO NOTE:**

49. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.

50. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.

#### **SECTION 1: DEEP DIVE INTO SMI SCHEME USING REESIE FRAMEWORK:**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

#### EFFECTIVENESS

##### **ET1: Is the scheme design appropriate to address scheme objectives?**

##### **Is there evidence that assumptions have been tested and are valid?**

Q1 – Based on the monitoring data, has the implementation of SMI resulted in positive outcomes in the state (between 2015-2019):

- Yield/productivity
- income of farmers
- IPC-IPU
- Generation of employment

Please share the relevant data in support of your response.

##### **ET2: How are scheme targets set and monitored**

##### **Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. Is your state using GIS map technology for data collection? Please give some evidence



Q2. Do you face any challenges in regular uploading the data over the MIS system? If yes, what are the challenges?

**ET3 How has the scheme performed against scheme objectives and annual targets?**

**What is the statewise, year wise performance against target**

Q1. Based on monitoring data, what is the state-wise, year wise performance against target?

Q2. How has the state performed in terms of irrigation potential and water source creation during 2015-2019 period? Please provide supporting data.

Q3. How has the state performed in terms of financial target during 2015-2019 period? Please provide supporting data.

**What are the key bottlenecks, issues & challenges in the implementation of the scheme**

Q1. What are the key bottlenecks, issues & challenges in the implementation of the scheme, considering scheme monitoring?

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1 - What are the existing indicators to measure scheme performance?

Q2. Are there any additional performance indicators (over and above those currently tracked) that may be necessary to effectively monitor scheme performance? If yes, please share some information around it.

SUSTAINABILITY

**SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. Based on monitoring results, what have been the main reasons behind project failures in the state under the following heads:

- a) Technical
- b) Institutional
- c) Financial
- d) Economic
- e) Social
- f) Political
- g) Environmental

Identify risks that have high probability of occurrence and / or high impact if the risk materializes.

Q2. What is the underlying mechanism for continued service under scheme in case of failure/breakdown?

IMPACT



**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. Based on state monitoring data, comment on the impact of this scheme on following parameters:

- a) IPC-IPU gap
- b) Physical access to water on farm
- b) SDG 2.3
- c) SDG 6
- d) Cultivable area under assured irrigation
- e) Sustainable water conservation and on-farm water use efficiency
- f) Preventing soil erosion
- g) Increasing ground water levels
- h) Increasing employment opportunities
- i) Income augmentation of farmers
- j) Resilience to climate- change

Please share relevant data.

**Sustainability – More focus on water intensive crops**

Q1. Is any awareness generation program/training conducted for farmers focusing on sustainable agriculture? If yes, what has been its direct impact? Provide details

EQUITY

**EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Has the scheme had any significant impact in promoting societal equity? Please share some evidence

Q2. Does the monitoring data capture beneficiary data segregated as the number of SC/ST and female farmers availing irrigation under SMI? If yes, please share the data.

**SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Accountability & Transparency – Citizen Accountability**



Q1. Is there an existing and functional system to address the grievances of the citizens at state level?

Provide evidence

### **Beneficiary involvement**

Q1. What are the steps undertaken at state level to ensure beneficiary involvement across project monitoring and evaluation? Provide evidence.

Q2. Has there been adequate level of involvement? Provide evidence.

### **Direct/Indirect employment generation - Women participation (%) in the Sector/Program**

Q1. Does the monitoring data indicate an increase in women participation after the implementation of SMI?

Provide supportive evidence

### **Use of IT/Technology in driving efficiency**

Q1 – Mention the areas in which IT/Technology is used for efficient monitoring? Explain.

### **What data records are available for the scheme in public domain?**

Q1. Was any external agency engaged for scheme monitoring by the state? If yes, provide details of its findings?

Q2. Have there been any instances of inconsistencies between the data reported by the district to state and what was found by independent agencies? In any such case, how is it resolved?

### **SECTION 3: CHALLENGES AND SUGGESTIONS**

1. Broadly, what are the state-specific challenges/ limitations that you see in this scheme from monitoring point of view?
2. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

### **5.1.9 State level stakeholder - Secretary, Irrigation and water resource department**



## GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
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  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

## INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **SMI**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHS/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.



- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

**PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

**SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH SMI SCHEME**

**RESEARCHER TO NOTE:**

51. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.

52. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.

**SECTION 1: DEEP DIVE INTO SMI SCHEME USING REESIE FRAMEWORK:**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

EFFECTIVENESS

**ET1: Is the scheme design appropriate to address scheme objectives?**

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1. As per your perspective, what are the limitations of the scheme design and underlying assumptions? Please elaborate with examples and relevant data.

Q2. Do you suggest any change in the result chains (like inputs, activities, outputs, outcomes, impacts) for more effective implementation?

**ET3: How has the scheme performed against scheme objectives and annual targets?**

**What are the key bottlenecks, issues & challenges in the implementation of the scheme**

Q1. Since different departments (like water resources, irrigation, regional offices of CWC etc.) are involved at state level, is there proper synergy amongst them? Provide evidence of convergence

Q2. Have there been any issues of resource crunches (like fund, manpower)? If yes, give instances

Q3. What are the other bottlenecks, issues & challenges in the implementation of the scheme?

EFFICIENCY

**EC2: Can the costs of the scheme be lowered?**



**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1 - How is the coordination between ministries (and departments) ensured in the execution of scheme such that resources are used efficiently? Please provide details.

**What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1 - Is there any other functional scheme in the state that aim to achieve similar outcomes?

Q2 - Is there any other schemes (apart from MGNREGA) that can complement this scheme? (Like JNNURM)

SUSTAINABILITY

**SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. What is the mechanism under place to ensure financial and institutional sustainability of the scheme in the state?

Q2. Who is responsible for O&M during and after project implementation?

Q3. Is there a need for mandatory provision on a certain percentage of funding to be spent towards awareness campaign and capacity building? Provide justifying reasons.

**SS5: Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1. How is the environmental and social sustainability of the scheme ensured?

Q2. How can environmental and social sustainability be improved?

RELEVANCE

**RL1: Is the scheme relevant in the present context?**

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1. Does SMI tackle any key challenges across water and irrigation in the state? Please explain how?

Q2. As per our understanding, the scheme is designed to improve irrigation coverage as well as enhance irrigation productivity.

Is the successful implementation of the scheme contributing towards any other area? Eg: SDG 2.3 (i.e. - by 2030 double the agricultural productivity and the incomes of small-scale food producers, particularly women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment) and SDG 6 (Clean Water and sanitation)?



Can you provide relevant data and / or studies that may have been done in your state in this respect?

Q3. What were the following targets during scheme inception:

- Reduction between IPC-IPU gap
- Increase in irrigation productivity

### **Sustainability – Climate Change**

Q1. Has implementation of SMI helped/ is expected to help in mitigating extreme effects of climate change on agriculture in India like increased frequency and intensity of hydrological droughts in your state?

Is the scheme helpful in mitigating any other effects of climate change?

Explain in detail with supporting evidence.

### **What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1. Are there any state-specific interventional gaps (viz. areas that are not addressed by this or other schemes), considering sectoral challenge, beneficiary need, national priority and SDG with respect to water and agriculture?

### **RL2 Is it appropriate to continue / prioritize this scheme?**

#### **What would be the impact if the scheme were to be scaled down or stopped?**

Q1. What would be the state-specific impact of continuation/ acceleration or shutting up/ scaling down of the scheme? Please explain your answer with supporting evidence.

Q2. Are there any alternative schemes, serving similar purpose in the state? If yes, can you share some data/information about it?

Q3. Is there any duplication of activities under difference schemes in this state? If no, how the interventional areas are segregated across these different schemes? If yes, how can the duplication be avoided?

#### **From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**

Q1. Considering your state, are there any priority areas in the sector which are not addressed by the SMI?

Q2. Why are these a priority over those addressed by the scheme?

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Technology to address key challenges**



Q1. What technologies are available to address the efficiency and implementation of SMI?  
Are there any constraints towards its adoption? Please provide evidence.

**SECTION 3: CHALLENGES AND SUGGESTIONS**

1. Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
2. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

5.1.10 State level stakeholder - Director State Watershed Department

**GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?



- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said\_\_\_\_\_ but it also seems like\_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **SMI**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
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- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH SMI SCHEME**

### **RESEARCHER TO NOTE:**

*53. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*

*54. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.*



**SECTION 1: DEEP DIVE INTO SMI SCHEME USING REESIE FRAMEWORK:**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

EFFECTIVENESS

**ET3 How has the scheme performed against scheme objectives and annual targets?**

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1. Apart from the currently measured structural and non-structural indicators, what could be additional indicators for assessing the progress of the scheme?

Q2. Do you think there is a need to include an indicator related to quality of water? Explain.

**SECTION 2: CHALLENGES AND SUGGESTIONS**

1. Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
2. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

**5.1.11 State level stakeholder - Chief Engineer, State Groundwater Department**

**GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.



- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

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- Explain the purpose of the interview:
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- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**



- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH SMI SCHEME**

### **RESEARCHER TO NOTE:**

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56. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.

## **SECTION 1: DEEP DIVE INTO SMI SCHEME USING REESIE FRAMEWORK:**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

### EFFECTIVENESS

**ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

### **Sustainability – High dependence on groundwater for irrigation**

Q1. What has been the change in groundwater levels since the scheme implementation? Provide evidence

Does the data capture seasonal fluctuation before and after scheme implementation? If not, any plan for that. Please explain

Q2. Have the number of private borewell connections increased after scheme implementation? Please provide details

Q3. Do you think the increased availability of groundwater after scheme implementation could lead to increase in its abstraction, contrary to the scheme objective?

## **SECTION 3: CHALLENGES AND SUGGESTIONS**

1. Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?



2. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

### 5.1.12 State level stakeholder - State Level Sanctioning Committee

#### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### **INTRODUCTION: SELF**

Thank you for giving us your valuable time.



- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **SMI**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

#### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH SMI SCHEME**

#### **RESEARCHER TO NOTE:**

*57. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*

*58. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.*

#### **SECTION 1: DEEP DIVE INTO SMI SCHEME USING REESIE FRAMEWORK:**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

EFFECTIVENESS



**ET3: How has the scheme performed against scheme objectives and annual targets?**

**What are the key bottlenecks, issues & challenges in the implementation of the scheme**

**Overall nature and responsiveness of Water sector planning - Greater coordination between the various central government level organizations and the state government departments**

Q1. Has there been adequate coordination between center, state and district throughout scheme implementation?

Q2. Is there adequate consultation between state government and Panchyati Raj Institutions during DPR creation? Please provide details to justify your logic

**SECTION 2: CHALLENGES AND SUGGESTIONS**

1. Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
2. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

**5.1.13 District level stakeholder - District Irrigation Officer**

**GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?



- What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_that made you decide to\_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said\_\_\_\_\_ but it also seems like\_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India’s policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **SMI**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the district level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can’t write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH SMI SCHEME**

### **RESEARCHER TO NOTE:**



59. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.

60. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.

## **SECTION 1: DEEP DIVE INTO SMI SCHEME USING REESIE FRAMEWORK:**

### **EFFECTIVENESS**

#### **ET1: Is the scheme design appropriate to address scheme objectives?**

##### **Sustainability – High dependence on groundwater for irrigation**

Q1. Does the District Irrigation Plan (DIP) include organisation of trainings/workshops for farmers to encourage them to adopt structures created under SMI over private borewells for irrigation? Please share the DIP in support of your answer.

#### **ET3: How has the scheme performed against scheme objectives and annual targets?**

##### **What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. What are the bottlenecks, issues & challenges in the implementation of the scheme at district level?

Q2. Have there been any issues of resource crunches (like fund, manpower)? If yes, give instances

##### **What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable**

Q1. Which are the areas in the planning process that are not being adhered to?

Q2. According to you what are the limitations of the ongoing planning process? How can the planning process be improved?

Q3. What is mechanism for incorporating feedback/course corrections to the scheme? For e.g. regarding District Irrigation Plans (DIP) - what are the reasons for delay in their formulation, status of their implementation and available datasets therein for the decision-makers.

#### **ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

##### **Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1. Provide project-wise details on:

a) When was the fund requested?



b) When were the funds received?

c) When were the funds utilized on-site?

Q2.- Is the fund flow adequate and received on-time, as per the scheme guidelines? If not, what are the reasons?

SUSTAINABILITY

### **Access - Widening IPC-IPU Gap**

Q1. Do beneficiary farmers tend to shift towards less water efficient agriculture like flood irrigation after scheme implementation? If yes, how can the farmers be motivated to adopt more water efficient practices, like inlet discharge control? Please explain.

IMPACT

**IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. Have there been any district specific studies/ data to assess the impact of this scheme on following parameters have changed as -

- a) IPC-IPU gap
- b) Physical access to water on farm
- b) SDG 2.3
- c) SDG 6
- d) Cultivable area under assured irrigation
- e) Sustainable water conservation and on-farm water use efficiency
- f) Preventing soil erosion
- g) Increasing ground water levels
- h) Increasing employment opportunities
- i) Income augmentation of farmers
- j) Resilience to climate- change

If yes, provide details.

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Stakeholder and Beneficiary Behavioral Change - Mechanisms to promote and ensure behaviour change**



Q1. What activities are undertaken at district and block level to promote adoption of good practices under SMI? Can you provide an evidence/case study depicting the significance of behavioural change and awareness generation towards the success of SMI?

### **Challenges faced**

Q1 - What are the major challenges towards promoting stakeholders and beneficiary behavioural change?

Q2. Are there any areas which need more attention in terms of bringing behaviour change?

### **Unlocking synergies with other government program – what are the challenges hindering effective convergence**

Q1. What are the gaps faced by the district in the level of coordination/conflicts between center, state and district, which limit convergence?

### **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste Population - Inclusion of vulnerable groups in scheme as well as sector**

Q1. How SMI has contributed towards the inclusion of vulnerable group by providing them access to irrigation?

Q2. Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits?

If so, what modifications are necessary to scheme design or implementation?

Q3. Can you provide an evidence/case study depicting how successful implementation of SMI has contributed towards mainstreaming of Tribal and Scheduled Caste population?

Q4. Have you undertaken an activity to analyse the problems faced by SCs/STs in your District? If yes, please provide details of the findings?

Q5. Whether SCA to TSP/SCA to SCSP has been implemented in your district or not? If implemented -

- a) Is there any micro-project under SCA to TSP/SCA to SCSP being undertaken in your district? (Collect details of Irrigation projects, villages where SCA projects are being implemented)
- b) What are the activities/interventions being undertaken for SCs and STs which are being funded through SCSP and TSP?
- c) What are the irrigation structures being constructed by the government under SCA to TSP/SCA to SCSP?
- d) Are the farmers being provided any subsidy/incentive for irrigation under SCA to TSP/SCA to SCSP?
- e) Does Krishi Vikas Kendra (KVK) implement Hands-on training/workshops/awareness programmes? If yes, what are the skill



development and other irrigation-related trainings being conducted by KVKs under SCA to TSP/SCA to SCSP?

- f) How many farmers have been trained by KVK under SCA to TSP/SCA to SCSP?
- g) What type of Multi-sector Support and Advisory services are being provided by KVKs to farmers under SCA to TSP/SCA to SCSP? How many farmers have benefitted from such services?
- h) What are the steps taken to monitor the SCA to TSP/SCA to SCSP activities at the State/District/village level?
- i) How do you measure the impact under SCA to TSP/SCA to SCSP?
- j) What are the issues/challenges in the CSS? (Probe for top 5 issues)
- k) Please share recommendations to improve the impact of SCA to TSP/SCA to SCSP?

**Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme. Any best practice**

Q1. Have any community/ collective/ cooperatives/ civil society availed benefit within SMI at the district? If yes, how many?

Provide details.

**SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from an implementation point of view?
- What are some of the suggestions that you would like to point out in order to improve this scheme so that it can give better results on the ground level?



<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

5.1.14 District level stakeholder - District Agriculture Officer

**GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

**INTRODUCTION: SELF**

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NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **SMI**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the district level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

#### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH SMI SCHEME**

##### **RESEARCHER TO NOTE:**

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#### **SECTION 1: DEEP DIVE INTO SMI SCHEME USING REESIE FRAMEWORK:**

##### **EFFECTIVENESS**

##### **ET1: Is the scheme design appropriate to address scheme objectives?**

##### **Is there evidence that assumptions have been tested and are valid?**

Q1 – Can you share data collected by/available at the district on how the following parameters, depicting how they have changed due to adoption of SMI in the district (between 2015-2019)?

- a) Yield/productivity
- b) income of farmers



- c) IPC-IPU
  - d) Generation of employment
- Collect the data.

**ET3: How has the scheme performed against scheme objectives and annual targets?**

**What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable**

Q1. Which are the areas in the planning process that are not being adhered to?

Q2. According to you what are the limitations of the ongoing planning process? How can the planning process be improved?

IMPACT

**IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. Have there been any district specific studies/ data to assess the impact of this scheme on following parameters have changed as -

- a) SDG 2.3
- b) SDG 6
- c) Sustainable water conservation and on-farm water use efficiency
- d) Preventing soil erosion
- e) Increasing ground water levels
- f) Increasing employment opportunities
- g) Income augmentation of farmers
- h) Resilience to climate- change

If yes, provide details.

**Water Security - Agriculture water use efficiency**

Q1. Do you think introduction of SMI has increased water use efficiency? If yes, please explain.

Q2. How do you think the storage losses (as water moves from reservoir), conveyance losses (as it is conveyed and delivered at farm gate), distribution losses (during application to farm), application losses (when it is stored in soil) and crop management losses (when it is finally consumed by crops) have changed after introduction of SMI?



## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Use of IT/Technology in driving efficiency**

Q1 - Is your district using GIS map technology for data collection? Please give some evidence

Q2. Is geotagging of the physical assets created and use of geotagged photographs done? Can you provide an evidence/case study depicting the use of IT/Technology to improve the efficiency of the implementation of SMI

### **Technology to address key challenges**

Q1. What technologies are available to address the key challenges facing the scheme?

Are there any constraints towards its adoption?

Provide evidence

### **Stakeholder and Beneficiary behavioural Change - Mechanisms to promote and ensure behaviour change**

Q1. What activities are undertaken at district and block level to promote adoption of good practices under SMI? Can you provide an evidence/case study depicting the significance of behavioural change and awareness generation towards the success of SMI?

### **Challenges faced**

Q1 - What are the major challenges towards promoting stakeholders and beneficiary behavioural change?

Q2. Are there any areas which need more attention in terms of bringing behaviour change? Can you provide an evidence/case study depicting the significance of behavioural change and awareness generation towards the success of SMI?

### **Reforms, Regulations-Adoption of models acts and reforms at governance, institutional and administrative level**

Q1. What measures are being undertaken at district to ensure effective implementation and compliance of adopted acts/rule/regulations within SMI at the district? (like in areas of accountability and transparency)

Can you provide an evidence/case study depicting the adoption of models, acts and reforms at governance, institutional and administrative level towards successful implementation of SMI?

SECTION 3: CHALLENGES AND SUGGESTIONS



- Broadly, what are the main challenges/ limitations that you see in this scheme from an implementation point of view?
- What are some of the suggestions that you would like to point out in order to improve this scheme so that it can give better results on the ground level?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

### 5.1.15 Village level stakeholder - Village Panchayat and Gram Sabha

#### **GENERAL GUIDELINES for FGDs:**

- The topics and questions below should be used to guide the Focus Group Discussion. Please keep in mind, while conducting the FGDs, do respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- During FGDs, group dynamics are common so it must be ensured that every respondent gets a chance to speak, one person should not be allowed to dominate the discussion. Also, be aware of any power dynamics that may be at play. Please ensure that all respondents speak one by one so that the audio recording is clear.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- **Seek more detail or explanation of a response.** For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- **Explore the reasons** behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?



- **Seek clarity and check for inconsistencies.** For example:
  - Can you explain what you mean by....?
  - Earlier you said\_\_\_\_\_ but it also seems like\_\_\_\_\_. Can you explain?

**INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the FGD:
- I am ....., working with Ipsos, a global research organization. We regularly carry out research on various social issues. Currently we are implementing a study on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog along with KPMG a consultancy firm.
- The current study is an evaluation of Centrally Sponsored Schemes in the Water Resources sector in various states including yours. We would like to seek your opinion on certain topics related to the scheme **SMI**. One aspect of the evaluation is to meet the beneficiaries of these schemes to understand the benefits received, how the benefits have impacted different aspects of their life-social, economic, and any other. Your views are beneficial to assess the experiences, challenges if any associated with this project. Discussion with your group as well as others will also help us identify recommendations and suggestions to improve the next phase of implementation of similar projects.
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- Explain that there are no right/ wrong answers and obtaining opinion and perception and their individual experience is critical.

- **NOTE TO THE TEAM:**
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### **Warm up:**

21. Can you give me some information about the village how many households live here, which is the nearest town, mode of transport etc.
22. What are the different occupations that people are engaged in? What percentage of the households are involved in agriculture/ agriculture related activities?
23. Do you all own your own land or you work on others' land? How many members of your family are currently involved in agriculture related work? What crops do you grow?
24. What are some of the most common problems that farmers in your village face? Note to RESERACHERS- DO NOT DWELL EXTENSIVELEY ON PROBLEMS HERE, THIS IS JUST TO UNDERSTAND INFRASTRUCTURE, WATER/ IRRIGATION, AND MARKET ACCESS RELATED ISSUES IF THEY ARE ON TOP OF MIND.

### **Awareness about different schemes and projects implemented in their village**

21. What are the different irrigation and/or agriculture related projects that have been implemented in your village in last five years?
22. Can you please elaborate on these projects in terms of how they have benefitted you/ others in the village and/ or how do they address the common issues that you face?
23. What are the type of works undertaken? According to you, which ones are working well for the village and you? Why do you say so?

### **SECTION 1: DEEP DIVE INTO SMI SCHEME USING REESIE FRAMEWORK:**

#### **We are would like to ask you questions specifically about one particular project/ government scheme – Command area development and water management practices**

1. Are you aware that this project was developed under which scheme/ project? Have you heard about this scheme/yojana/ project? What do you know about it? From where did you hear about the scheme/ project?
2. Q2. In your view, what is the purpose of this scheme/ project? When was this created, how much time did it take to complete the project since it was announced?



3. Q3. When did you start benefitting from this project? How is it helping you in agriculture?  
PROBE TO UNDERSTAND THROUGH EXAMPLES OF WHAT THE BENEFITS EXPERIENCE  
ARE, WHERE POSSIBLE GET CONCRETE FACTS AND FIGURES.

EFFECTIVENESS

**ET1: Is the scheme design appropriate to address scheme objectives?**

**Is there evidence that assumptions have been tested and are valid?**

Q1 Provide details of the work done under SMI in the village under following heads:

- Number of projects executed in the between 2015-2019.
- Types of work undertaken under SMI: asset creation, repair, maintenance, others.

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1 – What better can be done to achieve end goal of ensuring on-farm irrigation (enabled by SMI projects)

**ET2: How are scheme targets set and monitored?**

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. What is the frequency of field level monitoring by the local implementing agency under following heads:

- a) Assets built under SMI
- b) Capacity building of the community
- c) Any other monitoring activities. Please specify

**ET3: How has the scheme performed against scheme objectives and annual targets?**

**What are the key bottlenecks, issues & challenges in the implementation of the scheme**

Q1 - What are the issues & challenges that is faced in the implementation of the schemes at village level?  
Please explain in detail.

**What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable.**

Q1. Were the Panchayati Raj Institutions consulted by the state during DPR preparation?

**How has the scheme performed in respect of participatory irrigation management?**

Q1. How is community participation ensured in the village for implementing and maintaining SMI-HKPP assets?

Q2 - How many irrigation assets have been taken over by the community?



Q3 -What are the strengths and weakness of SMI structures which have been handed over to the community under the following heads:

	Strengths	Weakness
Financial sustainability		
Financial capacity for maintenance of assets		
Institutional sustainability		
Institutional capacity for maintenance of assets		
Ensuring equitable distribution of water		

## SUSTAINABILITY

**SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

- Q1. Is there a wiliness to pay in the community to access assets built under SMI? Is yes, how much?  
Q2. How do you think continued operation and maintenance can be ensured?

**SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

- Q1. Have there been any cases of breakdown/ discontinued usage of structures created under SMI? What were the reasons behind it?  
Q2. What mitigation measures were done against these measures?  
Q3. Are the community capacity building activities adequate to ensure future operation and maintenance of the scheme assets?  
Q4. Is the maintenance activity conducted by the implementing agency or has it been handed over to the village level management body?

## IMPACT

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**



**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. According to you, what are the long-term benefits of the scheme?

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

### 5.1.16 Village level stakeholder - SC/ST and women representative in Gram Sabha and Gram Panchayat

#### **GENERAL GUIDELINES for FGDs:**

- The topics and questions below should be used to guide the Focus Group Discussion. Please keep in mind, while conducting the FGDs, do respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
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- In particular, there are 3 main approaches to eliciting more information from the respondents:
- **Seek more detail or explanation of a response.** For example:
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  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- **Explore the reasons** behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- **Seek clarity and check for inconsistencies.** For example:
  - Can you explain what you mean by....?
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**Warm up:**

25. Can you give me some information about the village how many households live here, which is the nearest town, mode of transport etc.
26. What are the different occupations that people are engaged in? What percentage of the households are involved in agriculture/ agriculture related activities?
27. Do you all own your own land or you work on others' land? How many members of your family are currently involved in agriculture related work? What crops do you grow?
28. What are some of the most common problems that farmers in your village face? Note to RESERACHERS- DO NOT DWELL EXTENSIVELEY ON PROBLEMS HERE, THIS IS JUST TO UNDERSTAND INFRASTRUCTURE, WATER/ IRRIGATION, AND MARKET ACCESS RELATED ISSUES IF THEY ARE ON TOP OF MIND.

**Awareness about different schemes and projects implemented in their village**

24. What are the different irrigation and/or agriculture related projects that have been implemented in your village in last five years?
25. Can you please elaborate on these projects in terms of how they have benefitted you/ others in the village and/ or how do they address the common issues that you face?
26. What are the type of works undertaken? According to you, which ones are working well for the village and you? Why do you say so?

**SECTION 1: DEEP DIVE INTO SMI SCHEME USING REESIE FRAMEWORK:**

**We are would like to ask you questions specifically about one particular project/ government scheme – Command area development and water management practices**

4. Are you aware that this project was developed under which scheme/ project? Have you heard about this scheme/yojana/ project? What do you know about it? From where did you hear about the scheme/ project?
5. Q2. In your view, what is the purpose of this scheme/ project? When was this created, how much time did it take to complete the project since it was announced?
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EQUITY



**EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Have you witnessed any change in the number of SC/ST/women/other disadvantaged section of the society gaining access to irrigation after implementation of SMI? If yes, please explain how it has changed.

**EQ2: Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1. Do you feel SC/ST/other weaker section of the society is excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits?

Provide details.

If so, what modifications do you suggest to scheme design or implementation?

### **SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from an implementation point of view?
- What are some of the suggestions that you would like to point out in order to improve this scheme so that it can give better results on the ground level?
  - Short term
  - Medium term
  - Long term

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



## 5.1.17 Village level stakeholder - NGO/ Local Implementing agency

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  - What happened next?
- **Explore the reasons** behind a response. For example:
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  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
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**Warm up:**

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**Awareness about different schemes and projects implemented in their village**

27. What are the different irrigation and/or agriculture related projects that have been implemented in your village in last five years?
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**We are would like to ask you questions specifically about one particular project/ government scheme – Command area development and water management practices**

7. Are you aware that this project was developed under which scheme/ project? Have you heard about this scheme/yojana/ project? What do you know about it? From where did you hear about the scheme/ project?
8. Q2. In your view, what is the purpose of this scheme/ project? When was this created, how much time did it take to complete the project since it was announced?
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EFFECTIVENESS

**ET1: Is the scheme design appropriate to address scheme objectives?**

**Is there evidence that assumptions have been tested and are valid?**

Q1 Provide details of the work done under SMI in the village under following heads:

- Number of projects executed in the between 2015-2019.
- Types of work undertaken under SMI: asset creation, repair, maintenance, others.
- Irrigation potential created (IPC) under the scheme
- Irrigation potential utilised (IPU) after the project completion

**ET2: How are scheme targets set and monitored?**

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. What is the frequency of field level monitoring conducted by you under following heads:

- a) Assets built under SMI



- b) Capacity building of the community
- c) Any other monitoring activities done by you? Please specify

**ET3: How has the scheme performed against scheme objectives and annual targets?**

**What are the key bottlenecks, issues & challenges in the implementation of the scheme**

Q1 - What are the issues & challenges that is faced by you towards the implementation of the schemes:

- a) Facilitating asset creation under SMI
- b) Handing over the asset to the community
- c) Monitoring work under SMI
- d) Any other challenges

**How has the scheme performed in respect of participatory irrigation management?**

Q1. How is community participation ensured in the village for implementing and maintaining SMI-HKCP assets?

Q2 - How many irrigation assets have been taken over by the community?

Q3 -What are the strengths and weakness of SMI structures which have been handed over to the community under the following heads:

	Strengths	Weakness
Financial sustainability		
Financial capacity for maintenance of assets		
Institutional sustainability		
Institutional capacity for maintenance of assets		
Ensuring equitable distribution of water		

SUSTAINABILITY

**SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

- Q1. Is there a wiliness to pay in the community to access assets built under SMI? Is yes, how much?
- Q2. How do you think continued operation and maintenance can be ensured?

**SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**



**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. Have there been any cases of breakdown/ discontinued usage of structures created under SMI? What were the reasons behind it?

Q2. What mitigation measures were done against these measures?

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



## 5.2 Discussion Guide for FGD

### 5.2.1 FGD: Project Beneficiaries

#### GENERAL GUIDELINES for FGDs:

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social, economic, and any other. Your views are beneficial to assess the experiences, challenges if any associated with this project. Discussion with your group as well as others will also help us identify recommendations and suggestions to improve the next phase of implementation of similar projects.

- Inform the respondents of the probable duration of the discussion - Approximately 90 minutes
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**Warm up:**

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**Awareness about different schemes and projects implemented in their village**

- 30. What are the different irrigation and/or agriculture related projects that have been implemented in your village in last five years?
- 31. Can you please elaborate on these projects in terms of how they have benefitted you/ others in the village and/ or how do they address the common issues that you face?
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- 10. Are you aware that this project was developed under which scheme/ project? Have you heard about this scheme/yojana/ project? What do you know about it? From where did you hear about the scheme/ project?
- 11. Q2. In your view, what is the purpose of this scheme/ project? When was this created, how much time did it take to complete the project since it was announced?
- 12. Q3. When did you start benefitting from this project? How is it helping you in agriculture? PROBE TO UNDERSTAND THROUGH EXAMPLES OF WHAT THE BENEFITS EXPERIENCE ARE, WHERE POSSIBLE GET CONCRETE FACTS AND FIGURES.

EFFECTIVENESS

**ET1: Is the scheme design appropriate to address scheme objectives?**

**Is there evidence that assumptions have been tested and are valid?**

Q1. Has there been any positive impact of the adoption of SMI (between 2015-2019) on:

- a) Yield/productivity
- b) Irrigation potential created
- c) Irrigation potential utilized
- d) Income on farmers
- e) Generation of employment

**Please help us fill the attached template in support of your response**



Crops - Yield/Productivity							
S r.	Cro p Na me	Crop Type - Rabi/K harif	Field/Horti cultue	Irrigated Area of the crop (ha)	Yield (kg/ha)		Cha nge in yield (%)
					Withou t SMI	With SMI	
1							
2							
3							
4							
5							
6							

Irrigation Potential Created					
S r.	Cro pe Na me	Crop Type - Rabi/K harif	IPC /ha		Change in IPC after the introdu ction of SMI (%)
			Without SMI	With SMI	
1					
2					
3					

Irrigation Potential Utilised					
S r.	Cro pe Na me	Crop Type - Rabi/K harif	IPU /ha		Change in IPU after the introdu
			Without SMI	With SMI	



					ction of SMI (%)
1					
2					
3					

Statewise Average Increase in Farmer's Income										
			System							
Sr.	Crop	Crop Type - Rabi/Kharif	Conventional	SMI	Total Input* (Rs. Per ha)	Total Yield (Quintal /ha)	Rate per Quintal	Total Income (Rs per ha)	Total Savings (Rs per ha)	Additional benefit by SMI (Rs per ha)
1										
2										
3										
4										
* Input costs include expenditure over Human Resource, Leveling, Seeds, Irrigation, Fertilizer, Pesticide, etc										

New Employment Opportunities						
Sr.	State	Habitat	Direct/Indirect	Skilled/Unskilled	Type of new work	No. or % of new employment opportunities created



1						
2						
3						
4						

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1- Do you have any suggestions to improve the scheme?

**Sustainability - High dependency on groundwater for irrigation**

Q1. After successful implementation of SMI, do you still use privately owned irrigation facilities (e.g. borewells)? If yes, why and to what extent?

**ET3: How has the scheme performed against scheme objectives and annual targets?**

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1 - Do you face any challenges for getting required support from the Government? Please specify

Q2 - Do you get required support from the local implementor/NGO? Please specify

Q3. Did you face any issue during/after scheme implementation? If yes, give details.

**Sustainability – High dependence on groundwater for irrigation**

Q1. After successful implementation of SMI and the presence of Type 1 (i.e. public irrigation projects) irrigation, do the farmers still use privately installed irrigation structures?

If yes, why and to what extent?

**ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1 – According to you, what factors (social, political, institutional) have prevented you from getting benefits under SMI projects?

Q2 - Do you prefer ground water-based irrigation over the SMI? If yes, why?

Q3. Is water available through irrigation sources created under SMI throughout the year? Do you feel the need to use complementary sources for irrigation like lift irrigation?

Q4 – Are there any other factors that prevent you from adopting SMI?

**Water Security - Using recycled water for agriculture**

Q1. - If government plans to introduce recycled use of wastewater (planned safe use), are you willing to use such water for agriculture? If not, what are the reasons?



### Access - Widening IPC-IPU Gap

Q1. With the presence of SMI, do you continue to prefer groundwater-based irrigation? Give reasons.

### **EFFICIENCY**

#### **EC1: Did the benefits of the scheme exceed costs?**

**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently? What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. What has been the socio-economic impact after completion of SMI works in respect of:

- a. Competency of farmers: Have the capacity building trainings benefitted you?
- b. Period of employment per year in agriculture
- c. Soil quality (like decrease in salinity/ alkalinity)?
- d. Ground water availability in the command area?

#### **EC2: Can the costs of the scheme be lowered?**

**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1. Have you faced any co-ordination issues with the irrigation departments or other concerned state departments?

### SUSTAINABILITY

#### **SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes**

Q1 – Do you get adequate support from the district during scheme implementation during asset creation, handing over and maintenance? Are there any areas where you feel more support is necessary?

Q2 - Do you think of any other risks that may affect scheme sustainability?

### Access - Widening IPC-IPU Gap

Q1. With more water availability, are you planning to shift towards uncontrolled irrigation techniques like flood irrigation? Explain.

### Sustainability - Poor O&M and lack of financing

Q1. Are you willing to pay for O&M of the project under SMI?

Q2. Do you see the scheme as financially sustainable, without any support from the department? Please explain.

### RELEVANCE



**RL1: Is the scheme relevant in the present context?**

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1. Has the scheme helped to improve irrigation coverage in the village?

Q2. Has the availability of irrigation, improved agricultural productivity of your farms?

Q3. Are there any other benefits derived from the scheme?

**Access - Gap in irrigation coverage**

Q1. Has there been any shift from rainfed to irrigated agriculture after scheme implementation?

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1. Do you think that the scheme could be improved to address any other needs? If yes, please specify and mention why it is important.

IMPACT

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Sustainability - More focus on water-intensive crop**

Q1. With more water availability after scheme implementation, do you prefer to take up crops like rice, wheat, sugarcane or other water-intensive crops?

Q2. Is there a change in number of crops grown in a year after scheme implementation? Provide details.

**SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Stakeholder and Beneficiary behavioural change- Fund Allocation**

Q1 - How many scientific knowledge & awareness campaigns (trainings) have been conducted between 2015 to 2019? Provide details.

Q2. Has it led to a visible behaviour change in the community? Give reasons.

**Mechanisms to promote and ensure behaviour change**

Q1. What activities were conducted by district and block level authorities to promote the adoption of good practices? On what frequency were these activities conducted?

Q2 - What % of beneficiaries have received training under SMI between 2015 to 2019?

**Unlocking Synergies with other Government Program- Convergence (Inter-Ministerial/Inter-Departmental/Financial/Human Resource/Administrative/Institutional/Schemes**

Q1. Have you faced any co-ordination issues during scheme implementation?

Example: between different departments like irrigation and water resources departments,



## 5.2.2 FGD: SC/ST Beneficiaries

### GENERAL GUIDELINES for FGDs:

- The topics and questions below should be used to guide the Focus Group Discussion. Please keep in mind, while conducting the FGDs, do respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- During FGDs, group dynamics are common so it must be ensured that every respondent gets a chance to speak, one person should not be allowed to dominate the discussion. Also, be aware of any power dynamics that may be at play. Please ensure that all respondents speak one by one so that the audio recording is clear.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- **Seek more detail or explanation of a response.** For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- **Explore the reasons** behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- **Seek clarity and check for inconsistencies.** For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the FGD:
- I am ....., working with Ipsos, a global research organization. We regularly carry out research on various social issues. Currently we are implementing a study on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog along with KPMG a consultancy firm.
- The current study is an evaluation of Centrally Sponsored Schemes in the Water Resources sector in various states including yours. We would like to seek your opinion on certain topics related to the scheme **SMI**. One aspect of the evaluation is to meet the beneficiaries of these schemes to understand the benefits received, how the benefits have impacted different aspects of their life-social, economic, and any other. Your views are beneficial to assess the experiences, challenges



if any associated with this project. Discussion with your group as well as others will also help us identify recommendations and suggestions to improve the next phase of implementation of similar projects.

- Inform the respondents of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged that will lead to identification of individual responses that they give during this discussion.
- Explain that there are no right/ wrong answers and obtaining opinion and perception and their individual experience is critical.

- **NOTE TO THE TEAM:**
- AT THE VILLAGE LEVEL, RESEARCHER NEEDS TO FIRST MEET THE SARPANCH OF THE VILLAGE
- NO BENEFICIARIES ARE TO BE MET FOR ANY SCHEME/ PROJECT RELATED INTERVIEW/FGD BEFORE MEETING THE SARPANCH

**RESEARCHER TO NOTE:**

71. All the questions inside boxes font are only for reference of the researcher to gauge if the larger question has been answered. These questions are not to be asked directly to the respondents.
72. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, RESEARCHER should add additional probes to help answer those questions.

**Warm up:**

37. Can you give me some information about the village how many households live here, which is the nearest town, mode of transport etc.
38. What are the different occupations that people are engaged in? What percentage of the households are involved in agriculture/ agriculture related activities?
39. Do you all own your own land or you work on others' land? How many members of your family are currently involved in agriculture related work? What crops do you grow?



40. What are some of the most common problems that farmers in your village face? Note to RESEARCHERS- DO NOT DWELL EXTENSIVELY ON PROBLEMS HERE, THIS IS JUST TO UNDERSTAND INFRASTRUCTURE, WATER/ IRRIGATION, AND MARKET ACCESS RELATED ISSUES IF THEY ARE ON TOP OF MIND.

### **Awareness about different schemes and projects implemented in their village**

33. What are the different irrigation and/or agriculture related projects that have been implemented in your village in last five years?
34. Can you please elaborate on these projects in terms of how they have benefitted you/ others in the village and/ or how do they address the common issues that you face?
35. What are the type of works undertaken? According to you, which ones are working well for the village and you? Why do you say so?

## **SECTION 1: DEEP DIVE INTO SMI SCHEME USING REESIE FRAMEWORK:**

### **We are would like to ask you questions specifically about one particular project/ government scheme – Command area development and water management practices**

Are you aware that this project was developed under which scheme/ project? Have you heard about this scheme/yojana/ project? What do you know about it? From where did you hear about the scheme/ project?

13. Q2. In your view, what is the purpose of this scheme/ project? When was this created, how much time did it take to complete the project since it was announced?
14. Q3. When did you start benefitting from this project? How is it helping you in agriculture?  
PROBE TO UNDERSTAND THROUGH EXAMPLES OF WHAT THE BENEFITS EXPERIENCE ARE, WHERE POSSIBLE GET CONCRETE FACTS AND FIGURES.

### **EQUITY**

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Has SMI promoted uniform access to water resources across all sections of the society? Please provide some information.

Q2. Do you feel included in planning and monitoring after asset hand over to the community?



# Annexure 6 Primary Survey Guide – GWI

The primary survey guide for ‘Ground Water Irrigation’ is provided below.

## 6.1 Discussion Guide for KII

### 6.1.1 National level stakeholder - Director, Har Khet Ko Pani (Ground Water), Mo WR, RD & GR

#### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India’s policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **GWI**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the national level, your



insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH GWI SCHEME**

#### **RESEARCHER TO NOTE:**

*73. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*

*74. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.*

### **SECTION 1: DEEP DIVE INTO GWI SCHEME USING REESIE FRAMEWORK:**

#### **RELEVANCE**

RL3: Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?

**What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

Q2. Is there any output-outcome framework for Ground Water Irrigation scheme? If yes, please provide the outcome, output and impact parameters. If these parameters have not been identified, could you discuss what would be the appropriate parameters?

**Do the scheme objectives as stated in the EFC note appear in the scheme guidelines?**

Q1 - Can you share the EFC note for this scheme since we need to assess the scheme guidelines with respect to the objectives covered in EFC note?



## **EFFECTIVENESS**

ET1: Is the scheme design appropriate to address scheme objectives?

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1. What was the budget allocation for 2019-20?

Q2. Please mention about key assumptions underlying the logic of results chain (input, activities, output, outcome and impact), especially assumptions linking outputs to outcomes and impacts for the scheme.

ET2: How are scheme targets set and monitored?

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1 - How are the scheme targets set? Is it purely financial targets or in terms of outputs or outcomes? Please provide details.

Q2 - Which department sets the targets?

Q3. Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?

**What information is contained in utilization certificate issued by state govt? Are they credible and can they be relied upon as an indicator of scheme progress?**

Q1. What information does the utilization certificate contain?

Q2. Are the utilization certificates credible and can they be relied upon as an indicator of scheme progress? If no, are there any alternative to this. Please discuss.

ET3: How has the scheme performed against scheme objectives and annual targets?

**What are the year wise scheme targets, if any, for the period 2015-16 onwards?**

Q1. Since the scheme is operational only in Arunachal and Assam during 2019-20, what was the physical and financial target for these two states during 2019-20? *(Focus)*

**What is the state wise, year wise performance against target?**

Q1. How have Arunachal and Assam progressed so far in terms of physical and financial target? *(Focus)*

## **EFFICIENCY**

EC1: Did the benefits of the scheme exceed costs?

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. What are the envisaged direct and indirect benefits of the scheme?



### **What are the costs of the scheme? What is the monetary value of all costs?**

Q1. What are the different cost components for implementing the scheme?

EC2: Can the costs of the scheme be lowered?

### **What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1 - Is there any other scheme that aim to achieve similar outcomes? If yes, how is the cost of that scheme with respect to this Ground Water Irrigation scheme? Please provide details. *(Validate)*

Q2 - Is there any other scheme (e.g. apart from MGNREGA, Micro Irrigation Fund) that can complement/supplement this scheme? Please discuss. *(Validate)*

### **SUSTAINABILITY**

SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.

### **Extraction of groundwater and its regulation**

Q1. Although the scheme guideline has specified eligibility criteria to mitigate the unregulated ground water extraction issues, how will it be monitored that stage of Ground Water Development (SOD) in an area should not exceed 70% at any time? Will it be sustainable with respect to current water stressed situation? Please discuss.

### **Efficient groundwater management and technologies**

How are you planning to ensure efficient ground water management?

### **RELEVANCE**

RL1: Is the scheme relevant in the present context?

### **Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1 - As per our understanding, the scheme is designed to reduce IPC-IPU gap and increase irrigation productivity through ground water-based irrigation. Is there any other area which the scheme is designed to address? *(Focus)*

Q2 – Was there any target in respect of reduction of IPC-IPU gap, as an impact of this scheme, at the time of scheme conceptualization? If yes, please provide details.

Q3 - What was the target, if any, for irrigation productivity increase, as a result of this scheme, during scheme inception?

### **Dependency on groundwater for irrigation**

Q3 - Since high dependency on ground water for irrigation becomes a challenge in India due to water stressed situation, why does this scheme focus on ground water-based irrigation? Although scheme



guideline has specified eligibility criteria to maintain safe ground water development, do you not think that this scheme can exacerbate the water stress situation? Please explain.

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1 - Are there any interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority and SDG? If yes, please provide some information around them. *(Focus)*

RL2: Is it appropriate to continue / prioritize this scheme?

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1. What would be the impact of continuation/acceleration or shutting up/scaling down of the scheme? *(Focus)*

Q2- Are there any alternative schemes working in this area? Please specify. *(Focus)*

Q3. How can duplication of resources and effort with such schemes be avoided? *(Focus)*

**From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**

Q1. What are the priority areas in respect of groundwater that you feel are more important than those addressed by the scheme?

Q2. Why are these the priority over those addressed by the scheme? Please explain with evidence in support of your answer.

**IMPACT**

IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.

**IPC-IPU Gap**

Q1. Is groundwater minor irrigation more efficient than surface water minor irrigation? Are there any studies that you can cite in this regard?

**EQUITY**

EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. How are the SC/ST and women beneficiaries given priority under this scheme? Please explain with supporting evidence. *(Validate)*

**SECTION 2: CROSS SECTIONAL THEMES**



**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

#### **Availability of Data Records and Reports in public domain**

Q1 - What data records are available for the scheme in public domain?

#### **Monitoring Mechanisms**

Q1 - How robust is the monitoring mechanism? Has there been measures taken to establish a dedicated MIS system for tracking the progress of the projects under the scheme? Please provide some information.

#### **Beneficiary involvement**

Q1 - What is the expected involvement of beneficiaries across the project lifecycle?

Q2 - Are the beneficiaries getting involved at current stage? If yes, which area? Please provide supporting evidence.

#### **Direct/Indirect Employment Generation - Employment Generation**

Q1 - What is the expected level of employment generation through schemes in the sector and overall sectoral contribution in National employment generation? Please provide supporting evidence.

#### **Income levels**

Q1 - What is the expected improvement in income levels? Please provide supporting evidence.

#### **Institutional barriers**

Q1 - Do you see any institutional barriers to employment generation (e.g. access to markets)? If yes, please provide some information

#### **Private sector involvement**

Q1 - Is there scope for private sector to be involved with a view to increase employment opportunities? If yes, how?

#### **Gender mainstreaming - Inclusiveness in scheme design/planning**

Q1 - Is there a specific mention of gender equality and equity considerations in the scheme guidelines/objectives, i.e. has the scheme been designed keeping gender considerations in mind? Please provide some information

#### **Gender-friendly infrastructure and policies**

Q1 - How is empowerment of women planning to be ensured in respect of this scheme?

#### **Capacity building**

Q1 - Is there any plan for providing specific training for women to enhance incomes? Please share details

#### **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population - Funds allocated under TSP/ SCSP and other provisions for vulnerable communities**

Q1 - What is the fund allocated under TSP & SCSP for each scheme? Please share details.



**Development, dissemination & adoption of innovative practices, technology & know-how - Fund allocation towards promotion of innovation**

Q1 - What percent of total allocation is directed towards development, dissemination and adoption of innovative practices and technology? How much of it is utilized?

**Potential areas for synergy**

Q1 - What are the areas for potential convergence / synergy across govt. programs?

**Reforms, Regulations - Adoption of models acts and reforms at governance, institutional and administrative level**

Q1 - What measures are being taken to ensure effective implementation and compliance of adopted acts/rule/regulations? (like in areas of safety, accountability, transparency etc.) *(Focus)*

**SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

6.1.2 National level stakeholder - Regional Director, Central Ground Water Board (CGWB)

**GENERAL GUIDELINES:**



- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **GWI**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.



## PROFILE OF THE STAKEHOLDER

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH GWI SCHEME

### RESEARCHER TO NOTE:

75. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.

76. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.

### SECTION 1: DEEP DIVE INTO GWI SCHEME USING REESIE FRAMEWORK:

RL3: Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?

**What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

Q2. Can you provide the outcome, output and impact parameters specified for this scheme? If these parameters have not been identified, could you discuss what would be the appropriate parameters?

**Do the scheme objectives as stated in the EFC note appear in the scheme guidelines?**

Q1 - Can you share the EFC note for this scheme since we need to assess the scheme guidelines with respect to the objectives covered in EFC note?

### EFFECTIVENESS

ET1: Is the scheme design appropriate to address scheme objectives?

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1. What are the key assumptions behind the logic of mapping amongst input, activities, output, outcome and impact, especially assumptions linking outputs to outcomes and impacts for the scheme?

ET2: How are scheme targets set and monitored?

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?



**What information is contained in utilization certificate issued by state govt? Are they credible and can they be relied upon as an indicator of scheme progress?**

Q1. Are the utilization certificates credible enough to release the next installment of funding? If no, are there any alternative to this. Please discuss.

ET3: How has the scheme performed against scheme objectives and annual targets?

**What is the year wise scheme targets, if any, for the period 2015-16 onwards?**

Q1. Since the scheme is operational only in Arunachal and Assam during 2019-20, what was the physical and financial target for these two states during 2019-20?

**What is the state wise, year wise performance against target?**

Q1. How have Arunachal and Assam progressed so far in terms of physical and financial target? Do you see any challenges? Please discuss.

**EFFICIENCY**

EC2: Can the costs of the scheme be lowered?

**What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1 – Do you see any other scheme that aim to achieve similar outcomes at a cost lower than this Ground Water Irrigation scheme? Please provide details.

Q2 – What all schemes (e.g. apart from MGNREGA, Micro Irrigation Fund) are available at Nation, State and other levels which can complement/ supplement this scheme? Please discuss.

**SUSTAINABILITY**

SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.

**Extraction of groundwater and its regulation**

Q1. Although the scheme guideline has specified eligibility criteria to mitigate the unregulated ground water extraction issues, how will it be monitored that stage of Ground Water Development (SOD) in an area should not exceed 70% at any time? Will it be sustainable with respect to current water stressed situation? Please discuss.

**Micro level information on all depleted aquifers**

Since the scheme is related to ground water-based irrigation, are any measures taken (/expected to be taken) to improve micro level information on the depleted aquifers? Please provide details on progress in aquifer mapping that has been made so far.

**Groundwater quality**

What is the plan to ensure the quality of ground water after scheme becomes operational?



## Efficient groundwater management and technologies

Do you find any challenges in ensuring efficient ground water management? If yes, please share details.

### **RELEVANCE**

RL1: Is the scheme relevant in the present context?

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

#### **Dependency on groundwater for irrigation**

Q1 – Why does the scheme focus on ground water-based irrigation where high dependency on ground water for irrigation is a challenge in current water stressed situation in India? Although the scheme guideline has specified eligibility criteria to maintain safe ground water development, do you not think that this scheme can worsen the water stress situation? Please explain.

RL2: Is it appropriate to continue / prioritize this scheme?

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1. Do you see any impact of continuation/acceleration or shutting up/scaling down of the scheme?

Q2- Are you aware of any alternative schemes working in this area? If yes, how are the interventional areas different across these schemes? If there is duplication of resources and efforts in achieving scheme objectives, how can such duplication be avoided?

### **IMPACT**

IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.

#### **IPC-IPU Gap**

Q1. Is groundwater minor irrigation more efficient than surface water minor irrigation? Are there any studies that you can cite in this regard?

### **EQUITY**

EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. How are the SC/ST and women beneficiaries given priority under this scheme? Please explain with supporting evidence.

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**



### **Availability of Data Records and Reports in public domain**

Q1 - What data records are available for the scheme in public domain?

### **Monitoring Mechanisms**

Q1 – Do you see any challenges to ensure robust monitoring mechanism? Currently, there no dedicated MIS system for tracking the progress of the projects under the scheme. Why? Is it under construction? Please provide details.

### **Beneficiary involvement**

Q1 - What is the expected involvement of beneficiaries across the project lifecycle?

Q2 - Are the beneficiaries getting involved at current stage? If yes, which area? Please provide supporting evidence.

### **Private sector involvement**

Q1 - Is there scope for private sector to be involved with a view to increase employment opportunities? If yes, how?

### **Gender mainstreaming - Inclusiveness in scheme design/planning**

Q1 - Is there a specific mention of gender equality and equity considerations in the scheme guidelines/objectives, i.e. has the scheme been designed keeping gender considerations in mind? Please provide some information

### **Gender-friendly infrastructure and policies**

Q1 - How is empowerment of women planning to be ensured in respect of this scheme?

### **Capacity building**

Q1 - Is there any plan for providing specific training for women to enhance incomes? Please share details

### **Development, dissemination & adoption of innovative practices, technology & know-how - Fund allocation towards promotion of innovation**

Q1 - What percent of total allocation is directed towards development, dissemination and adoption of innovative practices and technology? How much of it is utilized?

### **Potential areas for synergy**

Q1 - What are the areas for potential convergence / synergy across govt. programs?

### **Reforms, Regulations - Adoption of models acts and reforms at governance, institutional and administrative level**

Q1 - What measures are being taken to ensure effective implementation and compliance of adopted acts/rule/regulations? (like in areas of safety, accountability, transparency etc.)

## **SECTION 3: CHALLENGES AND SUGGESTIONS**



- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

### 6.1.3 State level stakeholder - Secretary to Assam Govt., Irrigation Dept., Guwahati

#### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?



## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **GW**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the State level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH GW SCHEME**

### **RESEARCHER TO NOTE:**

*77. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*

*78. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

## **SECTION 1: DEEP DIVE INTO PDMC SCHEME USING REESIE FRAMEWORK:**

Q1. Could you please provide an overview of the scheme in terms of its objectives?



## **EFFECTIVENESS**

ET3: How has the scheme performed against scheme objectives and annual targets?

### **What is the year wise scheme targets, if any, for the period 2015-16 onwards?**

Q1. What was the physical and financial target for the state (Assam) during 2019-20? *(Validate)*

### **What is the state wise, year wise performance against target?**

Q1. How has the state progressed so far in terms of physical and financial target? *(Validate)*

### **What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable.**

Q1 - What is the planning process proposed under the scheme?

Q2 - Is the planning process adequately and effectively followed? If not, what improvements are desirable.

Q3 - Is there a mechanism for incorporating feedback/course corrections to the scheme. For e.g. regarding District Irrigation Plans (DIP) - what are the reasons for delay in their formulation, status of their implementation and available datasets therein for the decision-makers.

Q4. Did the CGWB cooperate the state while preparing the DPR (as per guidelines)? If no, what challenges did you face?

## **EFFICIENCY**

EC2: Can the costs of the scheme be lowered?

### **What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1 - Is there any other scheme that aim to achieve similar outcomes at a lesser cost? Please provide details. *(Focus)*

Q2 – What are the other scheme (e.g. apart from MGNREGA, Micro Irrigation Fund) that can complement/supplement this scheme? *(Focus)*



## **SUSTAINABILITY**

SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.

### **Efficient groundwater management and technologies**

What are the actions to be taken for ensuring efficient ground water management?

## **RELEVANCE**

RL1: Is the scheme relevant in the present context?

### **Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1 - Is there any other area apart from reducing IPC-IPU gap and enhancing irrigation productivity that the scheme is designed to address? *(Validate)*

### **What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1 - Do you think that there are other interventional gaps (viz. areas that are not currently addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority and SDG, which the scheme can address? If yes, please provide some information around them. *(Validate)*

RL2: Is it appropriate to continue / prioritize this scheme?

### **What would be the impact if the scheme were to be scaled down or stopped?**

Q1. Do you envisage any impact of continuation/ acceleration or shutting up/scaling down of the scheme? *(Validate)*

Q2- Are there any alternative schemes? Please specify. *(Validate)*

Q3. Is there duplication of effort and resources in achieving schemes objectives vis-à-vis other related schemes? If yes, please explain such duplication and what can be done to avoid it. *(Validate)*

### **From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**

Q1. What are the priority areas in respect of groundwater that you feel are more important than those addressed by the scheme?

Q2. Why are these the priority over those addressed by the scheme? Please explain with evidence in support of your answer.

## **IMPACT: IM1**



IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.

### **IPC-IPU Gap**

Q1. Do you think that groundwater minor irrigation is more efficient than surface water minor irrigation in terms of reducing IPC-IPU gap? Please share some studies/evidences to justify your logic.

### **Irrigation coverage status**

Q1. To what extent, do you think that the scheme is expected to help in increasing irrigation productivity, thereby enhancing irrigation coverage? Please explain.

### **EQUITY**

EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. What measures are being taken to give priority towards the SC/ST and women beneficiaries under this scheme? Please explain with supporting evidence (*Focus*)

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability & Transparency - Availability of Data Records and Reports in public domain**

Q1 - Can you share the physical and financial progress data till date?

### **Monitoring Mechanisms**

Q1 - Since there is no dedicated MIS system, how are you maintaining the progress information of the projects?

### **Financial Accountability**

Q1 - Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what are the reasons?

Q2 - Provide some details for few proposals - when: i) request for funds was made by you, ii) funds released by the approving authority, iii) funds released by you to the next level / contractor?

### **Direct/Indirect Employment Generation - Employment Generation**

Q1 - How is the women participation (%) in the scheme, so far, at your state? Please provide evidence in support of your answer.



### **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population - Inclusion of vulnerable groups in scheme as well as sector**

Q1 - What are the interventions implemented for specific vulnerable groups?

### **Use of IT/Technology in driving efficiency - Deployment of IT enabled mechanisms for monitoring of the Scheme**

Q1 - How is technology being used for on-ground data collection?

Q2 - Is geotagging and use of geotagged photographs being done at your state? Please provide some evidences

Q3 - Do you face any challenges with respect to use of technology? If yes, what are the challenges?

### **Use of latest technology to improve efficiency and effectiveness of scheme implementation**

Q1 - Are there any technologies being used in project implementation, service delivery? Provide details

### **Stakeholder and Beneficiary behavioral change - Fund Allocation**

Q1 - What percent of total allocation is directed towards Awareness generation or sensitization? What is the utilization rate? and How much impact has it been able to generate in terms of behavior change? Is there any evidence in this respect?

### **Mechanisms to promote and ensure behavior change**

Q1 - What activities are undertaken at District/Block level to promote adoption of good practices?

### **Cropping pattern**

Q1 - What are the key constraints in crop planning based on local water availability with a view to reduce water intensive crops?

### **Unlocking Synergies with other Government Program - Convergence (Inter-Ministerial/Inter-Departmental/Financial/Human Resource/Administrative/Institutional/Schemes)**

Q1 - What activities are undertaken to ensure convergence of Govt. schemes/programmes at community level? Are there any Action Plans prepared at State level to ensure that? Please provide details.

### **Reforms, Regulations - Adoption of models acts and reforms at governance, institutional and administrative level**

Q1 - What measures are being taken to ensure effective implementation and compliance of adopted acts/rule/regulations? (like in areas of safety, accountability, transparency etc.) *(Validate)*

## **SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from an implementation point of view?



- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

#### 6.1.4 State level stakeholder - Regional Director – Central Ground Water Board (CGWB) Regional Office, North Eastern Region, Guwahati

##### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

##### **INTRODUCTION: SELF**



Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **GWI**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the State level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

#### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH GWI SCHEME**

##### ***RESEARCHER TO NOTE:***

*79. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*

*80. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

#### **SECTION 1: DEEP DIVE INTO PDMC SCHEME USING REESIE FRAMEWORK:**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

##### **EFFECTIVENESS**

ET3: How has the scheme performed against scheme objectives and annual targets?



**What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable.**

Q1 – Do you find any challenges in following the planning process, proposed under the scheme, adequately and effectively? If yes, what are those?

Q2 - Is there a mechanism for incorporating feedback/course corrections to the scheme. For e.g. regarding District Irrigation Plans (DIP) - what are the reasons for delay in their formulation, status of their implementation and available datasets therein for the decision-makers.

Q3. Did the states consult Central Ground Water Board while preparing the DPR (as per guidelines)? If no, what might be the reasons?

**EFFICIENCY**

EC2: Can the costs of the scheme be lowered?

**What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1 – Do you see any way to reduce the cost of the schemes (e.g. converging with other schemes working in the same area etc.)? Please discuss

**SUSTAINABILITY**

SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.

**Micro level information on all depleted aquifers**

What are the measures taken (✓expected to be taken) to improve micro level information on the depleted aquifers, which can be helpful for such ground water-based irrigation scheme? Please provide details on progress in aquifer mapping that has been made so far.

**Groundwater quality**

What are the actions to be taken for ensuring the quality of ground water after scheme becomes operational?

**Efficient groundwater management and technologies**

What are the actions to be taken for ensuring efficient ground water management?

**EQUITY**

EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?



**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. What measures are being taken to give priority towards the SC/ST and women beneficiaries under this scheme? Are they adequate? Do you suggest any changes/course corrections? Please discuss

**SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Monitoring Mechanisms**

Q1 - Since there is no dedicated MIS system, how are you maintaining the progress information of the projects?

**Use of IT/Technology in driving efficiency - Deployment of IT enabled mechanisms for monitoring of the Scheme**

Q1 – What are the technologies being used for on-ground data collection?

Q2 - Is geotagging and use of geotagged photographs being done at your state? Please provide some evidences

Q3 - Do you face any challenges with respect to use of technology? If yes, what are the challenges?

**Use of latest technology to improve efficiency and effectiveness of scheme implementation**

Q1 - Are there any technologies being used in project implementation, service delivery? Provide details

**Cropping pattern**

Q1 - What are the key constraints in crop planning based on local water availability with a view to reduce water intensive crops?

**SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from an implementation point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?



<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



# Annexure 7 Primary Survey Guide – SPFM

The primary survey guide for ‘Special Package for Maharashtra’ is provided below.

## 7.1 Discussion Guide for KII

### 7.1.1 National level stakeholder - Joint Secretary, Mo WR, RD & GR

#### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India’s policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **SPFM**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led



to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH SPM SCHEME**

#### **RESEARCHER TO NOTE:**

81. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.

82. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.

### **SECTION 1: DEEP DIVE INTO SPM SCHEME USING REESIE FRAMEWORK:**

#### **RELEVANCE**

RL3: Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?

**What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**

Q1. Can you provide us an overview of the scheme? Are the scheme objectives clear? Please discuss *(Focus)*

Q2. Do the following scheme objectives have corresponding outcome parameters?

- a) Providing water for irrigation in suicide prone and draught prone district of Maharashtra
- b) Providing water for domestic use in suicide prone and draught prone districts of Maharashtra

Q3. Can you share the output-outcome framework for the scheme? *(Focus)*

**Do the scheme objectives as stated in the EFC note appear in the scheme guidelines?**

Q1 - Are the scheme objectives in the EFC note in alignment with the scheme guidelines?



Can you share the scheme guideline with us?

### **EFFECTIVENESS**

ET1: Is the scheme design appropriate to address scheme objectives?

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1. How do the scheme activities, outputs and outcomes relate to the desired impact of the scheme?

Q2. Please share the assumptions underlying the logic of result chain (input, activities, output, outcome, impact) especially assumptions linking outputs to outcomes and impact? Are these assumptions realistic?

Provide evidence, if any? (*Focus*)

ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?

### **Using recycled water for agriculture**

Q1 - Can recycled waste water be used as a water source under this scheme? If yes, how can it be implemented? If no, what challenges do you find in this regard?

### **EFFICIENCY**

EC2 Can the costs of the scheme be lowered?

**What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1 - Is there any other scheme that aim to achieve similar outcomes? If yes, provide details

**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1- Did the state utilize the possibility of availing NABARD loan to contribute towards state's share of funding? Please share some information. (as per scheme guidelines)

### **SUSTAINABILITY**

SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?

### **More focus on water-intensive crop**



Q1 - Since farmers cultivate water intensive crops like - cotton, sugarcane etc. in Vidarbha and Marathwada regions, how come water resource management across these drought prone regions be sustainable? Please explain.

SS3: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?

### **Planning and data management**

Q1 - Although the scheme is very new, do you think that any improvement is required in terms of planning by the state? If yes, please explain.

RL1: Is the scheme relevant in the present context?

### **Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1 - As per our understanding, the scheme is designed to provide adequate irrigation facilities for sustainable agriculture and provide water for domestic use in the suicide prone districts and drought prone areas of Maharashtra, thereby improve the socio-economic condition of the farmers of these regions. Is there any other sectoral challenge, beneficiary need, national priority, SDG that the scheme is designed to address? If yes, please provide details.

### **What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1 - Is there any interventional gap (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority and SDG? If yes, please provide some information around them. *(Focus)*

RL2: Is it appropriate to continue / prioritize this scheme?

### **What would be the impact if the scheme were to be scaled down or stopped?**

Q1 - Are there any alternative schemes that can deliver similar outcomes? Further, are such alternative schemes, if any, more effective than the subject scheme? Please provide some information to justify your logic. *(Focus)*

### **From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**



Q1 - Which are the areas of interventional gaps (if any) more important than the area addressed by the scheme? And why? (*Focus*)

## **IMPACT**

### **IPC-IPU Gap**

Q1 – This scheme has both MMI and SMI projects. MMI projects are designed to address UIP and IPC gap and SMI projects are to address IPC-IPU gap. What else are undertaken for reducing IPC-IPU gap in these regions?

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability & Transparency**

#### **Monitoring Mechanisms**

Q1 -How robust is the monitoring mechanism? Is there any mechanism to independently verify the progress reported by the supervising entity through audits or other methods? If yes, please provide some information around it. If no, are you planning to bring such mechanism and what is the timeline for that and at what level?

### **Direct/Indirect Employment Generation**

#### **Employment generation**

Q1 - What is the current level of employment generation through schemes in the sector and overall sectoral contribution in National employment generation?

Q2 - Do we need any further measures to ensure 341 lakh man-days for unskilled, semi-skilled and skilled workers, as expected?

Q3 - What is the expected improvement in income levels?

### **Quantum of Self Employment, entrepreneurship generated**

Q1 - Is there any self-employment opportunities generated or scope of such opportunity? Please provide some information

### **Institutional barriers**

Q1 - Do you see any institutional barriers to employment generation (e.g. access to markets)? If yes, please provide some information

### **Private sector involvement**

Q1 - Is there scope for private sector to be involved with a view to increase employment opportunities? If yes, how can it be implemented? If no, what are the challenges?



### **Gender mainstreaming- Inclusiveness in scheme design/planning**

Q1 - Is there a specific mention of gender equality and equity considerations in the scheme guidelines/objectives, i.e. has the scheme been designed keeping gender considerations in mind? Please provide some information

### **Gender-friendly infrastructure and policies**

Q1 - How is empowerment of women being ensured in respect of this scheme?

### **Capacity building**

Q1 - Is there any plan for providing specific training for women to enhance incomes? Please share details

### **Development, dissemination & adoption of innovative practices, technology & know-how- Fund allocation towards promotion of innovation**

Q1 - What percent of total allocation is directed towards development, dissemination and adoption of innovative practices and technology? How much of it is utilized?

### **Unlocking Synergies with other Government Program- Potential areas for synergy**

Q1 - What are the areas for potential convergence / synergy across govt. programs?

### **Reforms, Regulations- Adoption of models acts and reforms at governance, institutional and administrative level**

Q1 - What measures are being taken to ensure effective implementation and compliance of adopted acts/rule/regulations? (like in areas of safety, accountability, transparency etc.)

### **Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme- Private Sector Participation**

Q1 - Is there any private investment in any states for this program? If yes, please share some information. If no, are you expecting any?

### **Public-Private Partnership**

Q1 - Is there any PPP model prevalent in this area? If yes, how well has that functioned and what are the challenges? If no, can it be profitable/ help to realize the scheme outcomes at a lower cost?

## **SECTION 3: CHALLENGES AND SUGGESTIONS**



- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

### 7.1.2 National level stakeholder - Commissioner, SPR, Mo WR, RD &GR

#### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### **INTRODUCTION: SELF**



Thank you for giving us your valuable time.

- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **SPFM**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

#### **RESEARCHER TO NOTE:**

*83. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*

*84. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.*

#### **SECTION 1: DEEP DIVE INTO SPFM SCHEME USING REESIE FRAMEWORK:**

##### **RELEVANCE**

RL3: Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?

**What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**



Q1. Can you provide us an overview of the scheme? Are the scheme objectives clear?

Q2. Can you share the output-outcome framework for the scheme? If these parameters have not been identified, could you discuss what would be the appropriate parameters?

**Do the scheme objectives as stated in the EFC note appear in the scheme guidelines?**

Q1 - Are the scheme objectives in the EFC note in alignment with the scheme guidelines?

Can you share the scheme guideline with us?

**EFFECTIVENESS**

ET1: Is the scheme design appropriate to address scheme objectives?

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1 – Can you specify the result chain (mapping amongst input, activity, output, outcome and impact)?

Q2 - What are the key assumptions underlying the logic of result chain, especially assumptions linking outputs to outcomes and impact?

ET2: How are scheme targets set and monitored?

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. How are the scheme targets set? Is it purely financial targets or in terms of outputs or outcomes?

Q2. Which dept. sets the scheme target?

Q2. Which scheme parameters are monitored by Ministry of Water Resources, Rural Development and Ganga Rejuvenation?

Q3. How and through what logic is the monitoring done?

Q3. What is the frequency of monitoring?

**What information is contained in utilization certificate issued by state govt? Are they credible and can they be relied upon as an indicator of scheme progress?**

Q1. What information does the utilization certificate contain?

Q2. Are the utilization certificates credible and can they be relied upon as an indicator of scheme progress?

ET3: How has the scheme performed against scheme objectives and annual targets?

**What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable.**



Q1. Are 25% of SMI schemes built under special package for Maharashtra monitored by CWC twice a year (as per the scheme guidelines)? Please share some reports.

ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?

#### **Project Management and project execution**

Q1 - Although this scheme was launched in 2018, have you seen any project management related issues like - delay in project execution during last year? Please provide details

#### **Using recycled water for agriculture**

Q1 - Why is recycled waste water not used as a water source under this scheme? Do you find any bottlenecks in this regard? Please explain.

### **EFFICIENCY**

EC1: Did the benefits of the scheme exceed costs?

#### **What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. What are the envisaged direct and indirect benefits of the scheme?

#### **What are the costs of the scheme? What is the monetary value of all costs?**

Q1. What are the different cost components (especially, non-financial) for implementing the scheme?

EC2 Can the costs of the scheme be lowered?

#### **Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1- Can you share some information on whether the state has utilized the NABARD loan to contribute towards state's share of funding? (as per scheme guidelines)

#### **What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1 - Is there any other scheme which is working to achieve similar outcomes? If yes, how is the cost of that scheme with respect to this Special Package? Please provide details.

Q2 - Is there any other scheme (e.g. apart from MGNREGA) that can complement/supplement this scheme? Please provide some information around it.

### **SUSTAINABILITY**



SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?

#### **More focus on water-intensive crop**

Q1 - Since Vidarbha and Marathwada regions are drought prone and farmers cultivate water intensive crops like - cotton, sugarcane etc., what are the measures taken under this scheme to maintain sustainable water resource management across these regions? Please provide details.

SS3: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?

#### **Planning and data management**

Q1 - Although the scheme is very new, do you think that data is being managed properly by the state? Do you see any challenge in that? If yes, please provide details.

Q2 - Although the scheme is very new, do you think that any improvement is required in terms of planning by the state? If yes, please explain.

RL2: Is it appropriate to continue / prioritize this scheme?

#### **What would be the impact if the scheme were to be scaled down or stopped?**

Q1. Do you expect any impact of continuation/acceleration or shutting up/scaling down of the scheme? Please provide details. (*Focus*)

Q2- Are there any alternative schemes working in this area? Please specify. How can duplication of resources and effort with such schemes be avoided?

### **IMPACT**

#### **IPC-IPU Gap**

Q1 - Apart from SMI projects, are there any other measures being taken for reducing IPC-IPU gap in these regions? If yes, please provide details.

#### **Irrigation coverage**

Q1 - How is the scheme expected to help in increasing irrigation productivity, thereby enhancing irrigation coverage? Please explain

### **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**



### **Accountability & Transparency- Monitoring Mechanisms**

Q1 – Can you tell us about the monitoring mechanism? Do you deploy third party to independently verify the progress reported by the supervising entity through audits or other methods? If yes, can you share some evidence/report? If no, what is your plan to bring such mechanism? Please discuss.

### **Evaluation Mechanisms**

Q1 - Is there any impact evaluation study conducted on this scheme/ projects under this scheme? If yes, please share the study reports

Q2 - As per the guidelines, the major and medium projects under the proposal shall be monitored by field offices of CWC twice a year. SMI schemes would also be monitored periodically by field offices of CWC on sample basis (25%) twice a year. Are the states following this guideline? If yes, provide some reports. If not, what are the challenges? *(Validate)*

### **Beneficiary involvement**

Q1 - What is the expected involvement of beneficiaries across the project lifecycle? *(Focus)*

Q2 - Are the beneficiaries getting involved at this stage? If yes, which area? *(Focus)*

### **Community institutions**

Q1 - Are community institutions (e.g. WUAs) being created? If yes, provide evidence. *(Validate)*

Q2 - How would be their involvement in decision making? *(Validate)*

### **Direct/Indirect Employment Generation- Employment generation**

Q1 – Can you share some information on the current level of employment generation through schemes in the sector and overall sectoral contribution in National employment generation? *(Focus)*

Q2 – As per the cabinet note, it is expected to generate 341 lakh man-days for unskilled, semi-skilled and skilled workers through the scheme. How do you think that the scheme is progressing? Do you have any improvement suggestions to achieve this goal? Please discuss *(Focus)*

Q3 - What is the expected improvement in income levels? *(Focus)*

### **Quantum of Self Employment, entrepreneurship generated**

Q1 – Do you see any self-employment opportunities generated or scope of such opportunity? Please provide some information?

### **Private sector involvement**

Q1 – Do you think that there is scope for private sector to get involved to increase employment opportunities? If yes, how can it be implemented? If no, what are the challenges?



### **Gender mainstreaming- Inclusiveness in scheme design/planning**

Q1 - Has the scheme been designed keeping gender considerations in mind? Please provide some information?

### **Gender-friendly infrastructure and policies**

Q1 - How is empowerment of women being ensured in respect of this scheme?

### **Capacity building**

Q1 - Is there any plan for providing specific training for women to enhance incomes? Please share details.

### **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population- Funds allocated under TSP/ SCSP and other provisions for vulnerable communities**

Q1 - What is the fund allocated under TSP & SCSP for each scheme? Please share details

### **Development, dissemination & adoption of innovative practices, technology & know-how- Fund allocation towards promotion of innovation**

Q1 - What percent of total allocation is directed towards development, dissemination and adoption of innovative practices and technology? How much of it is utilized?

### **Unlocking Synergies with other Government Program- Potential areas for synergy**

Q1 - What are the areas for potential convergence / synergy across govt. programs?

### **Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme- Private Sector Participation**

Q1 - Is there any private investment in any states for this program? If yes, please share some information. If no, are you expecting any?

### **Public-Private Partnership**

Q1 - Is there any PPP model prevalent in this area? If yes, how well has that functioned and what are the challenges? If no, can it be profitable/ help to realize the scheme outcomes at a lower cost?

## **SECTION 3: CHALLENGES AND SUGGESTIONS**



- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>• SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

### 7.1.3 State level stakeholder - Director, Central Water Commission (CWC) Regional Office

**GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_that made you decide to\_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said\_\_\_\_\_ but it also seems like\_\_\_\_\_. Can you explain?



## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **SPFM**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH SPFM SCHEME**

### ***RESEARCHER TO NOTE:***

*85. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*

*86. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

## **SECTION 1: DEEP DIVE INTO SPFM SCHEME USING REESIE FRAMEWORK:**

### **EFFECTIVENESS**



ET1: Is the scheme design appropriate to address scheme objectives?

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1 – Do you have any improvement suggestions for this scheme which can help to achieve the outcomes more effectively? Please explain.

ET2: How are scheme targets set and monitored?

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. Which scheme parameters are monitored by the state? How and through what logic is the monitoring done?

Q2. What is the frequency of monitoring?

Q3. Do you have any suggestions in this regard?

ET3 How has the scheme performed against scheme objectives and annual targets?

**What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable.**

Q1 - Is there a mechanism for incorporating feedback/course corrections to the scheme. For e.g. regarding District Irrigation Plans (DIP) - what are the reasons for delay in their formulation, status of their implementation and available datasets therein for the decision-makers.

ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?

**Using recycled water for agriculture**

Q1 – Do you see any challenges to use recycled waste water as a water source under this scheme? If yes, what are those?

## **EFFICIENCY**

EC2 Can the costs of the scheme be lowered?

**What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1 – Can the costs of the scheme be lowered by converging this scheme with other Govt. schemes? Please explain.



## **SUSTAINABILITY**

SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?

### **More focus on water-intensive crop**

Q1 – Do you think that the scheme would be sustainable considering the facts that Vidarbha and Marathwada regions are drought prone and farmers cultivate water intensive crops like - cotton, sugarcane etc.? Please discuss.

## **RELEVANCE**

RL2 Is it appropriate to continue / prioritize this scheme?

### **What would be the impact if the scheme were to be scaled down or stopped?**

Q1. Do you see any impact of shutting up/ scaling down of the scheme? Is there any other scheme which works to achieve similar outcomes at a lesser cost? Please discuss.

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Monitoring Mechanisms**

Q1. Is your state using any GIS based app in coordination with the NRSC, Hyderabad?

Q2. Do you face any challenges in regular uploading the data over the MIS system? If yes, what are the challenges?

### **Evaluation Mechanisms**

Q1. As per the guidelines, the major and medium projects under the proposal shall be monitored by field offices of CWC twice a year. SMI schemes would also be monitored periodically by field offices of CWC on sample basis (25%) twice a year. Can you share some evidence/reports? what are the challenges do you face in this regard?

### **Financial Accountability**

Q1. Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what are the reasons?

Q2. Provide some details for few proposals - when: i) request for funds was made by you, ii) funds released by the approving authority, iii) funds released by you to the next level / contractor?



### **Use of IT/Technology in driving efficiency- Deployment of IT enabled mechanisms for monitoring of the Schemes**

Q1. Is geotagging and use of geotagged photographs being done at your state? Please provide some evidences

Q2. How is technology being used for on-ground data collection?

Q3. Do you face any challenges in that? If yes, what are the challenges?

### **Any Best Practices**

Q1. Any best practices/ innovative initiatives that your state has taken in technological intervention to improve the process

### **Stakeholder and Beneficiary behavioral change- Fund Allocation**

Q1. What percent of total allocation is directed towards Awareness generation or sensitization? What is the utilization rate? and How much impact has it been able to generate in terms of behavior change?

### **Unlocking Synergies with other Government Program- Convergence (Inter-Ministerial/Inter-Departmental/Financial/Human Resource/Administrative/Institutional/Schemes)**

Q1. What activities are undertaken to ensure convergence at community level? Are there any Action Plans prepared at State level to ensure the same?

### **Reforms, Regulations- Adoption of models acts and reforms at governance, institutional and administrative level**

Q1. What measures are being taken to ensure effective implementation and compliance of adopted acts/rule/regulations? (like in areas of safety, accountability, transparency etc.)

### **Any best practice**

Q1. Any best practices with respect to reforms, regulations

## **SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from an implementation point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?



<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

### **THANK AND END**

#### 7.1.4 State level stakeholder - Chief Engineer, Irrigation & Water Resources Department, Maharashtra

##### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

##### **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:



- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **SPFM**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

#### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH SPFM SCHEME**

##### **RESEARCHER TO NOTE:**

87. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.

88. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.

#### **SECTION 1: DEEP DIVE INTO SPFM SCHEME USING REESIE FRAMEWORK:**

##### **RELEVANCE**

RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?
--

**What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**

Q1. Do you think that the scheme objectives are clear? Please explain. *(Validate)*



Q2. Please share the output, outcome and impact parameters for the scheme. If these parameters have not been identified, could you discuss what would be the appropriate parameters? *(Validate)*

## **EFFECTIVENESS**

ET1: Is the scheme design appropriate to address scheme objectives?

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1. What are the key assumptions underlying this logic of results chain, especially assumptions linking outputs to outcomes and impacts? Are these assumptions realistic? Provide evidence, if any? *(Validate)*

ET2: How are scheme targets set and monitored?

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. Who sets the scheme target?

Q2. Which scheme parameters are monitored by the state? By whom and through what logic?

ET3 How has the scheme performed against scheme objectives and annual targets?

**What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable.**

Q1 - What is the planning process proposed under the scheme?

Q2 - Is the planning process adequately and effectively followed? If not, what improvements are desirable. *(Focus)*

Q3- Was the first milestone i.e. completion of 13 SMI projects by June 2019 achieved? If not, what were the reasons?

**How has the scheme performed in respect of participatory irrigation management?**

Q1. Since most of the projects are not yet completed, are there any WUAs created so far? Have there any capacity building activities conducted? Please provide details.

ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?

**Using recycled water for agriculture**

Q1 - Can recycled waste water be used as a water source under this scheme? If yes, how can it be implemented? If no, what challenges do you find in this regard?



## **Water Conveyance through canal network**

Q1 - Are there any measures taken for reducing water loss through canal network? If yes, please provide details.

### **EFFICIENCY**

EC1 Did the benefits of the scheme exceed costs?

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. What are the envisaged direct and indirect benefits of the scheme?

**What are the costs of the scheme? What is the monetary value of all costs?**

Q1. What are the different cost components (especially, non-financial) for implementing the scheme?

EC2 Can the costs of the scheme be lowered?

**What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1 - Is there any other scheme that aim to achieve similar outcomes?

Q2 - Is there any other scheme (e.g. apart from MGNREGA) that can complement/supplement this scheme? Please provide some information around it

**Need for scheme convergence**

Q1 - Do you see expected convergence of activities undertaken by this scheme with those by other schemes like - MGNREGA? Is there any duplication of the activities? Please provide details to justify your logic.

### **SUSTAINABILITY**

SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?

**More focus on water-intensive crop**

Q1 - Since Vidarbha and Marathwada regions are drought prone and farmers cultivate water intensive crops like - cotton, sugarcane etc., what are the measures taken under this scheme to maintain sustainable water resource management across these regions? Please provide details.

RL1: Is the scheme relevant in the present context?

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**



Q1. How and to what extent does the scheme aid in reducing distress conditions of farmers in drought prone areas of Maharashtra? Can you provide evidence (if any)?

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1 - Do you see any interventional areas, that are not currently addressed by this or other schemes in respect of the sectoral challenge, beneficiary need, national priority and SDG, which this scheme can address? If yes, please provide some information around them. *(Validate)*

RL2 Is it appropriate to continue / prioritize this scheme?

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1. What would be the impact of continuation/ acceleration or shutting up/ scaling down of the scheme? *(Validate)*

Q2. Do you see any other schemes that can deliver similar outcomes more effectively than the subject scheme? Please provide some information to justify your logic. *(Validate)*

**From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**

Q1. What are the priority areas in the sector, which are more important than those addressed by the scheme? *(Validate)*

Q2. Why are these the priority over those addressed by the scheme? *(Validate)*

**IMPACT**

IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?

**IPC-IPU Gap**

Q1. To what extent, the SMI projects are expected to help in increasing IPU?

**Irrigation Coverage**

Q1. How is the scheme expected to help in increasing irrigation productivity, thereby enhancing irrigation coverage? Please explain.

**EQUITY**



EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Please provide evidence. *(Focus)*

Q2. Does the scheme have any significant impact in reducing societal equity? Please provide evidence. *(Focus)*

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability & Transparency- Availability of Data Records and Reports in public domain**

Q1 - Can you share the physical and financial progress data for 2018-19 at district level?

### **Monitoring Mechanisms**

Q1 - Is your state using any GIS based app in coordination with the NRSC, Hyderabad?

Q2 - Do you face any challenges in regular uploading the data over the MIS system? If yes, what are the challenges?

### **Evaluation Mechanisms**

Q1 - As per the guidelines, the major and medium projects under the proposal shall be monitored by field offices of CWC twice a year. SMI schemes would also be monitored periodically by field offices of CWC on sample basis (25%) twice a year. Is your state following this guideline? If yes, provide some reports. If not, what are the challenges? *(Focus)*

### **Financial Accountability**

Q1 - Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what are the reasons?

Q2 - Provide some details for few proposals - when: i) request for funds was made by you, ii) funds released by the approving authority, iii) funds released by you to the next level / contractor?

### **Beneficiary involvement**



Q1 - What is the expected involvement of beneficiaries across the project lifecycle? *(Validate)*

Q2 - Are the beneficiaries getting involved at this stage? If yes, which area? *(Validate)*

### **Community institutions**

Q1 - Are community institutions (e.g. WUAs) being created? *(Focus)*

Q2 - How would be their involvement in decision making? *(Focus)*

### **Any best practices**

Q1 - Can you provide some examples of innovative initiatives/best practices in terms of accountability/transparency?

### **Direct/Indirect Employment Generation- Employment generation**

Q1 - What is the current level of employment generation through schemes in the sector and overall sectoral contribution in National employment generation? *(Validate)*

Q2 - Do we need any further measures to ensure 341 lakh man-days for unskilled, semi-skilled and skilled workers, as expected? *(Validate)*

### **Expected improvement in income levels?**

Q1 - What is the expected improvement in income levels? *(Validate)*

### **women participation (%) in the Sector/Program**

Q1 - How is the women participation (%) in the scheme at your state?

### **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population- Inclusion of vulnerable groups in scheme as well as sector**

Q1 - What are the interventions implemented for specific vulnerable groups?

### **Use of IT/Technology in driving efficiency- Deployment of IT enabled mechanisms for monitoring of the Schemes**

Q1 - Is geotagging and use of geotagged photographs being done at your state? Please provide some evidences

Q2 - How is technology being used for on-ground data collection?

Q3 - Do you face any challenges in that? If yes, what are the challenges?

### **Use of latest technology to improve efficiency and effectiveness of scheme implementation**



Q1 - What are the technologies being used in project implementation, service delivery? Provide details.

### **Any Best Practices**

Q1 - Any best practices/ innovative initiatives that your state has taken in technological intervention to improve the process

### **Stakeholder and Beneficiary behavioral change- Fund Allocation**

Q1 - What percent of total allocation is directed towards Awareness generation or sensitization? What is the utilization rate? and How much impact has it been able to generate in terms of behavior change?

### **Mechanisms to promote and ensure behavior change**

Q1 - What activities are undertaken at District/Block level to promote adoption of good practices?

### **Cropping pattern**

Q1 - What are the key constraints in crop planning based on local water availability with a view to reduce water intensive crops?

### **Unlocking Synergies with other Government Program- Convergence (Inter-Ministerial/Inter-Departmental/Financial/Human Resource/Administrative/Institutional/Schemes)**

Q1 - What activities are undertaken to ensure convergence at community level? Are there any Action Plans prepared at State level to ensure the same?

### **Reforms, Regulations- Adoption of models acts and reforms at governance, institutional and administrative level**

Q1 - What measures are being taken to ensure effective implementation and compliance of adopted acts/rule/regulations? (like in areas of safety, accountability, transparency etc.)

### **Any best practice**

Q1 - Any best practices with respect to reforms, regulations

## **SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from an implementation point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?



<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

### **THANK AND END**

#### 7.1.5 District level stakeholder - District Irrigation Officer

##### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

##### **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water



Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **SPFM**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the district level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

#### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH SPFM SCHEME**

##### ***RESEARCHER TO NOTE:***

*89. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*

*90. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

#### **SECTION 1: DEEP DIVE INTO PDMC SCHEME USING REESIE FRAMEWORK:**

##### **EFFECTIVENESS**

ET3: How has the scheme performed against scheme objectives and annual targets?

**What is the planning process proposed under the scheme? Is the planning process adequately and effective followed? If not, what improvements are desirable.**

Q1. Do you think that the planning process under the scheme is adequately and effective followed? If not, what improvements are desirable. (*Validate*)



Q2. What mechanism is in place for incorporating feedback/course corrections to the scheme. For e.g. regarding District Irrigation Plans (DIP) - what are the reasons for delay in their formulation, status of their implementation and available datasets therein for the decision-makers. If there is no such mechanism, how do you handle these matters currently?

ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?

### **Water Conveyance through canal network**

Q1. Are there any measures taken for reducing water loss through canal network? If yes, please provide details.

### **EFFICIENCY**

EC2 Can the costs of the scheme be lowered?

### **Need for scheme convergence**

Q1. Do you see expected convergence of activities undertaken by this scheme with those by other schemes like - MGNREGA? Is there any duplication of the activities? Please provide details to justify your logic. Do you think that such convergence will help to achieve scheme outcomes at a lower cost? Please discuss.

### **SUSTAINABILITY**

SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?

### **Gaps in broad sectoral outcomes - Capacity building of the organizations/utilities creating and managing Water Resources infrastructure and providing service**

Q1. Since most of the projects are not yet completed, are there any WUAs created so far? Have there any capacity building activities conducted? Please provide details.

### **EQUITY**

EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**



Q1. Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? *(Validate)*

Q2. Does the scheme have any significant impact in reducing societal equity? *(Validate)*

**SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from an implementation point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



# Annexure 8 Primary Survey Guide – PDMC

The primary survey guide for 'Per Drop More Crop' is provided below.

## 8.1 Discussion Guide for KII

### 8.1.1 National level stakeholder: Deputy Commissioner, DAC&FW, Mo A&FW

#### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **PDMC**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the national level your insights would be valuable in understanding of the schemes, key challenges and factors that led



to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

### **RESEARCHER TO NOTE:**

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

## **SECTION 1: DEEP DIVE INTO PDMC SCHEME USING REESIE FRAMEWORK:**

### **RELEVANCE**

**RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

**Do the scheme objectives as stated in the EFC note appear in the scheme guidelines?**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

Q2 - Can you share the EFC note for this scheme since we need to assess the scheme guidelines with respect to the objectives covered in EFC note?

### **EFFECTIVENESS**

ET1: Is the scheme design appropriate to address scheme objectives?

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1 - Can you specify the key inputs, activities, outputs, outcomes and impacts from the scheme?



Q2 - Was there any change in any of these (especially 'outcomes and impacts') actually achieved vis-à-vis what was planned? If yes, can you share some data/information around it?

Q3 - What are the key assumptions underlying this logic of results chain, especially assumptions linking outputs of the scheme to expected outcomes and impacts?

ET2: How are scheme targets set and monitored?

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1 - How are the scheme targets set? Is it purely financial targets or in terms of outputs or outcomes?

Q2 - Which dept. sets the targets?

Q3 - Is there any mechanism to independently verify the progress reported by the supervising entity through audits or other methods? If yes, please provide some information around it. If no, are you planning to bring such mechanism and what is the timeline for that?

Q4 - Are there any states which do not regularly upload progress data over MIS system? If yes, why is it happening?

**What information is contained in utilization certificate issued by state govt? Are they credible and can they be relied upon as an indicator of scheme progress?**

Q1 - What information is contained in utilization certificate issued by state govt?

Q2 - Are they credible and can they be relied upon as an indicator of scheme progress?

ET3 How has the scheme performed against scheme objectives and annual targets?

**Identify states that have performed well? What are the underlying reasons for such performance?**

Q1 - Identify states that have performed well

Q2. What are the key reasons/factors that have an impact on such scheme performance?

**Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q1 - Identify states that have performed poorly

Q2. What are the key reasons/factors that have an impact on such scheme performance?

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1 - Has the progress been reported regularly and accurately? If no, what are the challenges?

Q2 - Is monitoring and evaluation by 3rd party conducted by states as per scheme guidelines? If no, what is the reason behind that?

Q3 - What are the other bottlenecks, issues & challenges in the implementation of the scheme?

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**



Q1 - Is there any additional performance indicators (over and above those currently tracked) that may be necessary to effectively monitor scheme performance? If yes, please share some information around it.

*(Focus)*

ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?

**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1 - What are the positive factors that have enhanced scheme performance? *(Focus)*

Q2 - Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance? *(Focus)*

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1 - How can the scheme design be modified to recognize / replicate the positive factors and enhance performance? Provide success stories. *(Validate)*

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1 - Should the Govt. focus on existing energy crisis scenario/ interrupted availability of electricity across villages while setting targets? If yes, what measures can be taken? If no, why? *(Focus)*

Q2 - Should the MI industry be provided with priority/ infrastructure industry status to improve the financing opportunity available to the farmers? If yes, what measures need to be taken? If not, any other ways to improve financing opportunities?

Q3 - What are the negative factors that have reduced scheme performance?

**How can the scheme design be modified to mitigate the negative factors?**

Q1 – What is the plan to mitigate negative factors that have affected scheme performance?

## **Project Management**

Q1 - Previous studies stated that delay in fund release caused delay in project progress. Do you think it is true for this scheme? If yes, could you explain the reasons? How can it be improved?

**Was there timely utilization of available funds? If not, what were the reasons?**

Q1 - Was there timely utilization of available funds? If not, what were the reasons? *(Validate)*



**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1 - What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? *(Focus)*

Q2 - Assess potential impact of each such intervention with a view to enable prioritization. *(Focus)*

## **EFFICIENCY**

EC1 Did the benefits of the scheme exceed costs?

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1 - What are the direct and indirect scheme benefits?

**What are the costs of the scheme? What is the monetary value of all costs?**

Q1 - What are the different cost factors associated with this scheme?

EC2: Can the costs of the scheme be lowered?

**Are there lower cost alternatives for achieving the scheme outcomes?**

Q1 - Are there lower cost alternatives for achieving the scheme outcomes? Please discuss

**What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1 - Is there any other scheme that aim to achieve similar outcomes? If yes, please provide some information *(Validate)*

Q2 - Is there any other schemes (e.g. apart from MGNREGA) that can complement this scheme? If yes, provide some information *(Validate)*

Q3. Which states provide instances of implementation on convergence front?

Q4. Which states are lagging behind in convergence? What are the reasons?

## **SUSTAINIBILITY**

SS3: Is the scheme financially and institutionally sustainable? How can sustainability be improved?

**Planning and data management in the sector**

Q1 - Do you think that enough scheme related data is being collected and managed properly for the purpose of planning? Do you see any challenge in that? Please explain in detail.

**R&D in the sector**

Q1 - Can low cost MI technologies help in increasing its adoption amongst farmers (especially small and marginal)? Please explain. Has such R&D work started by any organization? If yes, provide details. If not, what measures can be taken in this regard.



SS5: Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1 – Do you see any challenges for continuation of this scheme in terms of environmental and social aspects? Please explain.

Q2 – How can those challenges be resolved?

SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1 - Over the past 4 years, what have been the main reasons behind project failures under the following heads: *(Validate)*

- a. institutional
- b. financial
- c. technical,
- d. socio-economic,
- e. political
- f. environmental

Q2 - Have such reasons been studied and documented? If yes, please share the same.

Q3 - What are the risks in sustainable water source creation? *(Focus)*

### **Agriculture Sector Contribution**

Q1 - How has this scheme positively affected country's GDP through enhancing agricultural productivity? Can the scheme be a sustainable solution in this regard? Is there a need to modify any guidelines, planning etc. for that? Please explain.

**RL1: Is the scheme relevant in the present context?**

**Provide details of the relevant sectoral challenge, beneficiary need, national priority, SDG that pertain to the area in which the scheme is operating?**



Q1 - As per our understanding, the scheme is operating to reduce the demand-supply gap as well as gap in irrigation coverage. Is there any other sectoral challenge, beneficiary need, national priority, SDG where the scheme is operating? If yes, please explain.

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1 - As per our understanding, the scheme is designed to improve on-farm water use efficiency resulting in reducing demand-supply gap and enhance irrigation efficiency. Also, water source creation under Other Interventions (OI) activities is helpful to provide more surface water, thereby reducing dependency on ground water (as source for Micro Irrigation (MI)) and improve soil-moisture content. Is there any other area the scheme is designed to address? If yes, please provide some information around it

Q2 - What was the target, if any, for water use efficiency enhancement at the time of scheme design?

Q3 - What was the target, if any, for enhancement in agricultural productivity at the time of scheme design?

Q4 – Since other schemes like - MGNREGA, WDC-PMKSY also focus on water source creation, how is duplication of activities undertaken by all these different schemes avoided? Do you see any challenges in this regard? If yes, what are those and what is the plan to resolve them?

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1 - Are there any interventional gaps (i.e. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority and SDG? If yes, please provide some information around them

Q2 - Can any provision related to waste water reuse be included in the scheme guideline? If yes, how can it be implemented?

**RL2 Is it appropriate to continue / prioritize this scheme?**

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1 - Are there any alternative schemes that can deliver similar outcomes? Further, are such alternative schemes, if any, more effective than the subject scheme? If yes, can you share some data/information about it? (*Focus*)

Q2 - Can piped irrigation be adopted as an alternative option to MI? If not, what are the areas where piped irrigation falls short of MI? If yes, why MI has been considered to address these sectoral challenges/beneficiary need?

Q3 - There are other schemes like MGNREGA, SMI-PMKSY, WDC-PMKSY which focus on water source creation. Why is it required to include similar activities under this scheme? Why cannot the scheme focus only on MI?



**From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**

Q1. What are the priority areas in the sector, which are more important than those addressed by the scheme?

Q2. Why are these the priority over those addressed by the scheme?

**IMPACT**

IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. Have there been any studies to assess the impact of the scheme on:

- a) SDG goals
- b) National priorities
- c) Employment generation
- d) Increase in farmer's income
- e) On-farm water use efficiency

If yes, please share such studies.

**Gap between demand and supply of water**

Q1 - To what extent, do you think that, this scheme has been able to reduce the demand-supply gap by improving water use efficiency and efficient water resource management? What additional measures, related to this scheme, need to be taken in this regard?

**SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Monitoring Mechanisms**

Q1 -How robust is the monitoring mechanism? Is there any mechanism to independently verify the progress reported by the supervising entity through audits or other methods? If yes, please provide some information around it. If no, are you planning to bring such mechanism and what is the timeline for that and at what level?

Q2 - Are there any states which do not regularly upload progress data over MIS system? If yes, why is it happening?



## Evaluation Mechanisms

### **What process / impact evaluation studies conducted in the last decade - frequency, quality, coverage, etc.**

Q1 - Impact evaluation report is available for a study on NMMI (2014). Is there any evaluation study conducted on PDMC (from 2015 to till date)? If yes, please share the study reports?

Q2 - As per the guidelines, do all the states conduct M&E of the scheme for their states by 3rd party? Please provide some information and share some reports, if available. Also, let us know what the frequency, quality and coverage of the studies are. *(Focus)*

### **Direct/Indirect Employment Generation**

#### Employment generation

Q1 - What is the level of employment generation through schemes in the sector and overall sectoral contribution in National employment generation?

Q1 - What is the improvement in income levels?

#### Institutional barriers

Q1 - Do you see any institutional barriers to employment generation (e.g. access to markets)? If yes, please provide some information *(Focus)*

#### Private sector involvement

Q1 - Is there scope for private sector to be involved with a view to increase employment opportunities? If yes, how can it be implemented? If no, what are the challenges? *(Focus)*

### **Gender mainstreaming**

#### Gender-friendly infrastructure and policies

Q1 - Is there any measure taken to improve women empowerment? Please provide some information

### **Climate change & sustainability including adoption of climate-change resilient practices & diversifications**

Are there appropriate climate resilient policies for mitigation and/or adaptation (or included as part of scheme objectives and design)?

Q1 - Does the scheme design consider different climate change situations, such as - intense rainfall, flood, drought etc.? If yes, please provide details.



What are the main impacts of climate change on the sector and scheme beneficiaries?

Q1 - What are the main impacts of climate change on scheme beneficiaries?

### **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population**

Funds allocated under TSP/ SCSP and other provisions for vulnerable communities

Q1 - What is the fund allocated under TSP & SCSP for each scheme? Please share details

### **Use of IT/Technology in driving efficiency**

Use of latest technology to improve efficiency and effectiveness of scheme implementation

Q1 - Which states are leading in terms of technology use and which are lagging behind?

### **Development, dissemination & adoption of innovative practices, technology & know-how**

Fund allocation towards promotion of innovation

Q1 - What percent of total allocation is directed towards development, dissemination and adoption of innovative practices and technology?

### **Research & Development**

Fund Allocation

**What percentage of total allocation (Sector as well as Scheme specific) is directed towards R&D?**

**How much of that percent is being utilized?**

Q1 - Is there any percentage of total allocation directed towards R&D? Is yes, what percentage?

### **Unlocking Synergies with other Government Program**

Convergence

(InterMinisterial/InterDepartmental/Financial/HumanResource/Administrative/Institutional/Schemes)

Q1 - What activities are undertaken to ensure convergence at community level? (*Focus*)

Q2 - Are there any Action Plans prepared at Nation level to ensure the same?

Q3 - What are the challenges hindering effective convergence?

Any best practices of the same



Q1 - Any best practices in terms of creating synergy with other schemes (like- MGNREGA, PMKSY - WDC etc.)?

#### Potential areas for synergy

Q1 - What are the areas for potential convergence / synergy across govt. programs? *(Focus)*

#### Reforms, Regulations

Adoption of models, acts and reforms at governance, institutional and administrative level

Q1 - What measures are being taken to ensure effective implementation and compliance of adopted acts/rule/regulations? (like in areas of safety, accountability, transparency etc.) *(Validate)*

#### Any best practices

Q1 - Any best practices with respect to reforms, regulations

#### Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme

##### Private Sector Participation

#### What is the percentage of private investment in the clusters/programs run by the government?

Q1 - Is there any private investment in any states for this program? If yes, please share some information. If no, are you expecting any? *(Focus)*

##### Public-Private Partnership

#### How well have PPP functions in the Sector? What are the challenges faced?

Q1 – Do you think that PPP model can be helpful to realize the scheme objectives at a lower cost? If yes, how can that be implemented? Will there be any challenges in this regard? Please discuss *(Focus)*

##### FPOs/SHGs/Cooperative's Participation

Q1 - How many private sector, community/collectives/cooperatives and civil society have availed the benefits under any Scheme? *(Validate)*

#### Any best practice

Q1 - Any best practices with respect to participation of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme



### SECTION 3: CHALLENGES AND SUGGESTIONS

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

#### 8.1.2 National level stakeholder: Joint Secretary, RFS, Mo A&FW

##### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
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- Explore the reasons behind a response. For example:
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  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?



## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **PDMC**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## **RESEARCHER TO NOTE:**

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## **SECTION 1: DEEP DIVE INTO PDMC SCHEME USING REESIE FRAMEWORK:**

### **RELEVANCE**



**RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

**Do the scheme objectives as stated in the EFC note appear in the scheme guidelines?**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

Q1 - Can you share the EFC note for this scheme since we need to assess the scheme guidelines with respect to the objectives covered in EFC note?

**SUSTAINIBILITY**

SS3: Is the scheme financially and institutionally sustainable? How can sustainability be improved?

**R&D in the sector**

Q1 – Previous studies suggested that low cost MI technologies can help in increasing its adoption amongst farmers (especially small and marginal). Do you also think so? Please discuss. Is there any such discussion going on or expected in near future?

SS5: Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1 – Do you see any challenges for continuation of this scheme in terms of environmental and social aspects? Please explain.

Q2 – How can those challenges be resolved?

SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1 - Over the past 4 years, what have been the main reasons behind project failures under the following heads:

- a. institutional
- b. financial
- c. technical,
- d. socio-economic,
- e. political
- f. environmental

Q2 - Have such reasons been studied and documented? If yes, please share the same.



Q3 What are the risks in sustainable water source creation? *(Validate)*

### **Agriculture Sector Contribution**

Q1 - How has this scheme positively affected country's GDP through enhancing agricultural productivity? Can the scheme be a sustainable solution in this regard? Is there a need to modify any guidelines, planning etc. for that? Please explain.

#### **RL1: Is the scheme relevant in the present context?**

**Provide details of the relevant sectoral challenge, beneficiary need, national priority, SDG that pertain to the area in which the scheme is operating?**

Q1 - As per our understanding, the scheme is operating to reduce the demand-supply gap as well as gap in irrigation coverage. Is there any other sectoral challenge, beneficiary need, national priority, SDG where the scheme is operating? If yes, please explain.

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1 - As per our understanding, the scheme is designed to improve on-farm water use efficiency resulting in reducing demand-supply gap and enhance irrigation efficiency. Also, water source creation under Other Interventions (OI) activities is helpful to provide more surface water, thereby reducing dependency on ground water (as source for Micro Irrigation (MI)) and improve soil-moisture content. Is there any other area the scheme is designed to address? If yes, please provide some information around it

Q2 - There are other schemes like - MGNREGA, WDC-PMKSY, which also focus on water source creation. So, does the scheme duplicate activities undertaken by these Govt. initiatives? If not, how the interventional areas are different across these different schemes?

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1 - Are there any interventional gaps (i.e. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority and SDG? If yes, please provide some information around them

Q2 - Can any provision related to waste water reuse be considered under the scheme guidelines? Please discuss

#### **RL2 Is it appropriate to continue / prioritize this scheme?**

**What would be the impact if the scheme were to be scaled down or stopped?**



Q1 - Are there any alternative schemes that can deliver similar outcomes? Further, are such alternative schemes, if any, more effective than the subject scheme? If yes, can you share some data/information about it?

Q2 - Can piped irrigation be adopted as an alternative option to MI? Please discuss

Q3 - There are other schemes like MGNREGA, SMI-PMKSY, WDC-PMKSY which focus on water source creation. Why is it required to include similar activities under this scheme? Why cannot the scheme focus only on MI?

**From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**

Q1. What are the priority areas in the sector, which are more important than those addressed by the scheme?

Q2. Why are these the priority over those addressed by the scheme?

## **IMPACT**

IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. Have there been any studies to assess the impact of the scheme on:

- a) SDG goals
- b) National priorities
- c) Employment generation
- d) Increase in farmer's income
- e) On-farm water use efficiency

If yes, provide share such studies.

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Direct/Indirect Employment Generation**

#### **Employment generation**

Q1 - What is the level of employment generation through schemes in the sector and overall sectoral contribution in National employment generation?

Q1 - What is the improvement in income levels?



### Institutional barriers

Q1 - Do you see any institutional barriers to employment generation (e.g. access to markets)? If yes, please provide some information

### Private sector involvement

Q1 - Is there scope for private sector to be involved with a view to increase employment opportunities? If yes, how can it be implemented? If no, what are the challenges?

### Gender mainstreaming

#### Gender-friendly infrastructure and policies

Q1 - Is there any measure taken to improve women empowerment? Please provide some information

### Climate change & sustainability including adoption of climate-change resilient practices & diversifications

Are there appropriate climate resilient policies for mitigation and/or adaptation (or included as part of scheme objectives and design)?

Q1 – Are there appropriate resilience policies in the scheme design for different climate change situations, such as - intense rainfall, flood, drought etc.? If yes, please provide details.

What are the main impacts of climate change on the sector and scheme beneficiaries?

Q1 - What are the main impacts of climate change on the scheme beneficiaries?

### Reforms, Regulations

Adoption of models acts and reforms at governance, institutional and administrative level

Q1 - What measures are being taken to ensure effective implementation and compliance of adopted acts/rule/regulations? (like in areas of safety, accountability, transparency etc.)

### Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme

Public-Private Partnership - **How well have PPP functions in the Sector? What are the challenges faced?**



Q1 – Do you think that PPP model can be helpful to realize the scheme objectives at a lower cost? If yes, how can that be implemented? Will there be any challenges in this regard? Please discuss

**SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>• SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

8.1.3 National level stakeholder: India Officer, International Water Management Institute (IWMI)

**GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
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  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:



- What makes you say that?
- What was it about \_\_\_\_ that made you decide to \_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said\_\_\_\_\_ but it also seems like\_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

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- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this organisation? What are your current roles and responsibilities here particularly with respect to this scheme?

## **RESEARCHER TO NOTE:**

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## **SECTION 1: DEEP DIVE INTO PDMC SCHEME USING REESIE FRAMEWORK:**

### **RELEVANCE**

#### **RL1: Is the scheme relevant in the present context?**

**Provide details of the relevant sectoral challenge, beneficiary need, national priority, SDG that pertain to the area in which the scheme is operating?**

Q1 – Do you see any other sectoral challenge, beneficiary need, national priority, SDG, apart from reduction of the demand-supply gap as well as gap in irrigation coverage, where the scheme is operating? If yes, please explain.

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1 - As we know, the scheme is designed to improve on-farm water use efficiency resulting in reducing demand-supply gap and enhance irrigation efficiency. Also, water source creation under Other Interventions (OI) activities is helpful to provide more surface water, thereby reducing dependency on ground water (as source for Micro Irrigation (MI)) and improve soil-moisture content. Is there any other area the scheme is designed to address? If yes, please provide some information around it

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1 – Do you find any interventional gaps in respect of the sectoral challenge, beneficiary need, national priority and SDG? If yes, can this scheme address any of those areas? Please discuss.

Q2 - Can any provision related to waste water reuse be considered under the scheme guidelines? Please discuss

#### **RL2 Is it appropriate to continue / prioritize this scheme?**

**What would be the impact if the scheme were to be scaled down or stopped?**

Q2 - Can piped irrigation be adopted as an alternative option to MI? Please discuss the pros and cons of using piped irrigation over MI?

**From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**

Q1. What are the priority areas in the sector, which are more important than those addressed by the scheme?

Q2. Why are these the priority over those addressed by the scheme?



### SECTION 3: CHALLENGES AND SUGGESTIONS

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

#### 8.1.4 National level stakeholder: Food and Agriculture Organization of the United Nations (FAO) representative in India

##### **GENERAL GUIDELINES:**

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- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:



- Can you explain what you mean by....?
- Earlier you said\_\_\_\_\_ but it also seems like\_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

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- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
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- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this organisation? What are your current roles and responsibilities here particularly with respect to this sector and scheme?

## **RESEARCHER TO NOTE:**

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## SECTION 1: DEEP DIVE INTO PDMC SCHEME USING REESIE FRAMEWORK:

### RELEVANCE

#### RL1: Is the scheme relevant in the present context?

**Provide details of the relevant sectoral challenge, beneficiary need, national priority, SDG that pertain to the area in which the scheme is operating?**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

Q1 – Do you see any other sectoral challenge, beneficiary need, national priority, SDG, apart from reduction of the demand-supply gap as well as gap in irrigation coverage, where the scheme is operating? If yes, please explain.

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1 - As we know, the scheme is designed to improve on-farm water use efficiency resulting in reducing demand-supply gap and enhance irrigation efficiency. Also, water source creation under Other Interventions (OI) activities is helpful to provide more surface water, thereby reducing dependency on ground water (as source for Micro Irrigation (MI)) and improve soil-moisture content. Is there any other area the scheme is designed to address? If yes, please provide some information around it

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1 – Do you find any interventional gaps in respect of the sectoral challenge, beneficiary need, national priority and SDG? If yes, can this scheme address any of those areas? Please discuss.

Q2 - Can any provision related to waste water reuse be considered under the scheme guidelines? Please discuss

#### RL2 Is it appropriate to continue / prioritize this scheme?

**What would be the impact if the scheme were to be scaled down or stopped?**

Q2 - Can piped irrigation be adopted as an alternative option to MI? Please discuss the pros and cons of using piped irrigation over MI?

**From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**

Q1. What are the priority areas in the sector, which are more important than those addressed by the scheme?

Q2. Why are these the priority over those addressed by the scheme?

## SECTION 2: CHALLENGES AND SUGGESTIONS



- Broadly, what are the main challenges/ limitations that you see in this scheme from a design and implementation point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

8.1.5 State level stakeholder: Nodal Officer, Department of Horticulture (for all selected states)

**GENERAL GUIDELINES:**

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- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## **RESEARCHER TO NOTE:**

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## **SECTION 1: DEEP DIVE INTO PDMC SCHEME USING REESIE FRAMEWORK:**

### **EFFECTIVENESS**



**ET1: Is the scheme design appropriate to address scheme objectives?**

**Is there evidence that assumptions have been tested and are valid?**

**Q1.** Could you please provide an overview of the scheme in terms of its objectives?

Q2 - To what extent, the following parameters have changed, at your state, due to adoption of PDMC during 2015-19 (please fill the templates) -

- a) Enhancement in yield/productivity. Crop wise productivity increase for drip and sprinkler separately
- b) Increase in the income of farmers, separately for Rabi and Kharif
- c) Reduction in fertilizer consumption, separately for Rabi and Kharif. What % of farmers have adopted fertigation?
- d) Reduction in power consumption separately for Rabi and Kharif
- e) Reduction in pesticide use, separately for Rabi and Kharif
- f) Saving of labor, separately for Rabi and Kharif
- g) Employment generation (skilled as well as unskilled, especially unemployed youth for installation and maintenance of MI system) has been generated, separately for Rabi and Kharif

Q2 - How many scientific knowledge & awareness campaigns (trainings) have been conducted, at your state, between 2015 to 2019? Do the campaigns focus on fertigation and using MI for field crops as well? Can you share the agenda/items covered in the campaigns?

Q3 - What % of beneficiaries has received training sessions, at your state, between 2015 to 2019?

Q4 - How many capacity building activities have been conducted, at your state, between 2015 to 2019?

Q5 - What is coverage of field crops and horticulture crops under MI, at your state, between 2015 to 2019? (please fill the template)

Q6 - To what extent has the MI coverage increased for water intensive crops, at your state, between 2015 to 2019?

Q7 - Can you point us to any study (or other evidence) that demonstrates that outcomes and impacts are being achieved?

**The data collection template is attached here**



**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**



Q1 - What are the gaps / weakness in the assumptions and / or scheme design? Can you share some examples around it? *(Focus)*

Q2 - What better can be done to achieve end goal of this scheme? *(Focus)*

Q3 - Do you think that any separate allocation is required from Central for awareness campaign and capacity building activities? Please provide some evidence to justify your logic

Q4 - Has the water source created through micro level water storage or water conservation/ management activities under Other Interventions (OI) component of the scheme to compliment and supplement the source creation linked with micro irrigation technologies for best use at state level? If yes, please provide some evidence to justify your logic. If not, how can it be improved?

## **ET2: How are scheme targets set and monitored?**

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1 - Is your state collecting and uploading the data of Bhuvan app in coordination with the NRSC, Hyderabad?

Q2 - Do you face any challenges in regular uploading the data over the MIS system? If yes, what are the challenges?

## **ET3 How has the scheme performed against scheme objectives and annual targets?**

**What are the key bottlenecks, issues & challenges in the implementation of the scheme**

Q1 – As per our knowledge, different departments (like agriculture, watershed, horticulture etc.) are involved at state level for implementation of this scheme. Do you see lack of synergy amongst them? If yes, please provide some information around it. How do you think that proper coordination can be achieved in this regard?

Q2 - At state level, are MI and OI activities implemented separately? Is linking between OI and MI activities happening at state level? If not, what challenges are there?

Q3 - What are the other bottlenecks, issues & challenges in the implementation of the scheme?

Q4 – [For north eastern states] why is there no progress so far? Is it because of terrain condition, lack of suppliers or any other challenges they are facing?

**What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable.**

Q1 - What is the planning process proposed under the scheme? *(Focus)*

Q2 - Which are the areas in the planning process that are not being adhered to? *(Focus)*

Q3 - How can the planning process be improved? *(Focus)*



Q4 - What is mechanism for incorporating feedback/course corrections to the scheme? For e.g. regarding District Irrigation Plans (DIP) - what are the reasons for delay in their formulation, status of their implementation and available datasets therein for the decision-makers. *(Focus)*

Q5 - Does the existing process of selection of beneficiaries by the States for adoption of MI systems under the PDMC need further improvement? If yes, what can be done? If not, please provide your justification

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1 - Is there any additional performance indicators (over and above those currently tracked) that may be necessary to effectively monitor scheme performance? If yes, please share some information around it? *(Validate)*

ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?

**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1 - What are the positive factors that have enhanced scheme performance? *(Validate)*

Q2 - Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance? *(Validate)*

Q3 - Till 2018-19, fund used to be allocated separately for MI and OI. However, from 2019-20, fund allocation is for overall PDMC. Is this change helpful in achieving scheme outcomes? Please provide some justification around your logic.

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1 - How can the scheme design be modified to recognize / replicate the positive factors and enhance performance? Provide success stories. *(Focus)*

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**



Q1 - Is there any need of reform in subsidy amount in terms of state level MI penetration and type of MI system i.e. drip and sprinkler? If yes, how can it be implemented? If no, can you provide some data/information to justify your logic?

Q2 - Is there any need of Special Purpose Vehicle (SPV) for catering to the promotion of micro irrigation in their respective states? If yes, how can it be implemented? If no, why?

Q3 - Should the Govt. focus on existing energy crisis scenario/ interrupted availability of electricity across villages while setting targets? If yes, what measures can be taken? If no, why? *(Validate)*

Q4 - What are the negative factors that have reduced scheme performance?

#### **How can the scheme design be modified to mitigate the negative factors?**

Q1 - How can the scheme design be modified to mitigate the negative factors?

#### **Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1 - Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what are the reasons? How can it be improved? *(Focus)*

Q2 - Provide some details for few proposals - when: i) request for funds was made by you, ii) funds released by the approving authority, iii) funds released by you to the next level / contractor?

#### **Was there timely utilization of available funds? If not, what were the reasons?**

Q1 - Can you provide details of funds unutilized at the end of each year? *(Focus)*

Q2 - Can you provide month-wise details of how available funds were used? *(Focus)*

Q3 - If there is a tendency of expenditure towards the end of the year? If yes, why?

#### **What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1 - What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? *(Validate)*

Q2 - Assess potential impact of each such intervention with a view to enable their prioritization. *(Validate)*

Q3 - Can you provide some examples of innovative initiatives taken for scheme implementation in your state?

#### **Using recycled water for agriculture**

Q1 - Why recycled waste water is not used as water source for MI? How can it be implemented? What challenges do you find in this regard?



## **EFFICIENCY**

### **EC2 Can the costs of the scheme be lowered?**

#### **Are there lower cost alternatives for achieving the scheme outcomes?**

Q1 - What can be done to reduce project cost without compromising on scheme objectives?

Q2 - Is there scope to bring in private sector to achieve cost efficiencies? If so, in what areas?

#### **Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1 - How is the coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently? Please provide some information

Q2 - How is the coordination between the Departments implementing MI activities with the Depts. of OI activities? If poor coordination, what are the challenges?

#### **What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1 - Is there any other scheme that aim to achieve similar outcomes? If yes, please provide some information (*Focus*)

Q2 - Is there any other schemes (e.g. apart from MGNREGA) that can complement this scheme? If yes, provide some information (*Focus*)

#### **Need for scheme convergence**

Q1 - Do you see expected convergence of activities undertaken by this scheme with those by other schemes like - MGNREGA, PMKSY-WDC etc.? Is there any duplication of the activities? Please provide details to justify your logic?

## **SUSTAINIBILITY**

### **SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

#### **Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1 - Are the manufacturers providing after sales services (agronomic as well as maintenance) for 3 years' post installation of MI assets, following the guidelines? Please provide some evidence

Q2 - Do you think that the minimum gap of renewal of subsidy (i.e. 7 years on same cultivable area) too long for realizing the scheme objectives? If yes, what would be the optimum duration? If no, do the MI assets last for 7 years?

Q3 - Should the Govt. make the provision mandatory that a certain percentage of funding to be spent towards awareness campaign and capacity building? If yes, how much % would be adequate for that? If no, please share evidences showing adequate awareness campaign and capacity building activities are going on across states



Q4 - How can the water structures created under OI activities become sustainable water source for MI?

### **Overall nature and responsiveness of Water sector planning - Lack of proper planning and data management**

Q1 - Do you think that data is being managed properly? Do you see any challenge in that? If yes, please provide details.

### **Gaps in broad sectoral outcomes - Capacity building of the organizations /utilities creating and managing Water Resources infrastructure and providing service**

Q1 - Is there a need to provide separate central allocation for capacity building? If yes, how much, do you think, would be adequate and why?

### **Gaps in broad sectoral outcomes - R&D in the sector**

Q1 - Can low cost MI technologies help in increasing its adoption amongst farmers (especially small and marginal)? Please explain. Has such R&D work started by any organization? If yes, provide details. If not, how can it be formulated?

<b>SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?</b>
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### **What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1 - What % of farmers (who use MI) possess fragmented landholding? Does fragmented landholding pose a risk to sustainability of the scheme? If yes, what measures can be taken for improvement?

Q2 - Over the past 4 years, what have been the top 3 reasons for project failure with respect to each of the following aspects. *(Focus)*

- a. institutional
- b. financial
- c. technical,
- d. socio-economic,
- e. political
- f. environmental

Q3 What are the risks in sustainable water source creation? *(Validate)*

### **More focus on water-intensive crop**

Q1 - Is MI used for water intensive crops? If yes, do you think that it can be suitable for these crops in this water scarce scenario? Do you see any challenges/shortcomings in that? If yes, please explain.



## **EQUITY**

EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1 - Are the guidelines related to small & marginal (including SC, ST and women) farmers being followed properly? If yes, provide some evidences to substantiate this. If not, how can it be improved? *(Focus)*

Q2 - Which other targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society does the scheme provide? *(Focus)*

Q3 - How is the scheme impactful in reducing inequity? *(Focus)*

Q4 - What is ratio of SC/ST/Male/Female farmers?

Q5 - Scheme guidelines are based on Census data 2011. At the current scenario, the no. of SC/ST farmers (small and marginal) are very less because they cannot afford high cost MI system. What measures can the Central Govt. take to help these farmers?

EQ2 - Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1 - Is the subsidy structure appropriate to attract different categories of farmers? If yes, provide some justification. If no, how can it be improved? *(Focus)*

Q2 - Should the Govt. coordinate with national banks for making easy financing options available to the weaker section of society? If yes, how can it be implemented? If no, what else can be done for making easy financing options? *(Focus)*

## **RELEVANCE**

**RL1: Is the scheme relevant in the present context?**

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1 – As per our understanding, the scheme is designed to improve water use efficiency and enhance irrigation productivity. How has this scheme progressed so far in terms of these two parameters?



**RL2 Is it appropriate to continue / prioritize this scheme?**

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1 - Are there any alternative schemes that can deliver similar outcomes? Further, are such alternative schemes, if any, more effective than the subject scheme? If yes, can you share some data/information about it? *(Validate)*

**IMPACT**

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1 - To what extent, did the scheme improve employment generation and thus, ensuring food security and maximizing value addition in agriculture?

Q2 - To what extent, was the scheme able to increase income of farmers?

**Irrigation coverage**

Q1 - Is the scheme helpful to improve water-use efficiency? To what extent? Please provide examples of changes in amount of water used for irrigation pre and post micro-irrigation intervention?

Q2 - Post implementation of micro-irrigation, have the savings in water resulted in increasing the coverage of irrigation to areas that were earlier not covered through irrigation? Have there been studies to determine the quantum of water saved through use of micro-irrigation?

**Demand and supply of water**

Q1 - To what extent, do you think that, this scheme has been able to reduce the demand-supply gap by improving water use efficiency and efficient water resource management? What additional measures, related to this scheme, need to be taken in this regard?

**SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Accountability & Transparency**

Availability of Data Records and Reports in public domain



Q1 - Can you share the physical and financial progress data (2015-16 to 2018-19) for the districts? This will help to cross check with the data available over the PDMC website

### Monitoring Mechanisms

Q1 - Is your state collecting and uploading the data of Bhuvan app in coordination with the NRSC, Hyderabad?

Q2 - Do you face any challenges in regular uploading the data over the MIS system? If yes, what are the challenges?

### Evaluation Mechanisms

Q1 - As per the guidelines, has your state conducted M&E/ impact evaluation study of the scheme by 3rd party? Please provide some information and share any reports, if available. Also, let us know what the frequency, quality and coverage of the studies are. *(Validate)*

### Citizen Accountability

Q1- As per guideline, the manufacturer is supposed to operate a toll-free customer care number where beneficiaries can register their queries/ complaints. Is the mechanism happening properly and timely manner? If not, what are the existing challenges? *(Focus)*

Q2 - Is there any other functional grievance redressal mechanism that successfully incorporate beneficiaries' and non-beneficiaries' concerns? *(Focus)*

### Financial Accountability

Q1 - Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what are the reasons? *(Focus)*

Q2 - Provide some details for few proposals - when: i) request for funds was made by you, ii) funds released by the approving authority, iii) funds released by you to the next level / contractor?

### Any best practices

Q1 - Can you provide some examples of innovative initiatives/best practices in terms of accountability/ transparency?

### Direct/Indirect Employment Generation

#### Employment generation

What is the level of employment generation through schemes in the sector and overall sectoral contribution in National employment generation?



Q1 - To what extent employment has generated, for skilled as well as unskilled, especially unemployed youth for installation and maintenance of MI system, during 2015-2019 due to adoption of PDMC?

*(Focus)*

Q2 - To what extent income level has increased due to this scheme during 2015-2019? *(Focus)*

Q3 - What is the women participation (%) in the scheme at your state? Which districts are leading, and which are lagging? *(Focus)*

### Any Best Practices

Q1 - Are there any best practices, in terms of direct/ indirect employment generation, noticeable at your state?

### Institutional barriers

Are there institutional barriers to employment generation (e.g. access to markets)?

Q1 - Do you see any institutional barriers to employment generation (e.g. access to markets)? If yes, please provide some information *(Validate)*

### Private sector involvement

Q1 - Do you see any scope for private sector to be involved with a view to increase employment opportunities? If yes, what? If no, what are the challenges? *(Validate)*

## Gender mainstreaming

### Inclusiveness in scheme design/planning

Q1 - Are the guidelines related to small & marginal (including SC, ST and women) farmers being followed properly? If yes, provide some evidences to substantiate this. If not, how can it be improved?

Q2 - Which other targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society does the scheme provide?

Q3 - How is the scheme impactful in reducing inequity?

### Any Best Practices

Q1 - What are the best practices adopted in your state to ensure gender equity/ women empowerment?

## Climate change & sustainability including adoption of climate-change resilient practices & diversifications



Are there appropriate climate resilient policies for mitigation and/or adaptation (or included as part of scheme objectives and design)?

Q1 – In what ways, does the scheme cover the effect of climate change situations like - intense rainfall, flood, drought etc.? Please discuss

Are there any training sessions held regularly for reducing pollution, adopting green practices, using local materials etc.?

Q1- Are there any training sessions conducted on the effect of climate change and sustainability? If yes, please provide some information. Also, what are the topics usually covered in such session?

Any Best Practices

Q1 - Any best practices in the area of climate change and sustainability

### **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population**

Funds allocated under TSP/ SCSP and other provisions for vulnerable communities

What has been the effect of the TSP & SCSP funds on improving equity?

Q1 - Have the TSP & SCSP funds been able to improve equity? Please justify your logic (*Validate*)

Q2 - Are you facing any challenges in this regard? (*Validate*)

Inclusion of vulnerable groups in scheme as well as sector

Q1. Have you undertaken an activity to analyse the problems faced by SCs/STs in your State? If yes, please provide details of the findings?

Q2. Whether SCA to TSP/SCA to SCSP has been implemented in your state or not? If implemented,

- a) What are the activities/interventions being undertaken for SCs and STs which are being funded through SCSP and TSP?
- b) What are the irrigation structures being constructed by the government under SCA to TSP/SCA to SCSP?
- c) Are the farmers being provided any subsidy/incentive for irrigation under SCA to TSP/SCA to SCSP?
- d) Does Krishi Vikas Kendra (KVK) implement Hands-on training/workshops/awareness programmes? If yes, what are the skill development and other irrigation-related trainings being conducted by KVKs under SCA to TSP/SCA to SCSP?



- e) What type of Multi-sector Support and Advisory services are being provided by KVKs to farmers under SCA to TSP/SCA to SCSP?
- f) Is there any other Agriculture Research Organization apart from KVK conducting trainings under SCA to TSP/SCA to SCSP?
- g) What are the steps taken to monitor the SCA to TSP/SCA to SCSP activities at the State level?
- h) How do you measure the impact under SCA to TSP/SCA to SCSP?
- i) What are the issues in the CSS? (Probe for top 5 issues)
- j) Please share recommendations to improve the impact of SCA to TSP/SCA to SCSP?

#### Any Best Practices

Q1 - Any best practices/initiatives that your state has taken to improve equity across SC, ST, vulnerable section etc.

#### Use of IT/Technology in driving efficiency

Deployment of IT enabled mechanisms for monitoring of the Schemes

#### In case of a scheme to create physical assets, is geotagging and use of geotagged photographs being done?

Q1 - Is geotagging and use of geotagged photographs being done at your state? Please provide some evidences (*Focus*)

#### How is technology being used for on-ground data collection?

Q2 - Is your state collecting and uploading the data of Bhuvan app in coordination with the NRSC, Hyderabad? (*Focus*)

Q3 - Do you face any challenges in that? If yes, what are the challenges? (*Focus*)

#### Use of latest technology to improve efficiency and effectiveness of scheme implementation

Q1 - What are the technologies being used in project implementation, service delivery? Provide details

#### Technology to address key challenges

Q1 - What technologies are available to address key challenges facing the scheme? Are there constraints in their adoption? (*Focus*)



#### Any Best Practices

Q1 - Any best practices/ innovative initiatives that your state has taken in technological intervention to improve the process

#### **Development, dissemination & adoption of innovative practices, technology & know-how**

##### Fund allocation towards promotion of innovation

Q1 - How much of the allocation towards development, dissemination and adoption of innovative practices and technology is utilized?

##### Contribution of improved practices in increasing outcome

Q1 - What is the impact of innovative technologies and practices on scheme outcomes?

##### Any Best Practice or innovation

Q1 - Any best practices in this aspect?

##### Fund Allocation

#### **What percent of total allocation is directed towards Awareness generation or sensitization? What is the utilization rate? and How much impact has it been able to generate in terms of behavior change?**

Q1 - Do you think that any separate allocation is required from Central for awareness campaign and capacity building activities? Please provide some evidence to justify your logic (*Focus*)

##### Mechanisms to promote and ensure behavior change

Q1 - What activities are undertaken at District level to promote adoption of good practices?

##### Challenges faced

Q1 - What are the major challenges? Are there any areas which need more attention in terms of bringing behavior change?

##### Any Best Practices

Q1 - Any best practices in this aspect?

##### Cropping pattern

Q1 - What are the key constraints in crop planning based on local water availability with a view to reduce water intensive crops?



## Research & Development

### Fund Allocation

Q1 - How much of the allocation towards R&D is being utilized?

## Unlocking Synergies with other Government Program

### Convergence

(InterMinisterial/InterDepartmental/Financial/HumanResource/Administrative/Institutional/Schemes)

Q1 - What activities are undertaken to ensure convergence at community level? *(Validate)*

Q2 - Are there any Action Plans prepared at State level to ensure the same?

Q3 - What are the challenges hindering effective convergence?

### Any best practices of the same

Q1 - Any best practices in terms of creating synergy with other schemes (like- MGNREGA, WDC etc.)?

### Potential areas for synergy

Q1 - What are the areas for potential convergence / synergy across govt. programs? *(Validate)*

## Reforms, Regulations

### Adoption of models acts and reforms at governance, institutional and administrative level

Q1 - What measures are being taken to ensure effective implementation and compliance of adopted acts/rule/regulations? (like in areas of safety, accountability, transparency etc.) *(Focus)*

### Any best practice

Q1 - Any best practices with respect to reforms, regulations?

## Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme

### Private Sector Participation

### What is the percentage of private investment in the clusters/programs run by the government?

Q1 - Is there any private investment in any of your districts for this program? If yes, please share some information. If no, are you expecting any? *(Validate)*



## Public-Private Partnership

### How well have PPP functions in the Sector? What are the challenges faced?

Q1 - Is there any PPP model prevalent in this area? If yes, how well has that functioned and what are the challenges? If no, can it be profitable/ help to realize the scheme outcomes at a lower cost? *(Validate)*

## FPOs/SHGs/Cooperative's Participation

Q1 - How many private sector, community/collectives/cooperatives and civil society have availed the benefits under any Scheme? *(Validate)*

## Any best practice

Q1 - Any best practices with respect to participation of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme

### SECTION 3: CHALLENGES AND SUGGESTIONS

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



### 8.1.6 State level stakeholder: Chief Engineer, Watershed Department (for Bihar, Karnataka, Maharashtra, Tamil Nadu) and Chief Engineer, Department of Agriculture (for Andhra Pradesh, Himachal Pradesh, Jharkhand, Punjab, Rajasthan, Uttar Pradesh, Assam, Manipur)

#### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **PDMC**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.



- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

### **RESEARCHER TO NOTE:**

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

## **SECTION 1: DEEP DIVE INTO PDMC SCHEME USING REESIE FRAMEWORK:**

### **EFFECTIVENESS**

#### **ET1: Is the scheme design appropriate to address scheme objectives?**

#### **Is there evidence that assumptions have been tested and are valid?**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

Q2 - To what extent, the following parameters have changed due to adoption of PDMC, at your state, during 2015-19 (please fill the templates) -

- a) Enhancement in yield/productivity. Crop wise productivity increase for drip and sprinkler separately
- b) Increase in the income of farmers, separately for Rabi and Kharif
- c) Reduction in fertilizer consumption, separately for Rabi and Kharif. What % of farmers have adopted fertigation?
- d) Reduction in power consumption separately for Rabi and Kharif
- e) Reduction in pesticide use, separately for Rabi and Kharif
- f) Saving of labor, separately for Rabi and Kharif



g) Employment generation (skilled as well as unskilled, especially unemployed youth for installation and maintenance of MI system) has been generated, separately for Rabi and Kharif

Q2 - How many scientific knowledge & awareness campaigns (trainings) have been conducted, at your state, between 2015 to 2019? Do the campaigns focus on fertigation and using MI for field crops as well? Can you share the agenda/items covered in the campaigns?

Q3 - What % of beneficiaries has received training sessions, at your state, between 2015 to 2019?

Q4 - How many capacity building activities have been conducted, at your state, between 2015 to 2019?

Q5 - What is coverage of field crops and horticulture crops under MI, at your state, between 2015 to 2019? (please fill the template)

Q6 - To what extent has the MI coverage increased for water intensive crops, at your state, between 2015 to 2019?

Q7 - Can you point us to any study (or other evidence) that demonstrates that outcomes and impacts are being achieved?



**The data collection template is attached here**

### **What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1 - What are the gaps / weakness in the assumptions and / or scheme design? Can you share some examples around it?

Q2 - How should the scheme design be modified to make it more effective?

Q3 - Do you think that any separate allocation is required from Central for awareness campaign and capacity building activities? Please provide some evidence to justify your logic

Q4 - Are you facing any challenges to link the water source, created through micro level water storage or water conservation/ management activities under Other Interventions (OI) component of the scheme, with micro irrigation technologies? If yes, what are those? How do you think that these challenges can be resolved for the best use of this scheme at your state?

### **ET2: How are scheme targets set and monitored?**

#### **Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1 – Does your dept. get involved in collecting and uploading the data of Bhuvan app in coordination with the NRSC, Hyderabad? If yes, what challenges do you face in regular uploading the data over the MIS



system? If not, who is responsible for that? Do you have any improvement suggestion for this process? Please discuss.

### **ET3 How has the scheme performed against scheme objectives and annual targets?**

#### **What are the key bottlenecks, issues & challenges in the implementation of the scheme**

Q1 - Since different departments (like agriculture, horticulture etc.) are involved at state level, is there proper synergy amongst them? Please provide some information around it

Q2 - What are the other bottlenecks, issues & challenges in the implementation of the scheme?

Q3 – [For north eastern states] why is there no progress so far? Is it because of terrain condition, lack of suppliers or any other challenges they are facing?

#### **What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable.**

Q1 - What is the planning process proposed under the scheme?

Q2 - Which are the areas in the planning process that are not being adhered to?

Q3 - How can the planning process be improved?

Q4 - What is mechanism for incorporating feedback/course corrections to the scheme? For e.g. regarding District Irrigation Plans (DIP) - what are the reasons for delay in their formulation, status of their implementation and available datasets therein for the decision-makers.

Q5 – Does the existing process of selection of beneficiaries by the States for availing benefits of Other Interventions/Supplementary Water Management Activities in addition to micro-irrigation systems under the PDMC need further improvement? If yes, what can be done? If not, please provide your justification

#### **What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1 - Is there any additional performance indicators (over and above those currently tracked) that may be necessary to effectively monitor scheme performance? If yes, please share some information around it?

ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?

#### **What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**



Q1 - What are the positive factors that have enhanced scheme performance?

Q2 - Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?

Q3 - Till 2018-19, fund used to be allocated separately for MI and OI. However, from 2019-20, fund allocation is for overall PDMC. How do you segregate funding required for OI activities? For state share, do you still provide separate funding? Do you think that this change has been helpful to create better coordination between water source creation under OI activities and MI system operation? Please discuss and provide some evidence to substantiate your logic.

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1 - How can the scheme design be modified to recognize / replicate the positive factors and enhance performance? Provide success stories.

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1 - Is there any need of reform in subsidy amount in terms of state level MI penetration and type of MI system i.e. drip and sprinkler? If yes, how can it be implemented? If no, can you provide some data/information to justify your logic?

Q2 - Is there any need of Special Purpose Vehicle (SPV) for catering to the promotion of micro irrigation in their respective states? If yes, how can it be implemented? If no, why?

Q3 - Should the Govt. focus on existing energy crisis scenario/ interrupted availability of electricity across villages while setting targets? If yes, what measures can be taken? If no, why?

Q4 - What are the negative factors that have reduced scheme performance?

**How can the scheme design be modified to mitigate the negative factors?**

Q1 - How can the scheme design be modified to mitigate the negative factors?

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1 - Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what are the reasons? How can it be improved?

Q2 - Provide some details for few proposals - when: i) request for funds was made by you, ii) funds released by the approving authority, iii) funds released by you to the next level / contractor?

**Was there timely utilization of available funds? If not, what were the reasons?**

Q1 - Can you provide details of funds unutilized at the end of each year?



Q2 - Can you provide month-wise details of how available funds were used?

Q3 - If there is a tendency of expenditure towards the end of the year? If yes, why?

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1 - What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance?

Q2 - Assess potential impact of each such intervention with a view to enable their prioritization.

Q3 - Can you provide some examples of innovative initiatives taken for scheme implementation in your state?

**Using recycled water for agriculture**

Q1 – Can water source creation under OI activities include recycled waste water? If yes, how can it be implemented? If not, what challenges do you find in this regard?

## **EFFICIENCY**

### **EC2 Can the costs of the scheme be lowered?**

**Are there lower cost alternatives for achieving the scheme outcomes?**

Q1 - What can be done to reduce project cost without compromising on scheme objectives?

Q2 - Is there scope to bring in private sector to achieve cost efficiencies? If so, in what areas?

**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1 - How is the coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently? Please provide some information

Q2 - How is the coordination between the Departments implementing MI activities with the Depts. of OI activities? If poor coordination, what are the challenges?

**What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1 - Is there any other scheme that aim to achieve similar outcomes? If yes, please provide some information

Q2 - Is there any other schemes (e.g. apart from MGNREGA) that can complement this scheme? If yes, provide some information

**Need for scheme convergence**



Q1 - Do you see expected convergence of activities undertaken by this scheme with those by other schemes like - MGNREGA, PMKSY-WDC etc.? Is there any duplication of the activities? Please provide details to justify your logic?

## **SUSTAINIBILITY**

### **SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

#### **Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1 - Are the manufacturers providing after sales services (agronomic as well as maintenance) for 3 years' post installation of MI assets, following the guidelines? Please provide some evidence

Q2 - Do you think that the minimum gap of renewal of subsidy (i.e. 7 years on same cultivable area) too long for realizing the scheme objectives? If yes, what would be the optimum duration? If no, do the MI assets last for 7 years?

Q3 - Should the Govt. make the provision mandatory that a certain percentage of funding to be spent towards awareness campaign and capacity building? If yes, how much % would be adequate for that? If no, please share evidences showing adequate awareness campaign and capacity building activities are going on across states

Q4 - How can the water structures created under OI activities become sustainable water source for MI?

#### **Overall nature and responsiveness of Water sector planning - Lack of proper planning and data management**

Q1 - Do you think that data is being managed properly? Do you see any challenge in that? If yes, please provide details.

#### **Gaps in broad sectoral outcomes - Capacity building of the organizations /utilities creating and managing Water Resources infrastructure and providing service**

Q1 - Is there a need to provide separate central allocation for capacity building? If yes, how much, do you think, would be adequate and why?

#### **Gaps in broad sectoral outcomes - R&D in the sector**

Q1 - Can low cost MI technologies help in increasing its adoption amongst farmers (especially small and marginal)? Please explain. Has such R&D work started by any organization? If yes, provide details. If not, how can it be formulated?



**SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1 - What % of farmers (who use MI) possess fragmented landholding? Does fragmented landholding pose a risk to sustainability of the scheme? If yes, what measures can be taken for improvement?

Q2 - Over the past 4 years, what have been the top 3 reasons for project failure with respect to each of the following aspects.

- a. institutional
- b. financial
- c. technical,
- d. socio-economic,
- e. political
- f. environmental

Q3 - What are the risks in sustainable water source creation?

**More focus on water-intensive crop**

Q1 – In the context of current water scarce situation, do you think that the OI activities are more beneficial for water intensive crops cultivated using MI system? Please discuss.

**EQUITY**

EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1 - Are the guidelines related to small & marginal (including SC, ST and women) farmers being followed properly? If yes, provide some evidences to substantiate this. If not, how can it be improved?

Q2 - Which other targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society does the scheme provide?

Q3 - How is the scheme impactful in reducing inequity?

Q4 - What is ratio of SC/ST/Male/Female farmers?

Q5 - Scheme guidelines are based on Census data 2011. At the current scenario, the no. of SC/ST farmers (small and marginal) are very less because they cannot afford high cost MI system. What measures can the Central Govt. take to help these farmers?



EQ2: Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1 - Is the subsidy structure appropriate to attract different categories of farmers? If yes, provide some justification. If no, how can it be improved?

Q2 - Should the Govt. coordinate with national banks for making easy financing options available to the weaker section of society? If yes, how can it be implemented? If no, what else can be done for making easy financing options?

## **RELEVANCE**

**RL1: Is the scheme relevant in the present context?**

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1 – As per our understanding, the scheme is designed to improve water use efficiency and enhance irrigation productivity. How has this scheme progressed so far in terms of these two parameters?

**RL2 Is it appropriate to continue / prioritize this scheme?**

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1 - Are there any alternative schemes that can deliver similar outcomes? Further, are such alternative schemes, if any, more effective than the subject scheme? If yes, can you share some data/information about it?

## **IMPACT**

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1 - To what extent, did the scheme improve employment generation and thus, ensuring food security and maximizing value addition in agriculture?

Q2 - To what extent, was the scheme able to increase income of farmers?



### **Irrigation coverage**

Q1 - Is the scheme helpful to improve water-use efficiency? To what extent? Please provide examples of changes in amount of water used for irrigation pre and post micro-irrigation intervention?

Q2 - Post implementation of micro-irrigation, have the savings in water resulted in increasing the coverage of irrigation to areas that were earlier not covered through irrigation? Have there been studies to determine the quantum of water saved through use of micro-irrigation?

### **Demand and supply of water**

Q1 - To what extent, do you think that, this scheme has been able to reduce the demand-supply gap by improving water use efficiency and efficient water resource management? What additional measures, related to this scheme, need to be taken in this regard?

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability & Transparency**

#### Evaluation Mechanisms

Q1 - As per the guidelines, has your state conducted M&E/ impact evaluation study of the scheme by 3rd party? Does this evaluation cover all OI activities as well along with MI system? Please provide some information and share any reports, if available. Also, let us know what the frequency, quality and coverage of the studies are.

#### Citizen Accountability

Q1- As per guideline, the manufacturer is supposed to operate a toll-free customer care number where beneficiaries can register their queries/ complaints. Is the mechanism happening properly and timely manner? If not, what are the existing challenges?

Q2 - Is there any other functional grievance redressal mechanism that successfully incorporate beneficiaries' and non-beneficiaries concerns?

#### Financial Accountability



Q1 - Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what are the reasons?

Q2 - Provide some details for few proposals - when: i) request for funds was made by you, ii) funds released by the approving authority, iii) funds released by you to the next level / contractor?

#### Any Best Practices

Q1 - Can you provide some examples of innovative initiatives/best practices in terms of accountability/transparency?

#### Direct/Indirect Employment Generation

#### What is the level of employment generation through schemes in the sector and overall sectoral contribution in National employment generation?

Q1 - To what extent employment has generated, for skilled as well as unskilled, especially unemployed youth for installation and maintenance of MI system, during 2015-2019 due to adoption of PDMC?

Q2 - To what extent income level has increased due to this scheme during 2015-2019?

Q3 - What is the women participation (%) in the scheme at your state? Which districts are leading, and which are lagging?

#### Any Best Practices

Q1 - Are there any best practices, in terms of direct/ indirect employment generation, noticeable at your state?

#### Institutional barriers

#### Are there institutional barriers to employment generation (e.g. access to markets)?

Q1 - Do you see any institutional barriers to employment generation (e.g. access to markets)? If yes, please provide some information



## Private sector involvement

Q1 - Is there scope for private sector to be involved with a view to increase employment opportunities? If yes, how can it be implemented? If no, what are the challenges?

## Gender mainstreaming

### Inclusiveness in scheme design/planning

Q1 - Are the guidelines related to small & marginal (including SC, ST and women) farmers being followed properly? If yes, provide some evidences to substantiate this. If not, how can it be improved?

Q2 - Which other targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society does the scheme provide?

Q3 - How is the scheme impactful in reducing inequity?

### Any Best Practices

Q1 - What are the best practices adopted in your state to ensure gender equity/ women empowerment?

## Climate change & sustainability including adoption of climate-change resilient practices & diversifications

Are there appropriate climate resilient policies for mitigation and/or adaptation (or included as part of scheme objectives and design)?

Q1 – In what ways, does the scheme cover the effect of climate change situations like - intense rainfall, flood, drought etc.? Please discuss

Are there any training sessions held regularly for reducing pollution, adopting green practices, using local materials etc.?

Q1- Are there any training sessions conducted on the effect of climate change and sustainability? If yes, please provide some information. Also, what are the topics usually covered in such session?

### Any Best Practices

Q1 - Any best practices in the area of climate change and sustainability

## Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population



Funds allocated under TSP/ SCSP and other provisions for vulnerable communities

What has been the effect of the TSP & SCSP funds on improving equity?

Q1 - Have the TSP & SCSP funds been able to improve equity? Please justify your logic

Q2 - Are you facing any challenges in this regard?

Inclusion of vulnerable groups in scheme as well as sector

Q1 - What are the interventions implemented for specific vulnerable groups?

Any Best Practices

Q1 - Any best practices/initiatives that your state has taken to improve equity across SC, ST, vulnerable section etc.

**Use of IT/Technology in driving efficiency**

Deployment of IT enabled mechanisms for monitoring of the Schemes

**In case of a scheme to create physical assets, is geotagging and use of geotagged photographs being done?**

Q1 - Is geotagging and use of geotagged photographs being done at your state? Please provide some evidences

**How is technology being used for on-ground data collection?**

Q2 - Is your state collecting and uploading the data of Bhuvan app in coordination with the NRSC, Hyderabad?

Q3 - Do you face any challenges in that? If yes, what are the challenges?

Use of latest technology to improve efficiency and effectiveness of scheme implementation



Q1 - What are the technologies being used in project implementation, service delivery? Provide details

Any Best Practices

Q1 - Any best practices/ innovative initiatives that your state has taken in technological intervention to improve the process

Technology to address key challenges

Q1 - What technologies are available to address key challenges facing the scheme? Are there constraints in their adoption?

### **Development, dissemination & adoption of innovative practices, technology & know-how**

Fund allocation towards promotion of innovation

Q1 - What percent of total allocation is directed towards development, dissemination and adoption of innovative practices and technology? How much of it is utilized?

Contribution of improved practices in increasing outcomes

Q1 - What is the impact of innovative technologies and practices on scheme outcomes?

Any Best Practice or innovation

Q1 - Any best practices in this aspect?

### **Stakeholder and Beneficiary behavioral change**

Fund Allocation

**What percent of total allocation is directed towards Awareness generation or sensitization? What is the utilization rate? and How much impact has it been able to generate in terms of behaviour change?**



Q1 - Do you think that any separate allocation is required from Central for awareness campaign and capacity building activities? Please provide some evidence to justify your logic

#### Challenges faced

Q1 - What are the major challenges? Are there any areas which need more attention in terms of bringing behavior change?

#### Any Best Practices

Q1 - Any best practices in this aspect?

#### Cropping pattern

Q1 - What are the key constraints in crop planning based on local water availability with a view to reduce water intensive crops?

### **Unlocking Synergies with other Government Program**

#### Convergence

(InterMinisterial/InterDepartmental/Financial/HumanResource/Administrative/Institutional/Schemes)

Q1 - What activities are undertaken to ensure convergence at community level? Are there any Action Plans prepared at State level to ensure the same?

Q2 - What are the challenges hindering effective convergence?

#### Any best practices of the same

Q1 - Any best practices in terms of creating synergy with other schemes (like- MGNREGA, WDC etc.)?

#### Potential areas for synergy

Q1 - What are the areas for potential convergence / synergy across govt. programs?

### **Reforms, Regulations**



## Adoption of models acts and reforms at governance, institutional and administrative level

Q1 - What measures are being taken to ensure effective implementation and compliance of adopted acts/rule/regulations? (like in areas of safety, accountability, transparency etc.)

### Any best practice

Q1 - Any best practices with respect to reforms, regulations?

## Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme

### Private Sector Participation

#### **What is the percentage of private investment in the clusters/programs run by the government?**

Q1 - Is there any private investment in your state for this program? If yes, please share some information. If no, are you expecting any?

### Public-Private Partnership

#### **How well have PPP functions in the Sector? What are the challenges faced?**

Q1 - Is there any PPP model prevalent in this area? If yes, how well has that functioned and what are the challenges? If no, can it be profitable/ help to realize the scheme outcomes at a lower cost?

### FPOs/SHGs/Cooperative's Participation

Q1 - How many private sector, community/collectives/cooperatives and civil society have availed the benefits under any Scheme?

### Any best practice

Q1 - Any best practices with respect to participation of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme



### SECTION 3: CHALLENGES AND SUGGESTIONS

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

#### 8.1.7 District level stakeholder: District Agricultural Officer

##### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:



- Can you explain what you mean by....?
- Earlier you said\_\_\_\_\_ but it also seems like\_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **PDMC**. Since you are a key stakeholder in the scheme overseeing implementation at the district level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from national, state, and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## **RESEARCHER TO NOTE:**

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*



## SECTION 1: DEEP DIVE INTO PDMC SCHEME USING REESIE FRAMEWORK:

### EFFECTIVENESS

ET1: Is the scheme design appropriate to address scheme objectives?

#### **Is there evidence that assumptions have been tested and are valid?**

**Q1.** Could you please provide an overview of the scheme in terms of its objectives?

Q2 - To what extent, the following parameters have changed due to adoption of PDMC, at your district, during 2015-19 (please fill the templates) -

- a) Enhancement in yield/productivity. Crop wise productivity increase for drip and sprinkler separately
- b) Increase in the income of farmers, separately for Rabi and Kharif
- c) Reduction in fertilizer consumption, separately for Rabi and Kharif. What % of farmers have adopted fertigation?
- d) Reduction in power consumption separately for Rabi and Kharif
- e) Reduction in pesticide use, separately for Rabi and Kharif
- f) Saving of labor, separately for Rabi and Kharif
- g) Employment generation (skilled as well as unskilled, especially unemployed youth for installation and maintenance of MI system) has been generated, separately for Rabi and Kharif

Q2 - How many scientific knowledge & awareness campaigns (trainings) have been conducted, at your district, between 2015 to 2019? Do the campaigns focus on fertigation and using MI for field crops as well? Can you share the agenda/items covered in the campaigns?

Q3 - What % of beneficiaries has received training sessions, at your district, between 2015 to 2019?

Q4 - How many capacity building activities have been conducted, at your district, between 2015 to 2019?

Q5 - What is coverage of field crops and horticulture crops under MI, at your district, between 2015 to 2019? (please fill the template)

Q6 - To what extent has the MI coverage increased for water intensive crops, at your district, between 2015 to 2019?

**The data collection template is attached here.**



**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1 - What are the gaps / weakness in the assumptions and / or scheme design? (*Validate*)



Q2 - What better can be done to achieve end goal of this scheme? *(Validate)*

Q3 – As we are aware, states have been utilizing the OI allocation in patches. So, how are the OI activities being linked with MI at district level? What challenges are there? How the coordination between various Govt. dept. at state/district level can be improved?

ET3 How has the scheme performed against scheme objectives and annual targets?

**What are the key bottlenecks, issues & challenges in the implementation of the scheme**

Q1 - What are the key bottlenecks, issues & challenges in the implementation of the scheme?

**What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable.**

Q1 - What is the planning process followed under the scheme? *(Validate)*

Q2 - Which are the areas in the planning process that are not being adhered to? *(Validate)*

Q3 - How can the planning process be improved? *(Validate)*

Q4 - What is mechanism for incorporating feedback/course corrections to the scheme? For e.g. regarding District Irrigation Plans (DIP) - what are the reasons for delay in their formulation, status of their implementation and available datasets therein for the decision-makers. *(Validate)*

Q5 - Do you think that the existing process of beneficiary selection is appropriate? If not, what improvements do you suggest? If yes, provide your justification

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1 - What are the negative factors that have reduced scheme performance?

Q2 - Is the subsidy amount adequate? If not, why? *(Focus)*

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1 - Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what are the reasons? *(Validate)*

**EFFICIENCY**



EC1 Did the benefits of the scheme exceed costs?

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1 - We have prepared a template for cost benefit analysis. Can you fill up the template? If you do not have data for any parameter, can you connect us with the right person? Also, please include any other key benefit for which data is available, but not covered in the template.

**What are the costs of the scheme? What is the monetary value of all costs?**

Q1 - We have prepared a template for cost benefit analysis. Can you fill up the template? If you do not have data for any parameter, can you connect us with the right person? Also, please include any other key cost component for which data is available, but not covered in the template.



***Template for Benefit Cost Analysis is attached here.***

EC2: Can the costs of the scheme be lowered?

**Convergence - Need for scheme convergence**

Q1 - Do you see expected convergence of activities undertaken by this scheme with those by other schemes like - MGNREGA, PMKSY-WDC etc? Is there any duplication of the activities? Please provide details to justify your logic.

**SUSTAINABILITY**

SS3: Is the scheme financially and institutionally sustainable? How can sustainability be improved?

**Gaps in broad sectoral outcomes - Capacity building of the organizations /utilities creating and managing Water Resources infrastructure and providing service**

Q1 - Is there a need to provide separate central allocation for capacity building? If yes, how much, do you think, would be adequate and why?

**IMPACT**

IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?



**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1 - To what extent, did the scheme improve employment generation and thus, ensuring food security and maximizing value addition in agriculture? Employment opportunity in terms of skilled as well as unskilled persons.

Q2 - To what extent, did the scheme increase on-farm water use efficiency?

Q3 - To what extent, was the scheme able to increase income of farmers?

**Adequacy - Low total water storage capacity as well as water storage capacity per capita in dams**

Q1 - Provided the fact that total water storage per capita is very low, do you think that water source creation under OI component is helpful to increase MI coverage? Do you see any challenges in that? If yes, please explain

**Access - Gap in irrigation coverage**

Q1 - Is the scheme helpful to improve water-use efficiency? To what extent? What additional measures need to be taken in this regard?

Q2 – Do you think that implementation of MI have brought more area of cultivable land under irrigation? Can you provide evidence (study, reports etc.) to substantiate that?

**SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Accountability & Transparency**

*Availability of Data Records and Reports in public domain*

Q1 - Can you share the physical and financial progress data (2015-16 to 2018-19) for the villages?

*Citizen Accountability*

Q1- Can you share any instances where the manufacturers have not addressed queries/ complaints of the beneficiaries properly and timely manner? Have you taken any measures to resolve such situations?  
*(Validate)*

Q2 - Do you have any other functional grievance redressal mechanism that successfully incorporate beneficiaries' and non-beneficiaries' concerns? *(Validate)*



## Financial Accountability

Q1 - Have you received adequate fund in timely manner? If not, what challenges have you faced? Can you share examples of few incidents where fund release was delayed and/or funding was not adequate? *(Validate)*

## Any best practices

Q1 - Can you provide some examples of innovative initiatives/best practices in terms of accountability/transparency?

## Beneficiary involvement

Q1 - As per the guidelines, the beneficiaries are responsible for O&M of installed MI systems and the manufacturers are supposed to provide after sales services up to 3 years from the installation period. Is there any other area where beneficiaries get involved? *(Focus)*

Q2 - Is the level of involvement adequate? If yes, please justify your answer. If no, how can it be enhanced and what are the existing challenges? *(Focus)*

## Direct/Indirect Employment Generation

Q1 - To what extent employment has been generated, for skilled as well as unskilled, especially unemployed youth for installation and maintenance of MI system, during 2015-2019 due to adoption of PDMC? *(Validate)*

Q2 - To what extent income level has increased due to this scheme during 2015-2019? *(Validate)*

Q3 - What is the women participation (%) in the scheme at your district? *(Validate)*

## Any Best Practices

Q1 - Are there any best practices, in terms of direct/ indirect employment generation, noticeable at your state?



## Institutional barriers

Are there institutional barriers to employment generation (e.g. access to markets)?

Q1 - Do you see any institutional barriers to employment generation (e.g. access to markets)? If yes, please provide some information *(Validate)*

## Private sector involvement

Q1 - Is there scope for private sector to be involved with a view to increase employment opportunities? If yes, how can it be implemented? If no, what are the challenges? *(Validate)*

## Gender mainstreaming

### Capacity building

Q1 - How many capacity building activities and training sessions have taken place for women beneficiaries? *(Focus)*

Q2 - What are the various topics covered in those sessions? *(Focus)*

### Any best practices

Q1 - What are the best practices adopted in your state to ensure gender equity/ women empowerment?

## Climate change & sustainability including adoption of climate-change resilient practices & diversifications

What are the main impacts of climate change on the sector and scheme beneficiaries?

Q1 - Can you brief us about the effect of different climate change situations, like - intense rainfall, flood, drought etc., on micro-irrigation? Please share some examples. How do you handle such situations with respect to different agricultural aspects? Please explain

### Any Best Practices

Q1 - Any best practices in the area of climate change and sustainability



## **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population**

Funds allocated under TSP/ SCSP and other provisions for vulnerable communities

Q1 - Are the TSP & SCSP funds effective in improving equity? Please justify your logic *(Focus)*

Q2 - Do you see any challenges in this regard? *(Focus)*

Inclusion of vulnerable groups in scheme as well as sector

Q1 - What are the interventions implemented for specific vulnerable groups? *(Focus)*

Any best practices

Q1 - Any best practices/initiatives that your state has taken to improve equity across SC, ST, vulnerable section etc.

## **Use of IT/Technology in driving efficiency**

Deployment of IT enabled mechanisms for monitoring of the Schemes

Q1 - Is geotagging and use of geotagged photographs being done at your district? Please provide some evidences *(Validate)*

Q2 - Is your district collecting and uploading the data of Bhuvan app in coordination with the NRSC, Hyderabad? *(Validate)*

Q3 - Do you face any challenges in that? If yes, what are the challenges? *(Validate)*

Technology to address key challenges

Q1 - What technologies are available to address key challenges facing the scheme? Are there constraints in their adoption? *(Validate)*

## **Stakeholder and Beneficiary behavioral change**

Fund Allocation



Q1 - Do you think that any separate allocation is required from Central for awareness campaign and capacity building activities? Please provide some evidence to justify your logic (*Validate*)

#### Mechanisms to promote and ensure behavior change

Q1 - What activities are undertaken at Block level to promote adoption of good practices?

#### Challenges faced

Q1 - What are the major challenges? Are there any areas which need more attention in terms of bringing behavior change?

#### Any Best Practices

Q1 - Any best practices in this aspect?

#### Cropping pattern

Q1 - Do you see any constraints in crop planning based on local water availability with a view to reduce water intensive crops? If yes, what?

### **Unlocking Synergies with other Government Program**

#### Convergence (Inter-Ministerial/Inter-Departmental/Financial/Human Resource/Administrative/Institutional/Schemes)

Q1 - What activities are undertaken to ensure convergence at community level? (*Validate*)

Q2 - Are there any Action Plans prepared at district/ block levels to ensure the same?

#### What are the challenges hindering effective convergence?

Q1 - What are the challenges hindering effective convergence?



## **Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme**

### Private Sector Participation

#### **What is the percentage of private investment in the clusters/programs run by the government?**

Q1 - Is there any private investment in any of your blocks for this program? If yes, please share some information. If no, are you expecting any? *(Validate)*

### Public-Private Partnership

#### **How well have PPP functions in the Sector? What are the challenges faced?**

Q1 - Is there any PPP model prevalent in this area? If yes, how well has that functioned and what are the challenges? If no, can it be profitable/ help to realize the scheme outcomes at a lower cost? *(Validate)*

### FPOs/SHGs/Cooperative's Participation

Q1 - How many private sector, community/collectives/cooperatives and civil society have availed the benefits under this Scheme? *(Focus)*

### Any best practice

Q1 - Any best practices with respect to participation of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme

## **SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?



<b>• SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

### 8.1.8 District level stakeholder: District Irrigation Officer

**GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

**INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:



- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **PDMC**. Since you are a key stakeholder in the scheme overseeing implementation at the district level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

#### **RESEARCHER TO NOTE:**

#### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH PDMC SCHEME**

#### **RESEARCHER TO NOTE:**

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

#### **SECTION 1: DEEP DIVE INTO PDMC SCHEME USING REESIE FRAMEWORK:**

##### **EFFECTIVENESS**

ET1: Is the scheme design appropriate to address scheme objectives?
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### Is there evidence that assumptions have been tested and are valid?

**Q1.** Could you please provide an overview of the scheme in terms of its objectives?

Q2 - To what extent, the following parameters have changed due to adoption of PDMC, at your district, during 2015-19 (please fill the templates) -

- a) Enhancement in yield/productivity. Crop wise productivity increase for drip and sprinkler separately
- b) Increase in the income of farmers, separately for Rabi and Kharif
- c) Reduction in fertilizer consumption, separately for Rabi and Kharif. What % of farmers have adopted fertigation?
- d) Reduction in power consumption separately for Rabi and Kharif
- e) Reduction in pesticide use, separately for Rabi and Kharif
- f) Saving of labor, separately for Rabi and Kharif
- g) Employment generation (skilled as well as unskilled, especially unemployed youth for installation and maintenance of MI system) has been generated, separately for Rabi and Kharif

Q2 - How many scientific knowledge & awareness campaigns (trainings) have been conducted, at your district, between 2015 to 2019? Do the campaigns focus on fertigation and using MI for field crops as well? Can you share the agenda/items covered in the campaigns?

Q3 - What % of beneficiaries has received training sessions, at your district, between 2015 to 2019?

Q4 - How many capacity building activities have been conducted, at your district, between 2015 to 2019?

Q5 - What is coverage of field crops and horticulture crops under MI, at your district, between 2015 to 2019? (please fill the template)

Q6 - To what extent has the MI coverage increased for water intensive crops, at your district, between 2015 to 2019?



**The data collection template is attached here.**

### What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?

Q1 - What are the gaps / weakness in the assumptions and / or scheme design?

Q2 - How should the scheme design be modified to make it more effective?

Q3 – Do you see any gap in coordination between the OI activities and MI at district level? If yes, what are those? How can it be improved for the best use of this scheme?

ET3 How has the scheme performed against scheme objectives and annual targets?



### **What are the key bottlenecks, issues & challenges in the implementation of the scheme**

Q1 - What are the key bottlenecks, issues & challenges in the implementation of the scheme?

### **What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable.**

Q1 - What is the planning process followed under the scheme?

Q2 - Which are the areas in the planning process that are not being adhered to?

Q3 - How can the planning process be improved?

Q4 - What is mechanism for incorporating feedback/course corrections to the scheme? For e.g. regarding District Irrigation Plans (DIP) - what are the reasons for delay in their formulation, status of their implementation and available datasets therein for the decision-makers.

Q5 - Do you think that the existing process of beneficiary selection is appropriate? If not, what improvements do you suggest? If yes, provide your justification

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

### **What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1 - What are the negative factors that have reduced scheme performance?

Q2 - Is the subsidy amount adequate? If not, why?

### **Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1 - Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what are the reasons?

### **EFFICIENCY**

EC1 Did the benefits of the scheme exceed costs?

### **What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1 - We have prepared a template for cost benefit analysis. Can you fill up the template? If you do not have data for any parameter, can you connect us with the right person? Also, please include any other key benefit for which data is available, but not covered in the template.



### **What are the costs of the scheme? What is the monetary value of all costs?**

Q1 - We have prepared a template for cost benefit analysis. Can you fill up the template? If you do not have data for any parameter, can you connect us with the right person? Also, please include any other key cost component for which data is available, but not covered in the template.



**Template for Benefit Cost Analysis is attached here.**

EC2: Can the costs of the scheme be lowered?

### **Convergence - Need for scheme convergence**

Q1 – As per the guideline, it is expected to have convergence of activities undertaken by this scheme with those by other schemes like - MGNREGA, PMKSY-WDC etc. Do you see such convergence? If yes, please provide some evidence. If not, how can it be executed?

### **SUSTAINABILITY**

SS3: Is the scheme financially and institutionally sustainable? How can sustainability be improved?

### **Gaps in broad sectoral outcomes - Capacity building of the organizations /utilities creating and managing Water Resources infrastructure and providing service**

Q1 - Is there a need to provide separate central allocation for capacity building? If yes, how much, do you think, would be adequate and why?

### **IMPACT**

IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?

### **Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1 - To what extent, did the scheme improve employment generation and thus, ensuring food security and maximizing value addition in agriculture? Employment opportunity in terms of skilled as well as unskilled persons.



Q2 - To what extent, did the scheme increase on-farm water use efficiency?

Q3 - To what extent, was the scheme able to increase income of farmers?

### **Adequacy - Low total water storage capacity as well as water storage capacity per capita in dams**

Q1 - Provided the fact that total water storage per capita is very low, do you think that water source creation under OI component is helpful to increase MI coverage? Do you see any challenges in that? If yes, please explain

### **Access - Gap in irrigation coverage**

Q1 - Is the scheme helpful to improve water-use efficiency? To what extent? Please provide examples of changes in amount of water used for irrigation pre and post micro-irrigation intervention?

Q2 - Post implementation of micro-irrigation, have the savings in water resulted in increasing the coverage of irrigation to areas that were earlier not covered through irrigation? Have there been studies to determine the quantum of water saved through use of micro-irrigation?

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability & Transparency**

#### **Availability of Data Records and Reports in public domain**

Q1 - Can you share the physical and financial progress data (2015-16 to 2018-19) for the villages?

#### **Financial Accountability**

Q1 - Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what are the reasons?

#### **Beneficiary involvement**

Q1 - As per the guidelines, the beneficiaries are accountable for O&M of installed MI systems and the manufacturers are supposed to provide after sales services up to 3 years from the installation period. Is there any other area where beneficiaries get involved?



Q2 - Is the level of involvement adequate? If yes, please justify your answer. If no, how can it be enhanced and what are the existing challenges?

### **Direct/Indirect Employment Generation**

Q1 - To what extent employment has been generated, for skilled as well as unskilled, especially unemployed youth for installation and maintenance of MI system, during 2015-2019 due to adoption of PDMC?

Q2 - To what extent income level has increased due to this scheme during 2015-2019?

Q3 - What is the women participation (%) in the scheme at your district?

### **Gender mainstreaming**

#### **Capacity building**

Q1 - How many capacity building activities and training sessions have taken place for women beneficiaries?

Q2 - What are the various topics covered in those sessions?

### **Climate change & sustainability including adoption of climate-change resilient practices & diversifications**

*What are the main impacts of climate change on the sector and scheme beneficiaries?*

Q1 - Can you brief us about the effect of different climate change situations, like - intense rainfall, flood, drought etc., on micro-irrigation? Please share some examples. How do you handle such situations with respect to different irrigation aspects? Please explain

#### **Any Best Practices**

Q1 - Any best practices in the area of climate change and sustainability

### **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population**

*Funds allocated under TSP/ SCSP and other provisions for vulnerable communities*



Q1 - Have the TSP & SCSP funds been able to improve equity? Please justify your logic

Q2 - Are you facing any challenges in this regard?

#### Inclusion of vulnerable groups in scheme as well as sector

Q1. Have you undertaken an activity to analyse the problems faced by SCs/STs in your District? If yes, please provide details of the findings?

Q2. Whether SCA to TSP/SCA to SCSP has been implemented in your district or not? If implemented -

- a) Is there any micro-project under SCA to TSP/SCA to SCSP being undertaken in your district? (Collect details of Irrigation projects, villages where SCA projects are being implemented)
- b) What are the activities/interventions being undertaken for SCs and STs which are being funded through SCSP and TSP?
- c) What are the irrigation structures being constructed by the government under SCA to TSP/SCA to SCSP?
- d) Are the farmers being provided any subsidy/incentive for irrigation under SCA to TSP/SCA to SCSP?
- e) Does Krishi Vikas Kendra (KVK) implement Hands-on training/workshops/awareness programmes? If yes, what are the skill development and other irrigation-related trainings being conducted by KVKs under SCA to TSP/SCA to SCSP?
- f) How many farmers have been trained by KVK under SCA to TSP/SCA to SCSP?
- g) What type of Multi-sector Support and Advisory services are being provided by KVKs to farmers under SCA to TSP/SCA to SCSP? How many farmers have benefitted from such services?
- h) What are the steps taken to monitor the SCA to TSP/SCA to SCSP activities at the State/District/village level?
- i) How do you measure the impact under SCA to TSP/SCA to SCSP?
- j) What are the issues/challenges in the CSS? (Probe for top 5 issues)



k) Please share recommendations to improve the impact of SCA to TSP/SCA to SCSP?

### **Use of IT/Technology in driving efficiency**

#### Deployment of IT enabled mechanisms for monitoring of the Schemes

Q1 - Is geotagging and use of geotagged photographs being done at your district? Please provide some evidences

Q2 - Is your district collecting and uploading the data of Bhuvan app in coordination with the NRSC, Hyderabad?

Q3 - Do you face any challenges in that? If yes, what are the challenges?

#### Technology to address key challenges

Q1 - What technologies are available to address key challenges facing the scheme? Are there constraints in their adoption?

### **Stakeholder and Beneficiary behavioral change**

#### Fund Allocation

Q1 - Do you think that any separate allocation is required from Central for awareness campaign and capacity building activities? Please provide some evidence to justify your logic

#### Cropping pattern

Q1 - What are the key constraints in crop planning based on local water availability with a view to reduce water intensive crops?

### **Unlocking Synergies with other Government Program**



Convergence (Inter-Ministerial/Inter-Departmental/Financial/Human Resource/Administrative/Institutional/Schemes)

Q1 - What activities are undertaken to ensure convergence at community level? Are there any Action Plans prepared at district/ block levels to ensure the same?

What are the challenges hindering effective convergence?

Q1 - What are the challenges hindering effective convergence?

**Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme**

FPOs/SHGs/Cooperative's Participation

Q1 - How many private sector, community/collectives/cooperatives and civil society have availed the benefits under this Scheme?

**SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

## **THANK AND END**

### 8.1.9 Village level stakeholder: Sarpanch/Chairman, Gram Panchayat

#### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **PDMC**. Since you are the head of the village, you would be aware of the different projects around irrigation and agriculture



ongoing in the village. Your insights would be valuable in understanding of these schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from national, state, and district level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been the head of the village? What are your current roles and responsibilities?

#### **RESEARCHER TO NOTE:**

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

**AT THE VILLAGE LEVEL, RESEARCHER NEEDS TO FIRST MEET THE SARPANCH OF THE VILLAGE**

**NO BENEFICIARIES ARE TO BE MET FOR ANY SCHEME/ PROJECT RELATED INTERVIEW/FGD BEFORE MEETING THE SARPANCH**

**FIRST QUESTIONS TO ASK THE SARPANCH ARE AS FOLLOWS:**

- 1. What is the population of the village?**
- 2. What are the different projects related to irrigation, agriculture in the village that are currently running? Could you name them? What are your views about these?**



**3. What are the type of works undertaken in them? According to you, which ones are working well for the village and the people? Why?**

**EFFECTIVENESS**

ET1: Is the scheme design appropriate to address scheme objectives?

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1 – What are the gaps / weakness in the assumptions and / or scheme design? What better can be done to achieve end goal of this scheme? *(Validate)*

Q2 – What do you find happening in your village under this scheme – only cultivation using MI systems or water source creation (part of OI activities) as well? If both MI and OI activities are happening, do you find proper linkage between these two set of activities? Please discuss and provide evidence to justify your logic.

ET3 How has the scheme performed against scheme objectives and annual targets?

**What are the key bottlenecks, issues & challenges in the implementation of the scheme**

Q1 - What key issues & challenges do you see in the implementation of the scheme? Please discuss and provide examples.

ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (state or time period) and mention the relative impact of each factor on performance?**

Q1 – According to you, what are the negative factors that have reduced scheme performance?

Q2 - Is the subsidy amount adequate? If yes, please provide some evidence. If not, why so and how can it be improved? *(Validate)*

**SUSTAINIBILITY**

SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?



**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1 - Can you cite the top 3 reasons for project failure, over the past 4 years, with respect to each of the following aspects.

- a. institutional
- b. financial
- c. technical,
- d. socio-economic,
- e. political
- f. environmental

Q2 – Please provide evidence in this regard

SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1 - Are the manufacturers providing after sales services for 3 years post installation of MI assets, following the guidelines? If not, what measures can the Govt. take to make it effectively happen?

Q2 - Do you think that the minimum gap of renewal of subsidy (i.e. 7 years on same cultivable area) too long for realizing the scheme objectives? If yes, what would be the optimum duration? If no, do the MI assets last for 7 years?

Q3 - Should the Govt. make the provision mandatory that a certain percentage of funding to be spent towards awareness campaign and capacity building? If yes, how much % would be adequate for that? If no, please share evidences showing adequate awareness campaign and capacity building activities are going on across states

## **EQUITY**

EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1 - Are the guidelines related to small & marginal (including SC, ST and women) farmers being followed properly? If yes, provide some evidences to substantiate this. If not, how can it be improved? *(Validate)*

Q2 - Which other targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society does the scheme provide? *(Validate)*



Q3 - How is the scheme impactful in reducing inequity? *(Validate)*

Q4 – what is the proportion of SC/ST farmers (small & marginal) who have adopted MI system in the village? If yes, please mention the reasons (e.g. high initial cost of MI system) why they are not adopting it

EQ2 Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1 - Is the subsidy structure appropriate to attract different categories of farmers? If yes, provide some justification. If no, how can it be improved? *(Validate)*

Q2 - Should the Govt. coordinate with national banks for making easy financing options available to the weaker section of society? If yes, how can it be implemented? If no, what else can be done for making easy financing options? *(Validate)*

## SECTION 2: CHALLENGES AND SUGGESTIONS

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

SUGGESTIONS AND CORRECTIVE MEASURES	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



## 8.2 Discussion Guide for FGD

### 8.2.1 FGD: Project Beneficiaries

#### GENERAL GUIDELINES for FGDs:

- The topics and questions below should be used to guide the Focus Group Discussion. Please keep in mind, while conducting the FGDs, do respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- During FGDs, group dynamics are common so it must be ensured that every respondent gets a chance to speak, one person should not be allowed to dominate the discussion. Also, be aware of any power dynamics that may be at play. Please ensure that all respondents speak one by one so that the audio recording is clear.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- **Seek more detail or explanation of a response.** For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- **Explore the reasons** behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- **Seek clarity and check for inconsistencies.** For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the FGD:
- I am ....., working with Ipsos, a global research organization. We regularly carry out research on various social issues. Currently we are implementing a study on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog along with KPMG a consultancy firm.
- The current study is an evaluation of Centrally Sponsored Schemes in the Water Resources sector in various states including yours. We would like to seek your opinion on certain topics related to the scheme **Per Drop More Crop (PDMC)**. One aspect of the evaluation is to meet the beneficiaries of these schemes to understand the benefits received, how the benefits have impacted different aspects of their life- social, economic, and any other. Your views are beneficial



to assess the experiences, challenges if any associated with this project. Discussion with your group as well as others will also help us identify recommendations and suggestions to improve the next phase of implementation of similar projects.

- Inform the respondents of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged that will lead to identification of individual responses that they give during this discussion.
- Explain that there are no right/ wrong answers and obtaining opinion and perception and their individual experience is critical.

- **NOTE TO THE TEAM:**
- AT THE VILLAGE LEVEL, RESEARCHER NEEDS TO FIRST MEET THE SARPANCH OF THE VILLAGE
- NO BENEFICIARIES ARE TO BE MET FOR ANY SCHEME/ PROJECT RELATED INTERVIEW/FGD BEFORE MEETING THE SARPANCH

**RESEARCHER TO NOTE:**

91. All the questions inside boxes font are only for reference of the researcher to gauge if the larger question has been answered. These questions are not to be asked directly to the respondents.
92. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, RESEARCHER should add additional probes to help answer those questions.

**Warm up:**

41. Can you give me some information about the village how many households live here, which is the nearest town, mode of transport etc.
42. What are the different occupations that people are engaged in? What percentage of the households are involved in agriculture/ agriculture related activities?
43. Do you all own your own land or you work on others' land? How many members of your family are currently involved in agriculture related work? What crops do you grow?



44. What are some of the most common problems that farmers in your village face? Note to RESEARCHERS- DO NOT DWELL EXTENSIVELEY ON PROBLEMS HERE, THIS IS JUST TO UNDERSTAND INFRASTRUCTURE, WATER/ IRRIGATION, AND MARKET ACCESS RELATED ISSUES IF THEY ARE ON TOP OF MIND.

### **Awareness about different schemes and projects implemented in their village**

36. What are the different irrigation and/or agriculture related projects that have been implemented in your village in last five years?
37. Can you please elaborate on these projects in terms of how they have benefitted you/ others in the village and/ or how do they address the common issues that you face?
38. What are the type of works undertaken? According to you, which ones are working well for the village and you? Why do you say so? (Researcher to not get into detailed discussion here)

**AT HE VILLAGE LEVEL, RESEARCHER NEEDS TO FIRST MEET THE SARPANCH OF THE VILLAGE  
NO BENEFICIARIES ARE TO BE MET FOR ANY SCHEME/ PROJECT RELATED INTERVIEW/FGD  
BEFORE MEETING THE SARPANCH**

### **We are would like to ask you questions specifically about one particular project/ government scheme – Per Drop More Crop (PDMC)**

Q1. Are you aware that this project was developed under which scheme/ project? What do you know about it? From where did you hear about the scheme/ project?

Q2. In your view, what is the purpose of this scheme/ project? When was this created, how much time did it take to complete the project since it was announced?

Q3. When did you start benefitting from this project? How is it helping you in agriculture? (PROBE TO UNDERSTAND THROUGH EXAMPLES OF WHAT THE BENEFITS EXPERIENCE ARE, WHERE POSSIBLE GET CONCRETE FACTS AND FIGURES.)

### **SECTION 1: DEEP DIVE INTO PDMC SCHEME USING REESIE FRAMEWORK: EFFECTIVENESS**

ET1: Is the scheme design appropriate to address scheme objectives?

#### **Is there evidence that assumptions have been tested and are valid?**

Q1 - To what extent, the following parameters have changed due to adoption of PDMC during 2015-19 (please fill the templates) -

- a) Enhancement in yield/productivity, Crop wise productivity, increase for drip and sprinkler separately.



- b) Increase in the income of farmers, separately for Rabi and Kharif
- c) Reduction in fertilizer consumption, separately for Rabi and Kharif. What percentage of farmers have adopted fertigation?
- d) Reduction in power consumption separately for Rabi and Kharif
- e) Reduction in pesticide use, separately for Rabi and Kharif
- f) Saving of labor, separately for Rabi and Kharif
- g) Employment generation (skilled as well as unskilled, especially unemployed youth for installation and maintenance of MI system) has been generated, separately for Rabi and Kharif

Q2 - How many scientific knowledge & awareness campaigns (trainings) have been conducted between 2015 to 2019? Do the campaigns focus on fertigation and using MI for field crops as well? How helpful are such trainings and campaign and in what way? Do you recall the content that was discussed during those trainings? Which ones?

Q4 - How many capacity building activities have been conducted between 2015 to 2019?

Q5 - What is coverage of field crops and horticulture crops under MI between 2015 to 2019? (please fill the template) (individually or collectively for village? )

Q6 - To what extent has the MI coverage increased for water intensive crops between 2015 to 2019?



**The data collection template is attached here**

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1- The scheme also focusses on water structures creation which can be leveraged as water source for MI system. Do you find any challenges in using those water sources? If yes, please discuss with examples.

Q2 - How many different types of water sources do you use for feeding water into your MI system? Please specify.

**EFFICIENCY**

**EC1 Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1 - We have prepared a template for cost benefit analysis. Can you fill up the template? If you do not have data for any parameter, can you suggest where we can get the data?

**What are the costs of the scheme? What is the monetary value of all costs?**



Q1 - We have prepared a template for cost benefit analysis. Can you fill up the template? If you do not have data for any parameter, can you suggest where we can get the data?



**Template for Benefit Cost Analysis is attached here**

## **SUSTAINIBILITY**

SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1 – What do you think that about the intervening duration (i.e. 7 years on same cultivable area) before you become eligible for the next round of subsidy to replace MI assets? Is it a fair duration or do assets require replacement earlier than that? What would be the appropriate period before the next round of subsidy is made available?

**Overall nature and responsiveness of Water sector planning - Lack of proper planning and data management**

Q2 - Do you see any challenges in the processes related to the scheme? If yes, please provide details. Do you think that there is lack of regulation in this sector? Please explain.

**Gaps in broad sectoral outcomes - Capacity building of the organizations /utilities creating and managing Water Resources infrastructure and providing service**

Q2 - Do you get proper capacity building support regarding O&M and water resource management from the Govt. and manufacturers? What challenges do you face in this regard?

**Gaps in broad sectoral outcomes - R&D in the sector**

Q2 - Do you think that initial investment of MI is too high? What other areas measures would be necessary for increasing MI penetration?

## **EFFECTIVENESS**

ET3 How has the scheme performed against scheme objectives and annual targets?

**What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable.**



Q1- As per guideline, the manufacturer is supposed to operate a toll-free customer care number where beneficiaries can register their queries/ complaints. Do they answer your queries/complaints properly and timely manner? If not, please let us know about some incidents.

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1 - Do you face any challenges for getting required support from the Govt.? Please specify

Q2 - What challenges do you face for getting required support from the manufacturers?

Q3 - What are the other bottlenecks, issues & challenges in the implementation of the scheme?

Q4. Why did you adopt micro irrigation? What benefits have you been getting in it? Why are you continuing with it? Do you think you would continue using it? Why/ why not?

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

Q1- According to you, what are the benefits of micro irrigation?

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1 - What are the negative factors that you think have reduced scheme's performance? (To ask for their spontaneous reaction and then to check the following and then probe):

- a. Electricity crisis
- b. High cost of set-up
- c. High cost of maintenance
- d. Poor quality product
- e. Damages by Rodents
- f. Inadequate technical support
- g. Clogging of emitters
- h. Others

Q3 – Are there any other factors that prevent you from adopting MI scheme? Which ones?

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1 - Did you get your subsidy on time? If not, what were the challenges you faced in this regard?



Q2 - Is the subsidy amount adequate? If not, how much do you think would be adequate? And why?

### **Using recycled water for agriculture**

Q2 - If Govt. plans to introduce recycled use of wastewater (TO EXPLAIN IT FIRST TO THEM AND THEN ASK FOR THEIR VIEWS) (planned safe use), are you willing to adopt that? If not, why? (will go in HH)

SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. What are the key risks that may adversely affect the benefits from the scheme over the long term?

Q2 - How are the assets in terms of quality? Please provide some information. If the asset quality is poor, do you think that poor quality of assets might prevent you from adopting MI?

Q3 - Are the state/district level institutions able to ensure adequate levels of qualified personnel, finance, equipment and other inputs?

Q4 - Do you see any other risks?

### **Sustainability - More focus on water-intensive crop**

Q1 - Are you using MI for water intensive crops? Do you think that it can be suitable for these crops in current water scarce scenario? Do you see any challenges/shortcomings in that? If yes, please explain.

### **EQUITY**

EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

*(For SC / ST/Women Beneficiaries)*

Q1 - How the scheme is helpful for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society?

EQ2 Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?



**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

*(For SC / ST/Women Beneficiaries)*

Q1 - Do you think that Govt. is providing adequate subsidy for weaker section? If no, how much would be adequate?

Q2 - Do you think that any section of the society (SC/ST/ women) being excluded? If yes, can you specify them?

Q3 - Do you require any other facility from Govt. to adopt this scheme?

**RELEVANCE**

RL1: Is the scheme relevant in the present context?

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1. Is the scheme helpful to increase irrigation productivity? Is the scheme helpful to cover more area under irrigation using same volume of water source? Please discuss and provide some examples.

Q2. Do you think that the scheme helps to improve water use efficiency (i.e. covering more area for irrigation with same quantity of water)?

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1. Do you think that the scheme should fulfil your any other needs? If yes, please specify them

RL2: Is it appropriate to continue / prioritize this scheme?

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1 - Is this scheme beneficial to you? Please discuss and explain how it is beneficial.

Q2 - Do you envisage any challenges in case the scheme being scaled down or stopped?

**IMPACT**

IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1 – To what extent was the scheme able to increase income of farmers?

Q2 - To what extent was the scheme able to generate direct and indirect employment opportunities?



## **Adequacy - Low total water storage capacity as well as water storage capacity per capita in dams**

Q1 - Provided the fact that total water storage per capita is very low, do you think that water source creation under OI component is helpful to increase MI coverage? Do you see any challenges in that? If yes, please explain.

Q2- Do you have any improvement suggestions for this scheme?

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability & Transparency**

#### **Citizen Accountability**

Q1- As per guideline, the manufacturer is supposed to operate a toll-free customer care number where beneficiaries can register their queries/ complaints. Do they answer your queries/complaints properly and timely manner? If not, please let us know about some incidents *(Validate)*

#### **Financial Accountability**

Q1 - Did you get your subsidy on time? If not, what challenges did you face in this regard? *(Validate)*

Q2 - Is the subsidy amount adequate? If not, how much do you think would be? And why? *(Validate)*

#### **Beneficiary involvement**

Q1 - As per the guidelines, the beneficiaries are accountable for O&M of installed MI systems and the manufactures are supposed to provide after sales services up to 3 years from the installation period. Is there any other area you get involved? Please share some information *(Validate)*

### **Direct/Indirect Employment Generation**

#### **Employment generation**

Q1 - Has any new employment generated out of this scheme? Please share some evidence

Q2 - Has your income increased due to adoption of this scheme? Please share some information

*(For Women beneficiaries)*

Q3 - Do you face any challenges in participating to this scheme? If yes, what are those?

### **Gender mainstreaming**



### Inclusiveness in scheme design/planning

Q1 - How the scheme is helpful for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society?

### Gender-friendly infrastructure and policies

*(For Women beneficiaries)*

Q1 - Do you feel empowered through this scheme? Are the authorities helpful? Please provide some information

### Capacity building

*(For Women beneficiaries)*

Q1 - Have you received any training session or been part of any capacity building activities? What are the topics covered in those sessions? *(Validate)*

### Any Best Practices

*(For Women beneficiaries)*

Q1 - What are the best practices adopted by your State Govt. to ensure gender equity/ women empowerment?

### Decision making by women

*(For Women beneficiaries)*

Q1 - Are you empowered to take important decisions at household, village levels in respect of the scheme? Please share some evidence.

## **Stakeholder and Beneficiary behavioral change**

### Mechanisms to promote and ensure behavior change

Q1 - What activities are undertaken by the authorities to promote adoption of good practices?

### Cropping pattern

Q1 - Crop planning based on local water availability can be helpful to reduce overall water consumption. Do you face any challenges in this regard? If yes, what?



**Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme**

FPOs/SHGs/Cooperative's Participation

Q1 - Do you know any private sector, community/collectives/cooperatives and civil society who have availed the benefits under any Scheme?

**SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



# Annexure 9 Primary Survey Guide – WDC

The primary survey guide for 'Watershed Development component' is provided below.

## 9.1 Discussion Guide for KII

### 9.1.1 National level stakeholder – Secretary, DoLR (in his capacity as Chairman of Steering Committee) or his nominee

#### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organization in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **Watershed Development Component (WDC)**. Since you are a key stakeholder in the scheme overseeing planning and



implementation at the national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

### **RESEARCHER TO NOTE:**

*93. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*

*94. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.*

## **SECTION 1: DEEP DIVE INTO WDC SCHEME USING REESIE FRAMEWORK:**

### **RELEVANCE**

RL3: Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?

**What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

Q2. Does each scheme objective have a corresponding outcome parameters/indicator? Are the parameters/indicators being tracked?

If yes, provide the data for the same.

If no, is there a plan to improve tracking of such outcome parameters/indicators.

Q3. What outcomes are being tracked by the department (DoLR) presently?

Q34 What is the qualitative ranking of desired outcomes in terms of priority?



Q5. Is the scheme design appropriate to achieve the desired objectives? If No, what modifications may be required? Please explain in detail.

Q6. Has the department undertaken any analysis to check if scheme design leads to desired outcomes and impacts? If yes, please share such studies / analysis. What measures, if any, were taken to implement the lessons learnt for mid-course corrections?

#### **Do the scheme objectives as stated in the EFC note appear in the scheme guidelines?**

Q5. Could you please share the EFC note with us? (EFC stands Expenditure Finance Committee; The EFC note is issued by the Finance department and this includes the guidelines and objectives of the scheme. It is a public document but is currently not available in the public domain, hence the need to collect it from the official)

Q6. Do the scheme objectives as stated in the EFC note appear in the scheme guidelines?

### **EFFECTIVENESS**

ET1: Is the scheme design appropriate to address scheme objectives?
---

#### **Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1. Specify the key inputs, activities, outputs, outcomes and impacts from the scheme - was there any change in any of these post implementation especially 'outcomes and impacts' achieved vis-à-vis what was planned?

Q2. What are the unintended outcomes of the scheme? Identify both good and bad outcomes.

Q3. Are there any measures being taken to mitigate unintended outcomes which are negative? Have these plans yielded desired results? Please explain with supporting evidence.

Q5. What is the key assumptions underlying the (success of the scheme) logic of results chain, especially assumptions linking outputs to outcomes and impacts? (Is the success of the scheme dependent on some exogenous assumptions like availability of markets, etc.?)

Q6. Are these assumptions valid at the ground level?



Q7. Can you point us to any study (or other evidence) that demonstrate that outcomes and impacts are being achieved?

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q8. What are the gaps / weakness in the scheme design?

Q9. How should the scheme design be modified to make it more effective?

Q10. Have any steps been taken to impart livelihood skills associated with the WDC projects created (say, through Kaushal Vikas Centres as per recommendation of Parliamentary Standing Committee)? If yes, please share details.

ET2: How are scheme targets set and monitored?

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. What is the mechanism of setting scheme targets?

Q2. Who sets the scheme targets?

Q3. Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?

**What information is contained in utilization certificate issued by state govt? Are they credible and can they be relied upon as an indicator of scheme progress?**

Q4. What information is contained in utilization certificate issued by the state government?

Q5. Are the utilization certificate credible and can they be relied upon as an indicator of scheme progress?

ET3: How has the scheme performed against scheme objectives and annual targets?

**What is the year wise scheme targets, if any, for the period 2015-16 onwards?**

Q1. What is the year wise and state-wise scheme targets, if any, please share for the period 2009-10 onwards?



Q2. What are the key reasons for delays in project completion (as pointed out by Parliamentary Standing Committee (PSC))? What remedial measures are required in this regard? Please explain in detail with evidence.

Q3. In keeping with PSC recommendation, have you taken measures to track which entity / stakeholder is responsible for what extent of delay and taking remedial measures? If yes, can you share such data? If no, is there any plan in this regard.

**What is the state wise, year wise performance against target?**

Q4. What is the state wise, year wise performance against target?

**Identify states that have performed well? What are the underlying reasons for such performance?**

Q5. Identify the states that have performed well against targets? Please specify the key metrics used to measure such performance.

Q6. What are the underlying reasons for such good performance by the states?

**Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q7. Identify the states that have performed poorly? Please specify the key metrics used to measure such performance?

Q8. What are the underlying reasons for such poor performance by the states?

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q9. What are the key bottlenecks, issues & challenges in the implementation of the scheme? Please explain in detail.

Q10. How has the department addressed the issues?

**What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable.**

Q11. What is the planning process proposed under the scheme?



Q12. Is the planning process adequately and effectively followed?

Q13. What improvements in the planning process (e.g. improving quality of DPRs, involving beneficiaries in the planning process) are required? Please explain the reasons for the suggested improvements.

Q14. What remedial measures have been taken to improve the quality of DPRs and complete their preparation in a reasonable amount of time?

Q15. Some of the recent evaluation reports on WDC have identified instances of project components (e.g. piggery unit, handicraft, pisciculture, horticulture plantation, rubber plantation, fruit processing) for which there was no interest from villagers / farmers to take up such activities? What are the reasons for such disconnect? What can improvement measures should be taken in this regard?

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q16. What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?

**How has the scheme performed in respect of participatory irrigation management?**

Q17. How can the scheme be made more participatory with respect to beneficiaries? What are the key measures required in this area and what are the challenges in implementing them?

ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?

**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (state or time period) and mention the relative impact of each factor on performance?**

Q5. What are the positive factors that have enhanced scheme performance? (Categorize the positive factors into universal (across states, across years) and specific (state or time period) and mention the relative impact of each factor on performance)?



**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q7. How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (state or time period) and mention the relative impact of each factor on performance?**

Q8. What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (state or time period) and mention the relative impact of each factor on performance?

**How can the scheme design be modified to mitigate the negative factors?**

Q9. How can the scheme design be modified to mitigate the negative factors?

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1. Is the fund flow at each level (of the scheme execution) adequate and released in the timely manner? If not, please discuss the issues and the underlying reasons?

Q2. What are positive and negative financial aspects that have impacted scheme performance? Please explain with supporting evidence.

**Was there timely utilization of available funds? If not, what were the reasons?**

Q3. Was there timely utilization of available funds? If not, what were the reasons?

Q4. Is there is a tendency of expenditure towards the end of the year? If yes, why?

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q6. What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.

**EFFICIENCY**

EC1: Did the benefits of the scheme exceed costs?



**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1 – Is the BC Ratio for states worked out and analysed?

Q2. How are the benefit cost ratio calculated for watershed project? Are there any guidelines prepared and disseminated to the States in this regard? If yes, please share the same.

Q3 - What are the factors considered for calculating the Benefit Cost Ratio?

EC2: Can the costs of the scheme be lowered?

**Are there lower cost alternatives for achieving the scheme outcomes?**

Q1. Are the cost norms for construction works suitable as per the requirement of the scheme, especially for the hilly regions? If No, please explain with supporting reasons?

Q2. Is there scope to reduce the cost of projects without compromising on scheme objectives? If yes, please elaborate on such opportunities.

Q3. Is there scope to involve private sector with a view to involve cost efficiencies? If yes, in what areas?

**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q4. What are areas where coordination is lacking between ministries at the central level? Discuss the impact of such lack of coordination and remedial measures.

Q5. What are areas where coordination is lacking between DoLR and state government and departments? Discuss the impact of such lack of coordination and remedial measures.

Q6. Which states have done well in convergence (coordination) and which states have done badly? Please give reasons.

**What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**



Q7. Parliamentary Standing Committee on Rural Development (2016-17) has stressed on the need to have an institutional arrangement by the State governments for effective convergence. What are the measures that can be taken in this regard? What is the progress in this regard?

Q8. Which Schemes can be leveraged upon for better implementation for WDC and in what way?

Q9. Are funds from MGNERGA being utilized in WDC? And in what activities?

Q10. What are the key recommendations for a better convergence?

## **SUSTAINABILITY**

SS3: Is the scheme financially sustainable? How can financial sustainability be improved?

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. Are the assets and project benefits created under the scheme sustainable from financial and institutional perspective? Provide supporting evidence.

Q2. What are the key areas of challenge with respect to financial and institutional sustainability? Provide supporting evidence / studies.

Q3. What measures can be taken to improve sustainability of projects post implementation level?

Q4 - What is the approximate number and quality of human resources available for O&M phase for a project?

Q5 - Is the human resource available for O&M adequate?

Q6. What is the mechanism to constitute and utilize Watershed Development Fund (WDF)? Are there any issues with respect to constitution and maintenance of WDF?

Q7 - Are adequate funds available during O&M phase of the scheme? If no what are the main reasons?

Q8. Is there any other (from another scheme Like MGNERGA) alternate funding source for O&M?

Q9. What type of user associations are formed under the scheme? Please name them? What are their key objectives?



SS5: Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1. Is the scheme sustainable from an a) environmental and b) social perspective? Provide supporting evidence.

Q2. What are the key areas of challenge with respect to a) environmental and b) social sustainability? Provide supporting evidence / studies.

Q3. What measures can be taken to improve sustainability?

SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. Over the past [few] years, what have been the reasons for poor performance or failure of project in respect of the following aspects [Mention top 3 reasons per aspect]:

- a. institutional
- b. financial
- c. technical
- d. socio-economic
- e. political
- f. environmental

Q2 - Have such reasons been studied and documented? If yes, please share the same?

Q3. Are the state/district/village level institutions able to ensure adequate levels of qualified personnel, finance, equipment and other inputs for post project O&M? What are the key areas of challenge in this regard?

Q4. Is adequate training (capacity building) given by the implementers to carry forward the O&M post implementation?



## **EQUITY**

EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society (especially women, SC/ST and landless and marginal farmers)? If yes, please explain with supporting evidence in this regard.

Q2. Are the scheme guidelines in this respect being followed on the field? If no, please explain the hurdles faced in this regard.

EQ2: Is any weaker section of society excluded /accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1. Are there any barriers in accessing scheme benefits under the scheme by SC/ST/women/landless or other weaker sections on the field? If yes, please explain the nature of such barrier.

Q2. What measures can be taken to address the above issues.

Q3. What is the process of selection of scheme beneficiaries? Is there a special weight age to the marginalized?

Q4. Is there a fair representation of marginalized (SC/ST/women/landless) in the Watershed Development Team?



Q5. Has the scheme contributed in economic development and improving the socio-economic condition of the resource poor and disadvantaged sections inhabiting the program areas?

## RELEVANCE

RL1: Is the scheme relevant in the present context?

**Provide details of the relevant sectoral challenge, beneficiary need, national priority, SDG that pertain to the area in which the scheme is operating?**

Q1. Which key national priorities, SDG, or sectoral challenges that are served by the WDC-PMKSY?

Q2. Is there duplication of objectives with respect to any other scheme? Which scheme and in what ways?

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q3. What are the selection criteria for choosing intervention watershed under the scheme? Does the criterion align with sectoral challenges?

Q4. Is the scheme missing any sectoral challenges that it should cover?

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q5. What are the other remaining areas of interventional gaps (i.e. apart from those addressed by WDC) in respect of the sectoral challenge, beneficiary need, national priority AND SDG specific to Rainfed areas?

Q6. From among the areas of interventional gaps identified above, please rank them in the order of importance? Please explain with reasons?

Q7. Should the scheme be modified to address any/some of the interventional gaps? If yes, please explain in detail.

RL2: Is it appropriate to continue / prioritize this scheme?



## What would be the impact if the scheme were to be scaled down or stopped?

Q1. Are there certain aspects of the scheme that needs to be scaled down or stopped? Please explain with reasons.

### IMPACT

IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?

### Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?

Q1. How successful has the scheme been in addressing sectoral challenge, national priority, SDG and to what extent?

Q2. Can you share studies on impact assessment (study done after 2009-10)?

### SECTION 2: CROSS SECTIONAL THEMES

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

#### Accountability & Transparency-Availability of Data Records and Reports in public domain

Q1. What data records are available for the scheme in public domain?

Q2. Are DPRs available in public domain?

#### Monitoring Mechanisms

Q1 -How robust is the monitoring mechanism? Please detail out the process and agencies involved in monitoring of various projects under WDC?

Q2. Is there any mechanism to independently verify the progress reported by the supervising entity at the state level through audits or other methods? If yes, please provide some information around it. If no, are you planning to bring such mechanism and what is the timeline for that and at what level?

Q3 - Are there any states which do not regularly upload progress data over MIS system? If yes, why is it happening?

#### Evaluation Mechanisms

Q1 - As per the guidelines, do all the states conduct M&E of the scheme for their states by 3rd party? Which states are doing well and which are not? Why? Please provide some information and share some reports, if available. Also, let us know what are the frequency, quality and coverage of the studies.

Q2. Is one percent of the project cost is being utilized for evaluation study by independent agency on a regular basis? Which states are doing well and which are not?



Q3 - Are impact evaluation reports available for projects carried out under WDC component. If yes, please share the study reports

#### **Citizen Accountability**

Q1. Are there functional grievance redressal mechanisms that successfully incorporate beneficiaries' and non-beneficiaries' concerns? Please explain.

#### **Financial Accountability**

Q1 - Is the fund flow at each level (of the scheme execution) adequate and released in the timely manner? If not, what are the reasons?

#### **Any Best Practices**

Q1 - Can you provide some examples of innovative initiatives/best practices in terms of accountability/transparency?

#### **Beneficiary involvement**

Q1. In what all stages are beneficiaries involved in the project lifecycle?

Q2. Is the involvement of beneficiary in the project and after the project adequate? If not please explain how?

Q3. What all activities are undertaken by the beneficiaries post implementation of the project?

#### **Community institutions**

Q1. What all community institutions are created during the project? What is their role? Are these doing their job effectively? If not explain why?

Q2. Are these community institutions have adequate power and resources to carry out the assigned activities? If not, why? If yes, please explain the activities carried out by these institutions?

#### **Direct/Indirect Employment Generation-Employment generation**

Q1 - What is the level of employment generation through schemes in the sector and overall sectoral contribution in National employment generation? Provide data.

Q2 - What is the improvement in income levels? Provide data.

Q3. Has there been an improvement in Employment generation activities? Capture how much has been the improvement in man-days for the below cases:

- a. Creating more employment through land-based and productive activities.
- b. Raising backyard nurseries.
- c. Wage earning through community assets creation such as community buildings, village roads etc.
- d. Cottage industries based on bamboo, woodcraft, cane craft etc. by using natural resources generated on the farm and over CPRs.
- e. Any other

Q4. What has been impact on the scheme on migration in the beneficiary villages? Please share relevant data.



### **Quantum of Self Employment, entrepreneurship generated - Quantum and kind of self-employment opportunities generate**

Q1. Has the scheme helped in generation of self-employment for the beneficiaries? If yes, in which jobs/business. Please share relevant data.

#### **Any Best Practices**

Q1 - Are there any best practices, in terms of direct/ indirect employment generation? Please share evidence.

#### **Institutional barriers**

Q1 - Do you see any institutional barriers to employment generation (e.g. access to markets)? If yes, please provide some information.

#### **Private sector involvement**

Q1 - Is there scope for private sector to be involved with a view to increase employment opportunities? If yes, how can it be implemented? If no, what are the challenges?

#### **Gender Mainstreaming-Gender-friendly infrastructure and policies**

Q1 - Is there any measure taken to improve women empowerment under the scheme? Please provide some information.

Q2. Have the measures proven successful, if not, why?

#### **Inclusiveness in scheme design/planning**

Q3. Is there a specific mention of gender equality and equity considerations in the scheme guidelines/objectives, i.e. has the scheme been designed keeping gender considerations in mind?

Q4. Is there any specific training offered for women to enhance incomes?

#### **Gender-friendly infrastructure and policies**

Q5. Is there any measure taken to improve women empowerment? Please provide some information.

Q6. Has there measures proven successful, if no, why?

#### **Climate change & sustainability including adoption of climate-change resilient practices & Diversification-Climate resilience**

Q1. Are there appropriate climate resilient policies/interventions/capacity building measures for mitigation and/or adaptation (or included as part of scheme objectives and design)?

Q2. Please identify key climate change adaptation knowhow specific to rainfed areas disseminated under the scheme?



Q3. Please share suggestions to modify the scheme to adequately address the challenges of climate change in rainfed areas.

### **Climate impact**

Q1. What are the main impacts of climate change on the sector and scheme beneficiaries?

Q2. How has the scheme helped the scheme beneficiaries become more resilient?

### **Use of IT/Technology in driving efficiency - Use of latest technology to improve efficiency and effectiveness of scheme implementation**

Q1 - Which states are leading in terms of technology use and which are lagging behind?

Q2- What is the benefit of using Bhavan-Shrishti portal in monitoring the scheme performance?

Q3- What additional features are required in the portal?

### **Development, dissemination & adoption of innovative practices, technology & know-how – Fund allocation towards promotion of innovation**

Q1 - What are the different innovative practices and technology and knowhow that are disseminated to the beneficiary under the project with respect to new crops, better cultivation practices or water use technologies??

Q2 -What percent of total allocation is directed towards development, dissemination and adoption of innovative practices and technology? How much of it is utilized?

### **Deployment of IT enabled mechanisms for monitoring of the Schemes**

Q1- What is the benefit of using Bhavan-Shrishti portal in monitoring the scheme performance?

Q2- What additional features are required in the portal?

### **Contribution of improved practices in increasing outcomes**

Q1 - What is the impact of such innovative technologies and practices on scheme outcomes?

### **Any Best Practice or innovation**

Q1 - Any best practices (innovative technologies and practices) in this aspect with respect to new crops, better cultivation practices or water use technologies?

### **Research & Development - Fund Allocation**

Q1 - Is there any percentage of total allocation is directed towards R&D?

If yes, what percentage? How much of that percent is being utilized?

Q2. In what activities is the fund on R&D being utilized?



### **Institutes and departments dedicated for R&D**

Q1. What is status of availability of any Institute or centre or department dedicated for R&D in the Sector?

### **Private Sector participation in R & D**

What is the percentage of private sector participation in R&D?

### **Challenges in undertaking R&D efforts**

Q1. What are the gaps? Are there any under-researched areas?

### **Any Best Practices**

Q1. What are some innovations or practices under R&D carried out by State or District?

### **Unlocking Synergies with other Government Program-Convergence (Inter-Ministerial/Inter-Departmental/Financial/Human Resource/Administrative/Institutional/Schemes)**

Q1. What initiatives have been undertaken by DoLR for ensuring Convergence?

Q2. What are the requirements as per DoLR for a good convergence?

Q3 - What activities are undertaken to ensure convergence at Centre, State, Department and community level? Are there any Action Plans prepared to ensure the same?

### **Challenges hindering effective convergence?**

Q1 - What are the challenges hindering effective convergence?

### **Any best practices of the same**

Q1 - Any best practices in terms of creating synergy with other schemes (like- MGNREGA.)

### **Potential areas for synergy**

Q1 - What are the areas for potential convergence / synergy across govt. programs?

### **Reforms, Regulations - Adoption of models acts and reforms at governance, institutional and administrative level**

Q1 - What measures are being taken to ensure effective implementation and compliance of adopted acts/rule/regulations applicable on the scheme? (like in areas of safety, accountability, transparency etc.)

### **Any best practice**

Q1 - Any best practices with respect to reforms, regulations?



**Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme**

- Q1. What is the percentage of private investment in the clusters/programs run by the government?
- Q2. Is there any private investment in any states for this program? If yes, please share some information. If no, are you expecting any?
- Q3. What is the role of community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme in the scheme? Please explain with examples.

**Public-Private Partnership**

Q1 - Is there any PPP model prevalent in this area? If yes, how well has that functioned and what are the challenges? If no, can it be profitable/ help to realize the scheme outcomes at a lower cost?

**SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

9.1.2 State level stakeholder – CEO, State Level Nodal Agency

**GENERAL GUIDELINES:**



- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organization in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **Watershed Development Component (WDC)**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHS/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.



- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

### **RESEARCHER TO NOTE:**

95. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.

96. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.

### **SECTION 1: DEEP DIVE INTO WDC SCHEME USING REESIE FRAMEWORK:**

RL3: Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?
---

#### **What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**

Q1. What is your overview of the scheme in terms of its objectives?

Q2. What is the qualitative ranking of desired outcomes in terms of priority?

Q3. Does each scheme objective have a corresponding outcome indicator/parameter that is being tracked? If yes, provide the data for the same. If no, is there a plan to improve tracking of such outcome parameters.

Q4. What outcome indicators are being tracked by the SLNA presently?

Q5. Is the scheme design appropriate to achieve the desired objectives? If No, what modifications may be required?

Q6. Has SLNA/State undertaken any analysis to check if scheme design leads to desired outcomes and impacts? If yes, please share such studies / analysis. What measures, if any, were taken to implement the lessons learnt for mid-course corrections?



**Do the scheme objectives as stated in the EFC note appear in the scheme guidelines?**

Q5. Please share the EFC note (in case it is not already available with us).

Q6. Do the scheme objectives as stated in the EFC note appear in the scheme guidelines?

**EFFECTIVENESS**

ET1: Is the scheme design appropriate to address scheme objectives?

**Is there evidence that assumptions have been tested and are valid?**

Q1. Could you please provide an overview of the scheme in terms of its objectives?

Q2. Can you point us to any study (or other evidence) that demonstrate that outcomes and impacts are being achieved?

Q3. What are the key assumptions (or requirements like availability of well-functioning agriculture markets) on which the outcomes and Impact are dependent?

Q4. Are these assumptions valid at the ground level?

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q4. What are the gaps / weakness in scheme design?

Q5. How should the scheme design be modified to make it more effective?

Q6. Have any steps been taken to impart livelihood skills associated with the WDC projects created (say, through Kaushal Vikas Centres as per recommendation of Parliamentary Standing Committee)? If yes, please share details.

ET2: How are scheme targets set and monitored?

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. What is the mechanism of setting scheme targets?

Q2. Who sets the scheme target?

Q3. Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?

**What information is contained in utilization certificate issued by state govt? Are they credible and can they be relied upon as an indicator of scheme progress?**



Q1. What information is contained in utilization certificate issued by State Government?

Q2. Can they be relied upon as an indicator of scheme progress?

ET3: How has the scheme performed against scheme objectives and annual targets?

### **What is the year wise scheme targets, if any, for the period 2015-16 onwards?**

Q1. What is the year wise scheme targets, if any, for the period 2009-10 onwards?

Q2. What are the key reasons for delays in project completion (as pointed out by Parliamentary Standing Committee (PSC))? What remedial measures are required in this regard? Please enumerate measures of DoLR and State (SLNA) separately.

Q3. In keeping with PSC recommendation, have you taken measures to track which entity / stakeholder is responsible for what extent of delay and taking remedial measures? If yes, can you share such data. If no, is there any plan in this regard.

Q4. What are the key factors that have had an impact on the scheme performance?

### **DPR preparation**

Q1. Please describe the process followed for preparation of DPR and all the stakeholders involved along with their inputs in preparation of DPRs?

Q1b. Has the DPRs contributed to delays of the project or below par performance of the project? Please explain with evidence.

Q2. Please explain the timelines for various phases involved in the preparation of DPR (e.g. selection and procurement of agencies, engineering survey and drawings, cost estimates, vetting of DPR, approvals, etc.)

Q3. Did you face any challenge in the preparation of DPRs? Please explain in detail.

Q4. Which agency was hired to develop the DPRs? Do you feel the agencies had adequate competence and experience in preparing DPRs for watershed project? Please substantiate with evidence / reasons.

Q5. What additional support, resources or measures are necessary in order to improve the DPR quality and reduce the time required for preparation of the same?

Q6. Some of the recent evaluation reports on WDC have identified instances of project components (e.g. piggery unit, handicraft, pisciculture, horticulture plantation, rubber plantation, fruit processing) for which there was no interest from villagers / farmers to take up such activities? What are the reasons for such disconnect? What can improvement measures should be taken in this regard?

### **What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q5. What are the key bottlenecks, issues & challenges in the implementation of the scheme?

Q6. How has the SLNA overcome the challenges?



Q7. Suggests measures to avoid project implementation delays in future? Rank the measures from High importance to Low importance

**What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable.**

Q8. What is the planning process at the State level proposed under the scheme?

Q9. Is the planning process adequately and effectively followed at the State and village level? If not, what improvements are desirable?

Q10. What improvements in the planning process (e.g. improving quality of DPRs, involving beneficiaries in the planning process) are required? Please explain the reasons for the suggested improvements.

Q11. What remedial measures have been taken to improve the quality of DPRs and complete their preparation in a reasonable amount of time?

Q12. What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?

**Overall nature and responsiveness of Water sector planning - Lack of proper planning and data management**

Q14. What is the mechanism of monitoring and data collection in respect of project progress? Discuss how robust is the mechanism?

Q15. Are proper records maintained for the collected data?

Q16. Is any data maintained during the O&M phase of the completed project?

Q17. What data and information do you share with DoLR and at what frequency?

Q18. Are the planning and targets set under the DPR achievable? Please explain in detail.

Q19. What is the mechanism of using technology to enhance the monitoring of the projects? Are these mechanisms strictly followed?

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

**How has the scheme performed in respect of participatory irrigation management?**

Q20. How can the scheme be made more participatory with respect to beneficiaries? What are the key measures required in this area and what are the challenges in implementing them?

ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?



**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. What are the positive factors that have enhanced scheme performance? (Categorize the positive factors into universal and specific and mention the relative impact of each factor on performance)

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q2. How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q3. What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal and specific and mention the relative impact of each factor on performance?

**How can the scheme design be modified to mitigate the negative factors?**

Q4. How can the scheme design be modified to mitigate the negative factors?

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1. Is the fund flow at each level (of the scheme execution) adequate and released in the timely manner? If not, please discuss the issues and the underlying reasons?

Q2. What are positive and negative financial aspects that have impacted scheme performance? Please explain with supporting evidence.

**Was there timely utilization of available funds? If not, what were the reasons?**

Q3. Was there timely utilization of available funds? If not, what were the reasons?

Q4. Is there is a tendency of expenditure towards the end of the year? If yes, why?

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**



Q1. What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.

## **EFFICIENCY**

EC1: Did the benefits of the scheme exceed costs?

### **What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. How are the benefit cost ratio calculated for watershed project? Are there any guidelines prepared and disseminated or developed in this regard?

Q2 - What are all the factors considered for calculating the Benefit Cost Ratio from watershed projects?

Q3 - What are the factors considered for calculating the Benefit Cost Ratio?

EC2: Can the costs of the scheme be lowered?

### **Are there lower cost alternatives for achieving the scheme outcomes?**

Q1. Are the cost norms for construction works suitable as per the requirement of the scheme, especially for the hilly regions? If No, could you please specify reasons?

Q2. Is there scope to reduce the cost of projects without compromising on scheme objectives? If yes, please elaborate on such opportunities.

Q3. Is there scope to involve private sector with a view to involve cost efficiencies? If so, in what areas?

### **Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q4. What are areas where coordination is lacking between Departments of the state government?

Discuss the impact of such lack of coordination and remedial measures.

Q5. What are areas where coordination is lacking between SLNA and DoLR? Discuss the impact of such lack of coordination and remedial measures.

### **What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q6. Parliamentary Standing Committee on Rural Development (2016-17) has stressed on the need to have an institutional arrangement by the State governments for effective convergence. What are the measures that can be taken in this regard? What is the progress in this regard?

Q7. Which Schemes can be leveraged upon for better implementation for WDC and in what way?

Q8. Are funds from MGNREGA being utilized in WDC? And in what activities?



Q9. What are the key recommendations for a better convergence?

## **SUSTAINABILITY**

SS3: Is the scheme financially sustainable? How can financial sustainability be improved?

### **Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. Are the assets and project benefits created under the scheme sustainable from financial and institutional perspective? Provide supporting evidence.

Q2. What are the key areas of challenge with respect to financial and institutional sustainability? Provide supporting evidence / studies.

Q3. What measures can be taken to improve sustainability?

Q4. Provide the following information: project-wise list of whether WUAs (or equivalent) i) is formed, ii) date of formation, iii) number of meetings conducted since formation?

Q5. What are the key decisions taken by the WUAs - please share the minutes of meeting of at least 20 such meetings (each meeting minute should be from a unique WUA) that demonstrates the decisions taken by the WUA.

Q6. What is the typically the number and quality of human resources available for O&M phase for a WDC project?

Q7. Is the adequate human resource available during the O&M phase? If no, please elaborate on the challenges faced?

Q8. What is the mechanism to constitute and utilize Watershed Development Fund (WDF) and challenges faced?

Q10. Are adequate funds available during O&M phase of the scheme?

Q11. Is there any other (say, from another scheme) source of alternate funding for O&M?

Q12. What type of user associations have been formed under the scheme?

### **Gaps in broad sectoral outcomes - Capacity building of the organizations/utilities creating and managing Water Resources infrastructure and providing service**

Q13. Provide details of all training that were imparted to various stakeholders for capacity building.

### **Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q14. Is the scheme sustainable from an environmental and social perspective? Provide supporting evidence.

Q15. What are the key areas of challenge with respect to environmental and social sustainability? Provide supporting evidence / studies.



Q16. What measures can be taken to improve sustainability?

SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. Over the past [few] years, what have been the reasons for poor performance or failure of project in respect of the following aspects [Mention top 3 reasons per aspect]:

- a. institutional
- b. financial
- c. technical
- d. socio-economic
- e. political
- f. environmental

Q2 - Have such reasons been studied and documented? If yes, please share the same?

Q3 - In case of a breakdown / dysfunction of project, who is responsible for repair and maintenance? Has such a mechanism been effective in ensuring continued benefits from the scheme?

Q4. Are the state/district level institutions able to ensure adequate levels of qualified personnel, finance, equipment and other inputs? What are the key areas of challenge in this regard?

Q5. Is adequate training (capacity building) given by the implementers to carry forward the O&M post implementation?

#### **Sustainability - Unregulated extraction of groundwater**

Q6. Has there been an increase in the conjunctive use of groundwater and surface water on account of WDC scheme? If so what measures have been taken in for the same?

Q7. Has the increase, if any, in the surface water flows due to scheme intervention lead to any reduction in the dependence on groundwater?

Q8. Is adequate training given to the beneficiary farmers on water saving technologies such as drip irrigation? If yes, please elaborate.

#### **Sustainability-Unregulated extraction of groundwater**

Q9. Given the improvement in groundwater levels, if any, in the watershed, has there been an unregulated extraction of ground water in response (e.g. shifting to water intensive cropping)? What measures have been taken to mitigate such issues?



Q10. Is there any regulation prohibiting / restricting drilling of new borewells or regulating groundwater extraction in the project area? If yes, please share a copy of such regulations / law.

Q11. What is the methodology used to monitor the groundwater table in the intervention watershed?

## **EQUITY**

EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? If yes, please explain with supporting evidence in this regard.

Q2. Are the scheme guidelines in this respect being followed on the field? If no, please explain the hurdles faced in this regard.

EQ2: Is any weaker section of society excluded /accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1. Are there any barriers in accessing scheme benefits under the scheme by SC/ST/women/landless or other weaker sections on the field? If yes, please explain the nature of such barrier.

Q2. What measures can be taken to address the above issues.

Q3. What is the process of selection of scheme beneficiaries? Is there a special weight age to the marginalized (SC/ST/women/landless)?

Q4. Is there a fair representation of marginalized in the WDT?

Q5. Has the scheme contributed in economic development and improving the socio-economic condition of the resource poor and disadvantaged sections inhabiting the program areas

## **RELEVANCE**

RL1: Is the scheme relevant in the present context?



**Provide details of the relevant sectoral challenge, beneficiary need, national priority, SDG that pertain to the area in which the scheme is operating?**

Q1. Which key national priorities (for rainfed areas), SDG, or sectoral challenges that are served by the WDC-PMKSY?

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q2. What are the selection criteria for choosing intervention watershed under the scheme in your state?

Does the criterion align with sectoral challenges?

Q3. Is the scheme missing any sectoral challenges that it should cover?

RL2: Is it appropriate to continue / prioritize this scheme?

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1. Are there certain aspects of the scheme that needs to be scaled down or stopped? Please explain with reasons.

**From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**

Q2. What are the remaining areas of interventional gaps (i.e. apart from those addressed by WDC) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?

**IMPACT**

IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

Q1. How successful has the scheme been in addressing sectoral challenge, national priority, SDG and to what extent? Can you share studies on impact assessment?

**Quality-Quality related issues for groundwater**

Q2. Has there been any improvement in the quality of groundwater after implementation of WDC project. If yes, i) what are the key reasons for such quality improvement? ii) are the beneficiaries aware of such quality improvement and is there any awareness campaign that you take up in this regard?



## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION 1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability & Transparency-Availability of Data Records and Reports in public domain**

Q1. Are the DPRs made available for public scrutiny?

Q2. Is scheme related document, Progress report available in public domain?

### **Monitoring Mechanisms**

Q1 - Is your state collecting and uploading the data of Bhuvan Geo-Portal Srishti in coordination with the NRSC, Hyderabad? Q2 - Do you face any challenges in regular uploading the data over the MIS system? If yes, what are the challenges?

### **Evaluation Mechanisms**

Q1 - Are impact evaluation reports available for projects carried out under WDC component. If yes, please share the study reports

Q2. Is the required expertise available to carry out such evaluations? Do you face any other challenges in conducting end-line evaluations?

### **Citizen Accountability**

Q1 - Is there any other functional grievance redressal mechanism that successfully incorporate beneficiaries' and non-beneficiaries' concerns?

### **Financial Accountability**

Q1 - Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what are the reasons?

Q2 - Provide some details for few proposals - when: i) request for funds was made by you, ii) funds released by the approving authority, iii) funds released by you to the next level / contractor?

### **Any Best Practices**

Q1 - Can you provide some examples of innovative initiatives/best practices in terms of accountability/transparency?

### **Beneficiary involvement**

Q1. In what all stages are beneficiaries involved in the project lifecycle?

Q2. Is the involvement of beneficiary in the project and after the project adequate? If not, please explain how?

Q3. What all activities are undertaken by the beneficiaries post implementation of the project?

### **Community institutions**

Q1. What all community institutions are created during the project? Are these doing their job effectively? If not explain why?



Q2. Are these community institutions have adequate power and resources to carry out the assigned activities? If not, why? If yes, please explain the activities carried out by these institutions?

### **Direct/Indirect Employment Generation-Employment generation**

*Please provide supporting data in respect of the question below*

Q1 - What is the level of employment generation through schemes in the sector and overall sectoral contribution in National employment generation?

Q2. What is the improvement in income levels?

Q3. - To what extent income level has increased due to this scheme during 2015-2019?

Q4. What has been the impact on crop productivity? a) winter crop yield, b) summer crop yield?

Q5. Has there been any change in cropping intensity?

Q6. What has been the change in cropping intensity on rainfed plots?

Q7. Has there been a shift towards crop Diversification? In what ways?

Q8. Have there been any changes in Livestock yield? By how much?

Q9. Has there been any change in cropping pattern from mono-cropping to double cropping?

Q10. Have there been introduction of suitable crops, improved crop varieties, inter-cropping, contour cultivation and crop management practices?

Q11. What have been changes in household income and by how much? Capture the source.

Q12. Has there been freedom from debt and reduction in dependence on moneylenders (including qualitative changes and record case-study)

Q13. Has there been a move towards other production activities such as; by how much?

a) Sericulture

b) Horticulture

c) Livestock development fodder cultivation

d) Milch cattle distribution

e) Establishment of milk co-operatives

f) Any other

g) Integration of other activities such as sheep rearing, fisheries, piggery, poultry, beekeeping etc.

Q14. What has been impact on the scheme on migration in the beneficiary villages? Please share relevant data.

### **Women participation (%) in the Sector/Program**

Q1 - What is the women participation (%) in the scheme at your state?

### **Quantum of Self Employment, entrepreneurship generated**

Q1. Has the scheme helped in generation of self-employment for the beneficiaries? If yes in which jobs/business

### **Any Best Practices**



Q1 - Are there any best practices, in terms of direct/ indirect employment generation, noticeable at your state?

### **Institutional barriers**

Q1 - Do you see any institutional barriers to employment generation (e.g. access to markets)? If yes, please provide some information

### **Private sector involvement**

Q1 - Is there scope for private sector to be involved with a view to increase employment opportunities? If yes, how can it be implemented? If no, what are the challenges?

### **Gender Mainstreaming-Inclusiveness in scheme design/planning**

Q1 Are the guidelines related to small & marginal (including SC, ST and women) farmers being followed properly? If yes, provide some evidences to substantiate this. If not, how can it be improved?

Q2 - Which other targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society does the scheme provide?

Q3 - How is the scheme impactful in reducing inequity?

### **Gender-friendly infrastructure and policies**

Q1 - Is there any measure taken to improve women empowerment? Please provide some information.

Q2. Have the measures proven successful, if not, why?

### **Capacity building**

Q1 - How many capacity building activities and training sessions have taken place for women beneficiaries?

Q2 - What are the various topics covered in those sessions?

### **Any Best Practice**

*State Level Nodal Agency (SLNA), Professional experts assisting the SLNA, State level data cell*

Q1 - What are the best practices adopted in your state to ensure gender equity/ women empowerment?

### **Decision making by women**

Q2 - Are you empowered to take important decisions at household, village levels in respect of the scheme? Please share some evidence

### **Climate change & sustainability including adoption of climate-change resilient practices &**

#### **Diversification -**

#### **Climate resilience**



- Q1. Are there appropriate climate resilient policies/interventions/capacity building measures for mitigation and/or adaptation (or included as part of scheme objectives and design)?
- Q2. Please identify key climate change adaptation knowhow disseminated under the scheme?
- Q3. Please share suggestions to modify the scheme to adequately address the challenges of climate change in rainfed areas.

### **Sustainable practices**

- Q1. Is there an effective waste management/end-of-life system in place for resources used in the sector/schemes?
- Q2. Is sustainable cropping pattern, local climate resilient crops, water saving technologies and crops promoted under the scheme? Please elaborate on each of them.

### **Awareness and capacity building**

- Q1. Are there any training sessions held regularly for climate resilient cropping pattern and water saving technologies?

### **Any Best Practices**

- Q1. Can you highlight any best practice in the form of a case study?

### **Climate impact**

- Q1. What are the main impacts of climate change on the sector and scheme beneficiaries?
- Q2. How has the scheme helped the scheme beneficiaries become more resilient?

### **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste Population – Inclusion of vulnerable groups in scheme as well as sector**

- Q1. Have you undertaken an activity to analyse the problems faced by SCs/STs in your State? If yes, please provide details of the findings?
- Q2. Whether SCA to TSP/SCA to SCSP has been implemented in your state or not? If implemented,
- a) What are the activities/interventions being undertaken for SCs and STs which are being funded through SCSP and TSP?
  - b) What are the irrigation structures being constructed by the government under SCA to TSP/SCA to SCSP?
  - c) Are the farmers being provided any subsidy/incentive for irrigation under SCA to TSP/SCA to SCSP?



- d) Does Krishi Vikas Kendra (KVK) implement Hands-on training/workshops/awareness programmes? If yes, what are the skill development and other irrigation-related trainings being conducted by KVKs under SCA to TSP/SCA to SCSP?
- e) What type of Multi-sector Support and Advisory services are being provided by KVKs to farmers under SCA to TSP/SCA to SCSP?
- f) Is there any other Agriculture Research Organization apart from KVK conducting trainings under SCA to TSP/SCA to SCSP?
- g) What are the steps taken to monitor the SCA to TSP/SCA to SCSP activities at the State level?
- h) How do you measure the impact under SCA to TSP/SCA to SCSP?
- i) What are the issues in the CSS? (Probe for top 5 issues)
- j) Please share recommendations to improve the impact of SCA to TSP/SCA to SCSP?

#### **Deployment of IT enabled mechanisms for monitoring of the Schemes**

Q1 - Is geotagging and use of geotagged photographs being done at your state? Please provide some evidences?

Q2- Are you facing any issues in fully utilizing the potential of this portal?

#### **How is technology being used for on-ground data collection?**

Q1 - Is your state collecting and uploading the data of Bhuvan-Shrishti portal app in coordination with the NRSC, Hyderabad?

Q2 - Do you face any challenges in that? If yes, what are the challenges?

Q3- What is the benefit of using Bhavan-Shrishti portal in monitoring the scheme performance?

Q4- What additional features are required in the portal?

#### **Use of IT/Technology in driving Efficiency-Use of latest technology to improve efficiency and effectiveness of scheme implementation**

Q1 - What are the technologies being used in project implementation, service delivery? Provide details.

#### **Any Best Practices**

Q1 - Any best practices/ innovative initiatives that your state has taken in technological intervention to improve the process



### **Technology to address key challenges**

Q1 - What technologies are available to address key challenges facing the scheme? Are there constraints in their adoption?

### **Development, dissemination & adoption of innovative practices, technology & know-how-Fund allocation towards promotion of innovation**

Q1 - What are the different innovative practices and technology and knowhow that is disseminated to the beneficiary under the project with respect to new crops, better cultivation practices or water use technologies??

Q2 -What percent of total allocation is directed towards development, dissemination and adoption of innovative practices and technology? How much of it is utilized?

### **Contribution of improved practices in increasing outcomes**

Q1 - What is the impact of such innovative technologies and practices on scheme outcomes?

### **Any Best Practice or innovation**

Q1 - Any best practices in this aspect with respect to new crops, better cultivation practices or water use technologies?

### **Stakeholder and Beneficiary behavioural Change - Fund Allocation**

Q1. What percent of total allocation is directed towards Awareness generation or sensitization? What is the utilization rate?

Q2. How much impact has it been able to generate in terms of behaviour change?

### **Challenges faced**

Q1 - What are the major challenges? Are there any areas which need more attention in terms of bringing behaviour change?

### **Any Best Practices**

Q1 - Any best practices in this aspect

### **Cropping pattern**

Q1 - What are the key constraints in crop planning based on local water availability with a view to reduce water intensive crops?

Q2. Has there been training with respect to adoption of traditional cropping pattern?



## **Research & Development**

Q1 - Is there any percentage of total allocation is directed towards R&D?

Is yes, what percentage? How much of that percent is being utilized?

Q2. In what activities is the fund on R&D being utilized?

## **Institutes and departments dedicated for R&D**

Q1. What is status of availability of any Institute or centre or department dedicated for R&D in the Sector?

## **Q1. Private Sector participation in R & D**

Q1. What is the percentage of private sector participation in R&D?

## **Challenges in undertaking R&D efforts**

Q1. What are the gaps? Are there any under-researched areas?

## **Any Best Practices**

What are some innovations or practices under R&D carried out by State or District?

## **Unlocking Synergies with other Government Program-Convergence (Inter-Ministerial/Inter-Departmental/Financial/Human Resource/Administrative/Institutional/Schemes)**

Q1 - What activities are undertaken to ensure convergence at community level? Are there any Action Plans prepared at State level to ensure the same?

## **Challenges hindering effective convergence**

Q1 - What are the challenges hindering effective convergence?

## **Any best practices of the same**

Q1 - Any best practices in terms of creating synergy with other schemes (like- MGNREGA.)

## **Potential areas for synergy**

Q1 - What are the areas for potential convergence / synergy across govt. programs?

Reforms, Regulations-Adoption of models acts and reforms at governance, institutional and administrative level



Q1 - What measures are being taken to ensure effective implementation and compliance of adopted acts/rule/regulations? (like in areas of safety, accountability, transparency etc.)

#### **Any best practice**

Q1 - Any best practices with respect to reforms, regulations

#### **Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme**

Q1 - Is there any private investment in your state for this program? If yes, please share some information. If no, are you expecting any?

#### **Public-Private Partnership**

Q1 - Is there any PPP model prevalent in this area? If yes, how well has that functioned and what are the challenges? If no, can it be profitable/ help to realize the scheme outcomes at a lower cost?

#### **FPOs/SHGs/Cooperative's Participation**

Q1 - How many private sector, community/collectives/cooperatives and civil society have availed the benefits under any Scheme?

Q2. What has been the impact of Farmer cooperatives, SHGs, FPOs, Water use associations on scheme outcomes? Please elaborate.

#### **Any best practice**

Q1 - Any best practices with respect to participation of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme

### **SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design and implementation point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?



<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

9.1.3 State level stakeholder – Senior Scientist, State Ground Water Board or his nominee

**GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

**INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:



- Sir/Madam, I am ....., working with Ipsos, a global research organization in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **Watershed Development Component (WDC)**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

#### **RESEARCHER TO NOTE:**

97. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.

98. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.

Q1. Could you please give an overview of WDC scheme in terms of its objectives? Please elaborate upon the activities under taken by your department in the WDC project area?

Q2. What is the methodology used to monitor the groundwater table in the intervention watershed?



Q3. Has there been an increase in the conjunctive use of groundwater and surface water on account of WDC scheme? Has this reduced pressure on groundwater?

Q4. What has been the impact of WDC scheme on the ground water table in your State? Could you please share data and evidence?

Q4. Has the increase, if any, in the surface water flows due to scheme intervention lead to any reduction in the dependence on groundwater?

Q5. Is adequate training given to the beneficiary farmers on water saving technologies such as drip irrigation? If yes, please elaborate. If no, could you please suggest some improvements.

#### **Sustainability-Unregulated extraction of groundwater**

Q6. Given the improvement in groundwater levels, if any, in the watershed, has there been an unregulated extraction of ground water in response (e.g. shifting to water intensive cropping)? What measures have been taken to mitigate such issues?

Q7. Is there any regulation prohibiting / restricting drilling of new borewells or regulating groundwater extraction in the project area? If yes, please share a copy of such regulations / law.

Q8. Please comment on the convergence issue between your department and SLNA/DoLR for better implementation of WDC project? How can the convergence be improved?

#### **Quality-Quality related issues for groundwater**

Q9. Has there been any improvement in the quality of groundwater after implementation of WDC project. If yes, i) what are the key reasons for such quality improvement? ii) are the beneficiaries aware of such quality improvement and is there any awareness campaign that you take up in this regard?

#### **Sustainable practices**

Q10. Is sustainable cropping pattern, local climate resilient crops, water saving technologies and crops promoted under the scheme? Please elaborate on each of them.

#### **Awareness and capacity building**

Q11. Are there any training sessions held regularly for climate resilient cropping pattern and water saving technologies?



Q12. Can you highlight any best practice in the form of a case study?

Q13 - What are the different innovative practices and technology and knowhow that is disseminated to the beneficiary under the project with respect to new crops, better cultivation practices or water use technologies??

#### **Any Best Practice or innovation**

Q14 - Any best practices in WDC project area with respect to new crops, better cultivation practices or water use technologies?

#### **Cropping pattern**

Q15 - What are the key constraints in crop planning based on local water availability with a view to reduce water intensive crops?

Q16. Has there been training with respect to adoption of traditional cropping pattern?

#### **Research & Development**

Q17 - Is there any percentage of total allocation is directed towards R&D in agriculture practices in rainfed areas?

Is yes, what percentage? How much of that percent is being utilized?

Q18. In what activities is the fund on R&D being utilized?

Q19. What is status of availability of any Institute or centre or department dedicated for R&D in the Sector?

#### **Sustainability - Unregulated extraction of groundwater**

Q20. Has there been an unregulated extraction of ground water in the watershed area? Have any measures have been taken to control the same?

Q21. Has there been a shift towards groundwater extraction post scheme intervention owing to groundwater recharge?



## **Climate change & sustainability including adoption of climate-change resilient practices &**

### **Diversification -**

#### **Climate resilience**

Q22. Are there appropriate climate resilient policies/interventions/capacity building measures for mitigation and/or adaptation (or included as part of scheme objectives and design)?

Q23. Please identify key climate change adaptation knowhow disseminated under the scheme?

Q24. Please share suggestions to modify the scheme to adequately address the challenges of climate change in rainfed areas.

Q25. Is sustainable cropping pattern, local climate resilient crops, water saving technologies and crops promoted under the scheme? Please elaborate on each of them.

#### **Awareness and capacity building**

Q26. Are there any training sessions held regularly for climate resilient cropping pattern and water saving technologies?

#### **Any Best Practices**

Q27. Can you highlight any best practice in the form of a case study?

#### **Climate impact**

Q28. What are the main impacts of climate change on the sector and scheme beneficiaries?

Q29. How has the scheme helped the scheme beneficiaries become more resilient?

### **CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in WDC scheme from your perspective?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?



<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

### **THANK AND END**

#### 9.1.4 State level stakeholder – Director, State Agriculture Department or his nominee

##### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

##### **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organization in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water



Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **Watershed Development Component (WDC)**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from national, district and block level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

#### **RESEARCHER TO NOTE:**

*99. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*

*100. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.*

Q1. Could you please give an overview of WDC scheme in terms of its objectives?

#### **Sustainable practices**

Q1. Please elaborate in detail upon the activities under taken by your department in the WDC project area?

Q2. Please explain in detail the extension services provided by your department in rainfed areas?



Q2. Please comment on convergence between your department and SLNA/DoLR for better implementation of the WDC project? How can the convergence be improved?

Q3. Is sustainable cropping pattern, local climate resilient crops, water saving technologies and crops promoted under the scheme? Please elaborate on each of them.

### **Awareness and capacity building**

Q4. Are there any training sessions held regularly for climate resilient cropping pattern and water saving technologies under the WDC project?

Q5. Can you highlight any best practice in the form of a case study?

Q6 - What are the different innovative practices and technology and knowhow that are disseminated to the beneficiary under the project with respect to new crops, better cultivation practices or water use technologies??

Q7- Any best practices in WDC project area with respect to new crops, better cultivation practices or water use technologies?

### **Cropping pattern**

Q8 - What are the key constraints in crop planning based on local water availability with a view to reduce water intensive crops?

Q9. Has there been training by a) your department b) PIA (WDC) with respect to adoption of traditional cropping pattern?

### **Research & Development**

Q10 - Is there any percentage of total allocation is directed towards R&D in agriculture practices in rainfed areas?

Is yes, what percentage? How much of that percent is being utilized?

Q11. In what activities is the fund on R&D being utilized?

Q12. What is status of availability of any Institute or centre or department dedicated for R&D in the Sector?



### **Sustainability - Unregulated extraction of groundwater**

Q13. Has there been an unregulated extraction of ground water in the watershed area? Have any measures have been taken to control the same?

Q14 Is there any regulation prohibiting / restricting drilling of new borewells or regulating groundwater extraction in the project area? If yes, please share a copy of such regulations / law.

Q15. Has there been a shift towards groundwater extraction post scheme intervention owing to groundwater recharge?

Q16. Has there been an increase in the conjunctive use of groundwater and surface water? If so what measures have been taken in for the same?

Q17. Has the increase, if any, in the surface water flows due to scheme intervention lead to any reduction in the dependence on groundwater?

Q18. Has there been an increase in the conjunctive use of groundwater and surface water on account of WDC scheme? If so what measures have been taken in for the same?

Q19. Has the increase, if any, in the surface water flows due to scheme intervention lead to any reduction in the dependence on groundwater?

Q20. Is adequate training given to the beneficiary farmers on water saving technologies such as drip irrigation? If yes, please elaborate.

### **Sustainability-Unregulated extraction of groundwater**

Q21. Given the improvement in groundwater levels, if any, in the watershed, has there been an unregulated extraction of ground water in response (e.g. shifting to water intensive cropping)? What measures have been taken to mitigate such issues?

Q22. Is there any regulation prohibiting / restricting drilling of new borewells or regulating groundwater extraction in the project area? If yes, please share a copy of such regulations / law.

Q23. What is the methodology used to monitor the groundwater table in the intervention watershed?



### **Quality-Quality related issues for groundwater**

Q24. Has there been any improvement in the quality of groundwater after implementation of WDC project. If yes, i) what are the key reasons for such quality improvement? ii) are the beneficiaries aware of such quality improvement and is there any awareness campaign that you take up in this regard?

### **Direct/Indirect Employment Generation-Employment generation**

Q25 - To what extent income level has increased due to this scheme during 2015-2019?

Q26. What has been the impact on crop productivity? a) winter crop yield, b) summer crop yield?

Q27. Has there been any change in cropping intensity?

Q28. What has been the change in cropping intensity on rainfed plots?

Q29. Has there been a shift towards crop Diversification? In what ways?

Q30. Have there been any changes in Livestock yield? By how much?

Q31. Has there been any change in cropping pattern from mono-cropping to double cropping?

Q32. Have there been introduction of suitable crops, improved crop varieties, inter-cropping, contour cultivation and crop management practices?

Q33. What have been changes in household income and by how much? Capture the source

Q34. Has there been reduction in farmer debts and dependence on moneylenders (including qualitative changes and record case study)

Q35. Has there been a move towards other production activities such as; by how much?

a) Sericulture

b) Horticulture

c) Livestock development fodder cultivation,

d) Milch cattle distribution

e) Establishment of milk co-operatives

f) Integration of other activities such as sheep rearing, fisheries, piggery, poultry, beekeeping etc.



## **Climate change & sustainability including adoption of climate-change resilient practices &**

### **Diversification -**

#### **Climate resilience**

Q36. Are there appropriate climate resilient policies/interventions/capacity building measures for mitigation and/or adaptation (or included as part of scheme objectives and design)?

Q37. Please identify key climate change adaptation knowhow disseminated under the scheme?

Q38. Please share suggestions to modify the scheme to adequately address the challenges of climate change in rainfed areas.

Q39. Is sustainable cropping pattern, local climate resilient crops, water saving technologies and crops promoted under the scheme? Please elaborate on each of them.

#### **Awareness and capacity building**

Q40. Are there any training sessions held regularly for climate resilient cropping pattern and water saving technologies?

#### **Any Best Practices**

Q41. Can you highlight any best practice in the form of a case study?

#### **Climate impact**

Q42. What are the main impacts of climate change on the sector and scheme beneficiaries?

Q43. How has the scheme helped the scheme beneficiaries become more resilient?

### **CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in WDC scheme from your perspective?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?



<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

**9.1.5 Village level stakeholder – Chairman, Project Implementing Agency**

**GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

**INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organization in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO),



NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **Watershed Development Component (WDC)**. Since you are a key stakeholder in the scheme implementation at the village level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from national, state, district and level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

#### **RESEARCHER TO NOTE:**

101. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*

102. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.*

#### **SECTION 1: DEEP DIVE INTO WDC SCHEME USING REESIE FRAMEWORK:**

##### **EFFECTIVENESS**

ET1: Is the scheme design appropriate to address scheme objectives?

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1. Could you please provide an overview of this scheme in terms of its objectives?



Q2. Specify the key inputs, activities, outputs, outcomes and impacts from the scheme - was there any change in any of these - especially 'outcomes and impacts' achieved vis-à-vis what was planned?

Q3. What are the unintended outcomes? Identify both good and bad outcomes.

Q4. Are there any measures being taken to mitigate unintended outcomes which are negative? Have these plans yielded desired results? Please explain with supporting evidence.

Q5. What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q5. What are the gaps / weakness in the scheme design?

Q6. How should the scheme design be modified to make it more effective?

Q7. Have any steps been taken to impart livelihood skills associated with the WDC projects created (say, through Kaushal Vikas Centres as per recommendation of Parliamentary Standing Committee)? If yes, please share details.

**DPR preparation**

Q1. Please describe the process followed for preparation of DPR and all the stakeholders involved along with their inputs in preparation of DPRs?

Q3. Did you face any challenge in the preparation of DPRs? Please explain in detail.

Q4. Which agencies was hired to develop the DPRs? Do you feel the agencies had adequate competence and experience in preparing DPRs for watershed project? Please substantiate with evidence / reasons.

Q5. What additional support, resources or measures are necessary in order to improve the DPR quality and reduce the time required for preparation of the same?

Q6. Some of the recent evaluation reports on WDC have identified instances of project components (e.g. piggery unit, handicraft, pisciculture, horticulture plantation, rubber plantation, fruit processing) for which there was no interest from villagers / farmers to take up such activities? What are the reasons for such disconnect? What can improvement measures should be taken in this regard?

ET3: How has the scheme performed against scheme objectives and annual targets?

**What is the year wise scheme targets, if any, for the period 2015-16 onwards?**



Q1. What are the key reasons for delays in project completion (as pointed out by Parliamentary Standing Committee (PSC))? What remedial measures are required in this regard?

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q9. What are the key bottlenecks, issues & challenges in the implementation of the scheme?

**What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable.**

Q11. What is the planning process proposed under the scheme?

Q12. Is the planning process adequately and effectively followed?

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q16. What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?

**How has the scheme performed in respect of participatory irrigation management?**

Q17. How can the scheme be made more participatory with respect to beneficiaries? What are the key measures required in this area and what are the challenges in implementing them?

ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1. Is the fund flow (of the scheme execution org) adequate and released in the timely manner? If not, please discuss the issues and the underlying reasons?

Q2. What are positive and negative financial aspects that have impacted scheme performance? Please explain with supporting evidence.

**Delays in execution of works**

Q8. Please explain in detail the reasons for the delay in completion of projects

Q9. What measures can be taken to reduce such delays? Please explain in detail and with supporting evidence.



## EFFICIENCY

Q1. Identify all the project costs incurred in the villages which will be covered as part of our survey.



Benefit Cost  
Analysis.xlsx

Please fill in the attached template.

## Overall nature and responsiveness of Water sector planning - Greater coordination between the various central government level organizations and the state government departments

Q1. Is there any institutional mechanism in place to ensure convergence with other central and state government programs / departments?

Q2. In what areas have convergence been achieved? Please provide example of each type of convergence.

Q3. Which other govt Schemes can be leveraged for better implementation for WDC?

Q4. Are funds from MGNERGA being utilized in WDC? If yes, for what activities?

## SUSTAINABILITY

SS3: Is the scheme financially sustainable? How can financial sustainability be improved?

### Is the scheme financially and institutionally sustainable? How can sustainability be improved?

Q1. What is the typically the number and quality of human resources available for O&M phase for a WDC project?

Q2 - Is the adequate human resource available during the O&M phase? If no, please elaborate on the challenges faced?

Q3. What is the mechanism to constitute and utilize Watershed Development Fund (WDF)?

Q4 - How much funds have been spent on O&M project-wise since 2015-16?

Q5 - Are adequate funds available during O&M phase of the scheme

Q6. Is there any other (say, from another scheme) source of alternate funding for O&M?

Q7. What type of user associations have been formed under the scheme? Please list them and show supporting evidence for association formation (e.g. memorandum) and active functioning (e.g. minutes of meeting)?

## Gaps in broad sectoral outcomes - Capacity building of the organizations/utilities creating and managing Water Resources infrastructure and providing service



Q8. What training was imparted by Project Implementing Agency in respect of WDC projects? Please provide details of such trainings conducted (e.g. date, topics covered, number and type of recipient of such trainings).

Q9. Was the coverage, quality and number of training sessions adequate? If no, how can it be improved?

### **Sustainability – O&M phase**

Q10. What are the institutional and other measures in places for completed projects to ensure that benefits from the project are sustainable in the long term? Please show evidence of such measures (e.g. through minutes of meetings, action taken reports, registers, etc.)

Q11. What are key issues and challenges that come up during the O&M phase of projects?

Q12. What remedial measures may be taken up?

### **Sustainability - Unregulated extraction of groundwater**

Q13. Has there been an unregulated extraction of ground water in the watershed area? Have any measures have been taken to control the same?

Q14. Is there any regulation prohibiting / restricting drilling of new borewells or regulating groundwater extraction in the project area? If yes, please share a copy of such regulations / law.

Q15. Has there been a shift towards groundwater extraction post scheme intervention owing to groundwater recharge?

Q16. Has there been an increase in the conjunctive use of groundwater and surface water? If so what measures have been taken in for the same?

Q17. Has the increase, if any, in the surface water flows due to scheme intervention lead to any reduction in the dependence on groundwater?

SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1- Over the past [few] years, what have been the reasons for poor performance or failure of project in respect of the following aspects [Mention top 3 reasons per aspect]:

- a. institutional
- b. financial
- c. technical,
- d. socio-economic,



- e. political
- f. environmental

Q3- Who is responsible for project O&M?

Q4. What training and resources are provided to those responsible for O&M?

Q5. Has the O&M mechanisms been effective in ensuring continued benefits from the scheme? If no, what remedial measures are necessary? Please provide data / evidence in support of your answers.

Q6. Are there any changes necessary in scheme design and implementation to improve the likelihood of sustaining project outcomes over the long-term, especially in terms of finance and human labour for O&M?

### **Gaps in broad sectoral outcomes - Lack of focus on efficient groundwater management and technologies**

Q7. Is adequate training given to the beneficiary farmers on water saving technologies such as drip irrigation? If yes, please elaborate and share evidence (e.g. details of training conducted).

### **EQUITY**

EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?

### **Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. Have marginalized and weaker section of the society benefitted from the scheme? If yes, please explain in what way and share evidence in support of your answer.

Q2. Are there any challenges in administering the provisions of scheme guidelines on the field in respect of vulnerable, marginalized, disadvantaged or weaker sections of society (e.g. SC, ST, women, landless labourers, etc.)? If yes, please explain in detail.

EQ2: Is any weaker section of society excluded /accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?

### **Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**



- Q1. What is the process of selection of scheme beneficiaries? Is there a special weight age to the marginalized?
- Q2. Is there a fair representation of marginalized in the village Watershed Committee (WC)? If yes, please mention which marginalized sections are represented in the WC.
- Q3. What are the various ways inclusiveness is ensured at different levels?
- Q4. Is there parity in benefits accruing to marginalized vis-à-vis other groups in the village? If no, in what ways?
- Q5. Has the scheme contributed in economic development and improving the socio-economic condition of the resource poor and disadvantaged sections inhabiting the program areas? If yes, please share supporting evidence in this regard.

## **Relevance**

### **What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

- Q1. What are the remaining areas of interventional gaps in rainfed areas (i.e. apart from those addressed by WDC in rainfed areas) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?
- Q2. From among the areas of interventional gaps identified above, please rank them in the order of importance? Please explain with reasons?
- Q3. Should the scheme be modified to address any or some of the interventional gaps? If yes, please explain in detail.

### **What would be the impact if the scheme were to be scaled down or stopped?**

- Q1. Are there certain aspects of the scheme that needs to be scaled down or stopped? Please explain with reasons.

## **IMPACT**

### **Quality-Quality related issues for groundwater**

- Q1. Have any physical, financial and social audit of the projects been undertaken? Please share copies of the same.
- Q2. Please describe the key findings from such audits, if any?

## **SECTION 2: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from your perspective?



- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



## 9.2 Discussion guide for FGD

### 9.2.1 FGD: Two groups with members as defined below:

- Group 1
  - Self Help Group, WDC
  - Cattle owner association / cattle owner
  - Watershed members' association
  - Farmer producers organisation
- Group 2
  - Landless persons who are given user rights over assets created on common property resources (CPRs)
  - Women beneficiaries
  - SC / ST beneficiaries

#### GENERAL GUIDELINES for FGDs:

- The topics and questions below should be used to guide the Focus Group Discussion. Please keep in mind, while conducting the FGDs, do respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- During FGDs, group dynamics are common so it must be ensured that every respondent gets a chance to speak, one person should not be allowed to dominate the discussion. Also, be aware of any power dynamics that may be at play. Please ensure that all respondents speak one by one so that the audio recording is clear.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- **Seek more detail or explanation of a response.** For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- **Explore the reasons** behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- **Seek clarity and check for inconsistencies.** For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### INTRODUCTION: SELF



Thank you for giving us your valuable time.

- Explain the purpose of the FGD:
- I am ....., working with Ipsos, a global research organization. We regularly carry out research on various social issues. Currently we are implementing a study on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog along with KPMG a consultancy firm.
- The current study is an evaluation of Centrally Sponsored Schemes in the Water Resources sector in various states including yours. We would like to seek your opinion on certain topics related to the scheme **Watershed Development Component (WDC)**. One aspect of the evaluation is to meet the beneficiaries of these schemes to understand the benefits received, how the benefits have impacted different aspects of their life- social, economic, and any other. Your views are beneficial to assess the experiences, challenges if any associated with this project. Discussion with your group as well as others will also help us identify recommendations and suggestions to improve the next phase of implementation of similar projects.
- Inform the respondents of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged that will lead to identification of individual responses that they give during this discussion.
- Explain that there are no right/ wrong answers and obtaining opinion and perception and their individual experience is critical.

- |  |
|--|
| <ul style="list-style-type: none"><li>• <b>NOTE TO THE TEAM:</b></li><li>• AT THE VILLAGE LEVEL, RESEARCHER NEEDS TO FIRST MEET THE SARPANCH OF THE VILLAGE</li><li>• NO BENEFICIARIES ARE TO BE MET FOR ANY SCHEME/ PROJECT RELATED INTERVIEW/FGD BEFORE MEETING THE SARPANCH</li></ul> |
|--|

**RESEARCHER TO NOTE:**

1. *All the questions inside boxes font are only for reference of the researcher to gauge if the larger question has been answered. These questions are not to be asked directly to the respondents.*



2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, RESEARCHER should add additional probes to help answer those questions.*

**Warm up:**

1. Can you give me some information about the village how many households live here, which is the nearest town, mode of transport etc.
2. What are the different occupations that people are engaged in? What percentage of the households are involved in agriculture/ agriculture related activities?
3. Do you all own your own land or you work on others' land? How many members of your family are currently involved in agriculture related work? What crops do you grow?
4. What are some of the most common problems that farmers in your village face? Note to RESEARCHERS- DO NOT DWELL EXTENSIVELEY ON PROBLEMS HERE, THIS IS JUST TO UNDERSTAND INFRASTRUCTURE, WATER/ IRRIGATION, AND MARKET ACCESS RELATED ISSUES IF THEY ARE ON TOP OF MIND.

**Awareness about different schemes and projects implemented in their village**

1. What are the different irrigation and/or agriculture related projects that have been implemented in your village in last five years?
2. Can you please elaborate on these projects in terms of how they have benefitted you/ others in the village and/ or how do they address the common issues that you face?
3. What are the type of works undertaken? According to you, which ones are working well for the village and you? Why do you say so? (Note to researcher: To get a brief understanding here and not get into details at this stage)

**SECTION 1: DEEP DIVE INTO WDC SCHEME USING REESIE FRAMEWORK:**

**RELEVANCE**

RL1: Is the scheme relevant in the present context?

**Provide details of the relevant sectoral challenge, beneficiary need, national priority, SDG that pertain to the area in which the scheme is operating?**

**We would like to ask you questions specifically about one particular project/ government scheme – Watershed Development component which is a part of PMKSY - Pradhan Mantri Krishi Sinchai Yojana**

Q1. Have you heard about this yojana? What do you know about it?

Q2. In your view, what is the purpose of this scheme? What are your views about it? Could you help us understand how is it helping you in agriculture? Could you please explain by using some examples?



## EFFECTIVENESS

ET3: How has the scheme performed against scheme objectives and annual targets?

### **What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. Who are the project implementation partners? Are you aware of them? If yes, have you been in any kind of interaction with them? How often do you interact with them and what has been your experience in this? Could you please give examples?

Q2. As beneficiaries, are you satisfied with the Project Implementation Agencies (PIA) with respect to planning and execution? If NO, please explain what needs to be improved?

### **What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable.**

Q1. We would like to understand the planning process in some details from you...In this project, how was planning done? How was it during the preparatory phase (years 1 and 2 of the project)? Who all were involved in the planning? How much time did it take?

Q2. Were you consulted in the planning process and for what purpose? If yes, do you think there were activities that were proposed and taken up as part of WDC project for which there were less interest among farmers / villagers (e.g. piggery unit, handicraft, pisciculture, horticulture plantation, rubber plantation, fruit processing)? If yes, do you have any suggestions on what other activities could be taken up in place of these?

Q3. Is there a scope to improve the planning process? If yes, in what ways?

## EFFICIENCY

EC1: Did the benefits of the scheme exceed costs?

### **What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. Please identify all the benefits that have been accrued from the project. (Try to get a consensus from the group beneficiaries in group one)



Benefit Cost  
Analysis.xlsx

Please refer to the excel template and fill out the benefits part of the template.



## **IMPACT**

### **Sustainability-Unregulated extraction of groundwater**

Q1. What kinds of crops were grown here traditionally, i.e. prior to implementation of WDC project?

Q1b. Has the cropping pattern changed post project implementation? Briefly explain how and why?

### **Water Security - Agriculture Sector Contribution**

Q2. Is the water availability during the year improved after the scheme interventions?

Q3. Has there been an improvement in forest cover, natural vegetation in the village after the scheme interventions?

What has been the change in production in revenue from forest lands (actual quantities)? (To probe if it is more, same or less than pre-project phase)

Q4. Has there been an increase in area under cultivation or number of crops cultivated per year after the scheme intervention? How?

Q5. Has there been a reduction in soil erosion? If yes, could you please explain it more with some examples?

Q6. Has the soil fertility improved? If yes, could you please explain it more with some examples?

Has there been a reduction of drought vulnerability in the watershed?

### **Quality - Quality related issues for groundwater**

Q7. Is the quality of surface water suitable for drinking for a) Humans b) Livestock.

Q8. Has there been any change in the quality of surface and groundwater before and after the project implementation, if yes, please explain how (e.g. reduction in incidence of diarrhea and related diseases)?

Q9. Do you think the improved groundwater levels have also helped in improving drinking water quality in the village?

### **Gaps in broad sectoral outcomes - Capacity building of the organizations/utilities creating and managing Water Resources infrastructure and providing service**

Q10. Was adequate training and capacity building was done at the village level to carry out repair and maintenance post scheme implementation? If no, please explain what challenges are faced during operations and management (O&M).

Q11. What has been the increase in the land for the following purposes as a result of this scheme/project? If yes, researcher to explore the situation before the scheme/project and after

- a. Cultivation
- b. Horticulture



### **Water Security - Effect of water stress on households- Health Impact**

Q12. [ask women members in the group] - Has the scheme intervention lead to better quality and adequate water availability at the household level?

Q13. [ask women members in the group] - Has there been any reduction in time spent on collecting water for household purposes?

Has there been a reduction in the drudgery owing to better availability of fodder and fuelwood?

Q14. What have been the perceived effects of the project on the household?

- a. perceived change in living standard (better, same, worse)
- b. change in housing quality
- c. change in percentage of families migrating
- d. perceived changes in real wage and availability of casual employment opportunities (To probe if it is higher, same, lower).

Q15. Has there been any kind of employment generation as a result of this scheme/project? If yes, on an average, what has been the increase in man-days?

- a. Creating more employment through land-based and productive activities.
- b. Raising backyard nurseries.
- c. Wage earning through community assets creation such as community buildings, village roads etc.
- d. Cottage industries based on bamboo, woodcraft, cane craft etc. by using natural resources generated on the farm and CPRs.

### **SUSTAINABILITY**

SS3: Is the scheme financially sustainable? How can financial sustainability be improved?

#### **Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. What assets have been created as part of the scheme?

Q2. Are the assets created under the scheme maintained well? If not, what are the issues?

Q3 What activities have been undertaken on common property that has benefited you directly? In what ways?

#### **Overall nature and responsiveness of Water sector planning - Water for environmental needs**

Q1. Is enough water available for natural vegetation, wild animals and birds in the village?



Q2. Has the increased water availability led to greening of the village landscape and common pasture lands?

## **EQUITY**

EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

[ask to all members]

Q1. Who does the members of Watershed Development Team comprise? (note if it comprises SC / ST, women or landless members)

Q2. What is the process of selection of scheme beneficiaries?

Q3. Were you the part of Watershed development team (WDT)? Were you involved in the planning of various activities under the scheme?

[ask the following 2 questions to SC / ST / women and landless members of the group only]

Q4. Is any special weightage given to the marginalized sections of society while selecting scheme beneficiaries?

Q5. Do you experience any barriers in accessing benefits under the scheme? If yes, in what ways?

EQ2: Is any weaker section of society excluded /accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

[ask to all members]

Q1. Do you think inclusiveness is ensured at different levels when it comes to getting the scheme benefits? Could you explain with some examples? If yes, how is it ensured?

[ask the following question to SC / ST / women and landless members of the group only]

Q2. Is there parity in benefits accruing to you (i.e. marginalized) vis-à-vis other groups in the village? If not, in what ways?



ET1: Is the scheme design appropriate to address scheme objectives?

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1. Is there a need to modify the scheme to make it more effective? If yes, please suggest measures.

## **RELEVANCE**

Q3. Please discuss and rate (on a scale of 1-10, 1 being worst and 10 being best) on how successful have WDC projects in your village been in each of the following areas:

A. **Developing wastelands/degraded lands** on a watershed basis, keeping in view the capability of land, site conditions and local needs;

B. **Restoring ecological balance** by harnessing, conserving and developing natural resources i.e. land, water, vegetative cover and afforestation;

C. **Employment generation**, poverty alleviation, community empowerment and development of human and other economic resources of the village;

D. **Rise in groundwater table**

E. **Sustainable livelihood generation**

F. **Surface water availability**

*Each member of the group to provide rating separately.*

SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1 - Over the past [few] years, what have been the reasons for poor performance or failure of project in respect of the following aspects [Please mention top 3 reasons per aspect]:



- a. Institutional (includes PIA, Watershed Development Team, BDO)
- b. financial
- c. technical,
- d. socio-economic,
- e. political
- f. environmental

Q2 - In case of a breakdown / dysfunction in the scheme, who is responsible for repair and maintenance?

Has such a mechanism been effective in ensuring continued benefits from the scheme?

Q3. Are the state/district level institutions able to ensure adequate levels of qualified personnel, finance, equipment and other inputs?

Q4. Is adequate training given by the implementation agency to carry forward the OPERATIONS AND MANAGEMENT post completion of projects?

Q5 - Is adequate human resource available for OPERATIONS AND MANAGEMENT adequate?

Q6. What is the mechanism to constitute and utilize Watershed Development Fund (WDF)?

Q7 - Are adequate funds available during OPERATIONS AND MANAGEMENT phase of the scheme [question needs to be asked to: i) the entity responsible for OPERATIONS AND MANAGEMENT, and ii) scheme beneficiaries

Q8. Is there any other (from another scheme) alternate funding source for OPERATIONS AND MANAGEMENT?

Q9. What type of user associations have been formed under the scheme? Please name them.

### **Sustainability - Unregulated extraction of groundwater**

Q10. Has there been a shift towards groundwater extraction post scheme intervention owing to groundwater recharge?

Q11. Has there been an increase in the conjunctive use of groundwater and surface water after scheme intervention? If yes, please explain how such conjunctive use is implemented?

Q12. Has the increase, if any, in the surface water flows due to scheme intervention led to reduction in the use of groundwater?

## **SECTION 2: CROSS SECTIONAL THEMES**

**(To ask only those questions which have not been covered in the previous sections)**

### **Accountability & Transparency-Beneficiary involvement**

Q1. In what all stages are beneficiaries involved during the project lifecycle?

Q2. Is the involvement of beneficiary in the project and after the project adequate? If not, please explain how it can be improved?

Q3. What all activities are undertaken by the beneficiaries post implementation of the project?



### Beneficiary involvement

- Q1. In what all stages are beneficiaries involved in the project lifecycle?
- Q2. Is the involvement of beneficiary in the project and after the project adequate? If not please explain how?
- Q3. What all activities are undertaken by the beneficiaries post implementation of the project?

### Community institutions

- Q1. What are all the community institutions created as part of the project?
- Q2. Are these functioning effectively? If not, could you give reasons for it?
- Q2. Do these community institutions have adequate power and resources to carry out the assigned activities? If no, explain? If yes, please explain the activities carried out by these institutions?

### Direct/Indirect Employment Generation-Employment generation

- Q1 – Has there been an increase in the income of people due to this scheme? To what extent income level has increased due to this scheme during 2015-2019? What have been changes in household income and by how much?
- Q2. What has been the impact on crop productivity? a) winter crop yield, b) summer crop yield?
- Q3. Has there been any change in cropping intensity?
- Q4. What has been the change in cropping intensity on rain fed plots?
- Q5. Has there been a shift towards crop diversification? In what ways?
- Q6. Have there been any changes in Livestock yield? By how much? (eg. Milk production)
- Q7. Has there been any change in cropping pattern from mono-cropping to double cropping?
- Q8. Have there been introduction of suitable crops, improved crop varieties, inter-cropping, contour cultivation and crop management practices? Could you please give some examples?
- Q9.
- Q10. Has there been reduction in farmer debts and dependence on moneylenders? Could you please explain with some examples? (Researcher to deep dive into one or more instances and get the narrative to develop **CASE STUDIES**)
- Q11. Has there been a move towards other production activities? What are they?
- a) Sericulture
  - b) Horticulture
  - c) Livestock development fodder cultivation,
  - d) Milch cattle distribution
  - e) Establishment of milk co-operatives
  - f) Integration of other activities such as sheep rearing, fisheries, piggery, poultry, beekeeping etc.



## **Inclusiveness**

Q1. Has the scheme helped in generation of self-employment for the beneficiaries? If yes in which jobs/business?

Q2 - How the scheme is helpful for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society?

Q3 - Is there any measure taken to improve women empowerment? Please provide some information. Have those measures proven successful, if no, why?

## **Gender Mainstreaming-Inclusiveness in scheme design/planning**

[ask to all. Ensure response from SC / ST, women and landless members of the group]

Q1 - How the scheme is helpful for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society?

## **Gender-friendly infrastructure and policies**

### **women participation (%) in the Sector/Program**

[Ask women beneficiaries in the group]

Q1. Do you face any challenges in participating to this scheme? If yes, what are those?

Q2. Has there been instances of self-employment and entrepreneurship generated through the scheme? If yes, could you please provide such instances?

## **Capacity building**

[ask to women beneficiaries in the group]

Q1 - Have you received any training session or been part of any capacity building activities? What are the topics covered in those sessions?

## **Any Best Practices**

[ask to women beneficiaries in the group]

Q1 - Are there any good practices implemented as part of the WDC project to ensure gender equity/ women empowerment?

## **Decision making by women**

[ask to women beneficiaries in the group]

Q1 - Are you empowered to take important decisions at household, village levels in respect of the scheme? Please share some instances to explain this.

## **Climate change & sustainability including adoption of climate-change resilient practices & diversifications**



Q1. Are there appropriate climate resilient policies for mitigation and/or adaptation (or included as part of scheme objectives and design)?

Q2. Are sustainable cropping pattern, local climate resilient crops, water saving technologies and crops promoted under the scheme? Please elaborate on each of them.

Q3. Are there any training sessions held regularly for reducing pollution, adopting green practices, using local materials etc.?

Q4. Can you highlight any best practice and explain it in details? (Researcher to get detailed response to in order to develop a case study?)

### **Stakeholder and Beneficiary behavioural Change-Mechanisms to promote and ensure behavior change**

Q1 - What activities are undertaken at project level to promote adoption of good practices which lead to behavioural change?

Q2. Has the scheme intervention lead to a negative behavioural change as in case of adoption of water intensive crops

### **Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme-FPOs/SHGs/Cooperative's Participation**

Q1 – Did the private sector, community/collectives/cooperatives and civil society have any role in the project planning, execution or OPERATIONS AND MANAGEMENT? If yes, please describe their respective roles.

Q2. What has been the impact of Farmer cooperatives, SHGs, FPOs, Water use associations on scheme outcomes? Please elaborate.

### **SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from your point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme?



<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>
SHORT TERM
MEDIUM TERM
LONG TERM

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



# Annexure 10 Primary Survey Guide – IC

The primary survey guide for 'Irrigation Census' is provided below.

## 10.1 Discussion Guide for KII

10.1.1 National level stakeholder - Additional Director General (Stat.), MI Stat Wing,  
Department of Water Resources, RD & GR

### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **IRRIGATION CENSUS**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the



national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

#### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH IRRIGATION CENSUS SCHEME**

##### **RESEARCHER TO NOTE:**

3. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
4. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.*

#### **SECTION 1: DEEP DIVE INTO IRRIGATION CENSUS SCHEME USING REESIE FRAMEWORK:**

##### **RELEVANCE**

**RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

**What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**

Q1 - To what extent is data available from the MI Census used for forecasting water usage, distribution and identifying problems for MI Schemes?

Q2 - To what extent, new MI schemes are developed by MI Dept. based on the MI Census data?

**(Validate)**



## EFFECTIVENESS

### ET1: Is the scheme design appropriate to address scheme objectives?

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1 - Apart from policy makers and researchers, who else are the users of the data and the analyses? For what purpose, do they use it? **(Focus)**

Q2 - How has the increased financial allocation for Irrigation Census helped in achieving the sectoral objectives (e.g. access to water, increase in irrigation coverage) through Minor Irrigation sources? **(Focus)**

**Is there evidence that assumptions have been tested and are valid?**

Q1- How are the data collected through Irrigation Census validated and by whom?

Q2 – Have there been any pilot studies conducted in this regard prior to conducting the survey? If yes, please share details. If no, please suggest what kind of studies would be appropriate.

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1 - To what extent the gaps (lessons learnt) will be addressed, by incorporating new methodology and inclusion of new parameters in 7<sup>th</sup> Irrigation Census?

### ET2: How are scheme targets set and monitored?

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1 - Which States have performed well in terms of coverage, timely submission of quality data and reasons for the same (based on field visits and video conferences)? Can you share any evidence in support of your answer? **(Focus)**

**What information is contained in utilization certificate issued by state govt? Are they credible and can they be relied upon as an indicator of scheme progress?**

Q1 - What mechanisms are followed by the MI (Stat) Wing of this Department to verify the physical and financial progress submitted by the States prior to release of 2nd & 3rd Installments?

Q2 - In the event of cost escalation in any sub-component(s), how are they addressed? **(Focus)**

### ET3 How has the scheme performed against scheme objectives and annual targets?



### **What are the year wise scheme targets, if any, for the period 2015-16 onwards?**

Q1 – Do you have any internal targets and / or targets for the state governments in view of timeliness, correctness and completeness of the survey? If yes, please share

Q2 – How is the work flow and progress monitored? **(Focus)**

Q3 - In what ways delays and errors / inconsistencies of surveys are addressed given the constraints of budget and time? **(Focus)**

### **What is the state-wise, year wise performance against target?**

Q1 – Do you track performance against the targets set (internally and / or for state governments)? If yes, can you please share the performance data for 5<sup>th</sup> and 6<sup>th</sup> Irrigation Census?

Q2 – How is the data quality assessed? **(Focus)**

Q3 - Which States have performed well for 6th Irrigation Census? Is there any ranking system in place to highlight the States that have performed well? Is such ranking circulated across all States?

Q4 - What factors are taken into consideration to measure performances of the States with respect to planning, execution and monitoring of Irrigation Census?

### **Identify states that have performed well? What are the underlying reasons for such performance?**

Q1 – Identify states that have performed well? What are the underlying reasons for such performance? **(Validate)**

Q2 - Are there any interim capacity building measures for the States in place that have performed poorly? If so, kindly provide details of the same. **(Focus)**

Q3 - Apart from the planned manpower for Irrigation Census, to what extent local people, CBOs are involved to augment the coverage, data validation etc.? **(Focus)**

### **What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1 - Issues identified pertaining to:

- Identification of enumerators, supervisors, data analysts
- Training of the staff

- Logistical arrangements **(Validate)**

### **What is the planning process proposed under the scheme? Is the planning process adequately and effective followed? If not, what improvements are desirable?**

Q1 - Do the States submit operational plan to Centre? What are the contents of such operational plans?

Q2 - Do the operational plans differ from State to State, if so, reasons for such differences?

Q3 - To what extent other departments / wings are involved in the entire process? **(Focus)**



**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1 – Are there any indicator to assess the performance of the scheme? If so, what are they? **(Focus)**

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1 – Are the performances (viz., timely operations w.r.t conducting survey, managing resources, timeliness, data quality) vis-à-vis the roles of State Statistical Cell officials and Nodal Officers at State level evaluated? **(Focus)**

Q2 – Could you please share details of trainings conducted by type of workforce / personnel

Q3 - To what extent the involvement of external agencies is ensured towards implementation and monitoring of progress?

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1 - How can the scheme design be modified to recognize / replicate the positive factors and enhance performance? Provide success stories. (Validate)

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1 - In what way could the time lag between census survey and publication of the results be reduced?

Q2 – Kindly share a list of new parameters (e.g. discharge measurements at head, mid and tail sections) proposed yet not included in survey schedules.

**How can the scheme design be modified to mitigate the negative factors?**

Q1 – What is the plan to mitigate negative factors that have affected scheme performance?

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1 – What are the criteria for release of funds to the States for:

- i. 1<sup>st</sup> Installment
- ii. 2<sup>nd</sup> Installment
- iii. 3<sup>rd</sup> & final Installment **(Focus)**



Q2 - Procedure for submission of the Utilization Certificates; what are the documents that need to be submitted along with UC **(Validate)**

Q3 - List of issues pertaining to UC submitted by State? **(Focus)**

**Was there timely utilization of available funds? If not, what were the reasons?**

Q1 - What is the average time lag between receipt of UC and release of funds to States? Reasons for the time lag? **(Validate)**

Q2 - What is the average time between release of 1st & 2nd instalments; between 2nd and 3rd instalment? **(Validate)**

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1 - Are there any considerations for engaging PMU for Irrigation Census?

Q2 – Could you please share the list of other departments which have provided active support for planning and execution of Irrigation Census. **(Focus)**

Q3 - What type of technical and managerial support is extended by other such departments? **(Focus)**

**EFFICIENCY**

**EC1 Did the benefits of the scheme exceed costs?**

**What are the costs of the scheme? What is the monetary value of all costs?**

Q1 - What is the total fund released to the States towards 6<sup>th</sup> Irrigation Census? **(Focus)**

Q2 - Is there any gap between fund allotment and fund released? If so, what are the reasons? **(Focus)**

**EC2 Can the costs of the scheme be lowered?**

**Are there lower cost alternatives for achieving the scheme outcomes?**

Q1 - In case, the Irrigation Census is merged with Agriculture Census, is there a possibility of lowering the cost in the 7<sup>th</sup> Irrigation Census?

Q2 - Are there any States which have adopted new / different techniques that has led to savings in cost and/ or turnaround time and improving data quality? **(Focus)**

**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1 - In what way data pertaining to Minor Irrigation from other departments are obtained in time?

Q2 - What are the issues involved in inter-departmental coordination during planning, execution of the survey, data validation, tabulation etc.?



**What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1 - Kindly share the list of departments which work in convergence with Department of Water Resources, GoI towards planning, execution, monitoring and report preparation for Irrigation Census.

Q2 - What is the nature of support / inputs received from private agencies viz., Research Institutes / Private agencies? **(Focus)**

**SUSTAINABILITY**

**SS2: Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1 - For the next Irrigation Census, to what extent is the funding expected to be increased?

Q2 – In absence of 100% support by DoWR, RD & GR, GoI towards Irrigation Census, are there any plans to ensure the financial sustainability of the survey? What are they? **(Focus)**

**SS3: Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1 - In what ways coverage of farmers / MI Scheme owners represent all classes and castes of the society? **(Focus)**

Q2 – What is the extent of participation of women in trainings and survey? **(Focus)**

**SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1 - What are the risk factors that are considered during:

- Estimating the Coverage
- conducting surveys
- data tabulation
- data validation / cleaning
- Analysis



- Publishing of results

for Irrigation Census? **(Focus)**

	<b>Technical (Data Quality affecting the Survey)</b>	<b>Lack of Inter &amp; Intra Departmental Coordn.</b>	<b>Delayed &amp; unplanned expenses</b>	<b>Lack of political will</b>	<b>Gap between actual &amp; planned coverage</b>
<b>Estimating the coverage</b>					
<b>Conducting Surveys</b>					
<b>Data Tabulation</b>					
<b>Data Validation / Data cleaning</b>					
<b>Analysis</b>					
<b>Report publishing</b>					
<b>Dissemination of facts</b>					

## RELEVANCE

**RL1: Is the scheme relevant in the present context?**

**Provide details of the relevant sectoral challenge, beneficiary need, national priority, SDG that pertain to the area in which the scheme is operating?**

Q1 – In what ways, the database so developed through Irrigation Census, have helped the DoWR, RD&GR, Govt. of India in identifying major issues pertaining to Minor Irrigation? **(Focus)**

Q2 – Madam / Sir, if you can kindly let us know of the prime issues pertaining to Minor Irrigation as derived through Irrigation Census **(Focus)**

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1 - In what ways, 6th Irrigation Census has been relevant in identifying interventions pertaining to improvement in Ground Water levels and Surface Water schemes? **(Focus)**



**RL2 Is it appropriate to continue / prioritize this scheme?**

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1 – Is the information (or parts thereof) contained in MI or Waterbody Census, collected additionally through any other state or national level surveys? **(Validate)**

Q2 – Is there any information on the coverage of next (i.e. 7<sup>th</sup>) Irrigation Census? Will the coverage and detail increase or remain the same? **(Focus)**

**IMPACT**

**IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1 - How far has the analyses covered issues like out-migration, access to better education, access to better health facilities of the families engaged in farming through Minor Irrigation? **(Focus)**

Q2 – Kindly provide a list of special studies taken up.

**EQUITY**

**EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1 – To what extent the Irrigation Census have helped preparing policy frameworks for Marginal, Small and Semi-medium farmers towards:

- Increased allocation of funds
- Subsidy on power usage for MI Schemes
- Increased access to loans specifically for Minor Irrigation **(Focus)**

**EQ2: Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**



Q1 – Do the survey population (estimated) grossly vary from the actual population covered? If so, how the difference is accounted in light of fund availability, timeliness, manpower etc.?

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability & Transparency - Availability of Data Records and Reports in public domain**

**Addl. Director General, MI Stat Division, Dept. of Water Resources, RD & GR, New Delhi,**

Q1. What are the types of skill required at Centre, State, District, Block level for data collection, data validation, data tabulation and analysis?

Q2. Are the State wise, District wise & Block wise analyses available on websites? **(Focus)**

Q3. In what other ways the data and analyses are made available for easy access to public? **(Focus)**

### **Monitoring Mechanisms**

**Addl. Director General, MI Stat Division, Dept. of Water Resources, RD & GR, New Delhi,**

Q1. Apart from the monitoring mechanisms adopted as deliberated in the guidelines, are there any other means of monitoring specifically adopted by any State? Could you please provide any such instances? **(Focus)**

### **Evaluation Mechanisms**

**Addl. Director General, MI Stat Division, Dept. of Water Resources, RD & GR, New Delhi,**

Q1. Could you please share with us a list of evaluations made for RMIS / Irrigation Census conducted by external agencies or other statutory evaluations by other departments

Q2. What were the major findings of such evaluation studies?

### **Financial Accountability**

**Addl. Director General, MI Stat Division, Dept. of Water Resources, RD & GR, New Delhi,**

Q1. What are the areas of planning, conducting survey works, data validation and tabulation and analyses, where the funding may be increased?

Q2. To what extent, the funding may be increased for better coverage, automated processes and wide publicity of the results? **(Focus)**

### **Any Best Practices**

**Addl. Director General, MI Stat Division, Dept. of Water Resources, RD & GR, New Delhi,**



Q1. Is there any specific example wherein innovative practices or alternative ways other than that prescribed in guidelines has been adopted by a State pertaining to Data Collection, Data Validation, Analyses and dissemination of results? Could you please elaborate? **(Focus)**

### **Gender mainstreaming - Inclusiveness in scheme design/planning**

**Addl. Director General, MI Stat Division, Dept. of Water Resources, RD & GR, New Delhi,**

Q1. Does irrigation census record the role of women in minor irrigation? If no, what parameters can be tracked in this regard? **(Focus)**

Q2. Do the reports / results have special focus on overall utilization and replenishment of water sources for irrigation? **(Focus)**

### **Gender-friendly infrastructure and policies**

**Addl. Director General, MI Stat Division, Dept. of Water Resources, RD & GR, New Delhi,**

Q1. Does irrigation census record the role of women in minor irrigation? If no, what parameters can be tracked in this regard?

Q2. Do the reports / results have special focus on overall utilization and replenishment of water sources for irrigation?

### **Climate change & sustainability including adoption of climate-change resilient practices & diversifications - Climate resilience**

**Addl. Director General, MI Stat Division, Dept. of Water Resources, RD & GR, New Delhi,**

Q1. In what ways the Irrigation Census covers the effect of rainfall, floods, droughts on minor irrigation? **(Focus)**

Q2. Does the department in coordination with other departments suggests policies on minor irrigation schemes considering factors like rainfall and disaster situations? **(Focus)**

### **Sustainable practices**

**Addl. Director General, MI Stat Division, Dept. of Water Resources, RD & GR, New Delhi,**

Q1. To what extent Irrigation Census covers aspects like pollution of ground water and crop productivity? **(Focus)**

### **Climate impact**

**Addl. Director General, MI Stat Division, Dept. of Water Resources, RD & GR, New Delhi,**

Q1. To what extent the Irrigation Census covers effect of flood / drought on minor irrigation? **(Focus)**

### **Use of IT/Technology in driving efficiency - Deployment of IT enabled mechanisms for monitoring of the Schemes**



**Addl. Director General, MI Stat Division, Dept. of Water Resources, RD & GR, New Delhi,**

Q1. What is the extent of use of GIS for MI Sources?

Q2. Could you tell us about the software that are being used for data entry, data validation, tabulation and analyses? Which ones are those?

### **Enquiry Area - Use of latest technology to improve efficiency and effectiveness of scheme implementation**

**Addl. Director General, MI Stat Division, Dept. of Water Resources, RD & GR, New Delhi,**

Q1. Which States have adequately and effectively used IT tools?

Q2. What are reasons that some States have effectively used IT tools while some have not used IT tools to the same scale?

### **Stakeholder and Beneficiary behavioral change - Fund Allocation**

**Addl. Director General, MI Stat Division, Dept. of Water Resources, RD & GR, New Delhi,**

Q1. Of the total fund allocated for Minor Irrigation Census & Census of Water Bodies, what portion is allocated for creating mass awareness about the Census?

Q2. What is the nature of activities outlined for booking expenses under Awareness Generation? (Focus)

### **Cropping pattern**

**Addl. Director General, MI Stat Division, Dept. of Water Resources, RD & GR, New Delhi,**

Q1. Taking the current situation of ground water, do the analyses recommend a suitable cropping pattern? If so, what are the recommendations? (Focus)

### **Research & Development - Fund Allocation**

**Addl. Director General, MI Stat Division, Dept. of Water Resources, RD & GR, New Delhi,**

Q1. Which areas of minor irrigation need to be explored / covered more in the irrigation census? (Focus)

Q2. What proportion of total fund was allocated for R & D in 6th MI Census?

Q3. In which areas is there is need to increase R & D activities? What would be associated cost?

### **Institutes and departments dedicated for R&D**

**Addl. Director General, MI Stat Division, Dept. of Water Resources, RD & GR, New Delhi,**

Q1. Could you please share a list of research institutes that are working in coordination with the department and support in providing inputs?

Q2. Could you please share a list of research institutes which may be additionally considered for inputs / analyses / assistance?



### Unlocking Synergies with other Government Program - Potential areas for synergy

**Addl. Director General, MI Stat Division, Dept. of Water Resources, RD & GR, New Delhi,**

Q1. To what extent, agriculture census and census on Medium and Micro Irrigation Schemes be conducted quinquennially (i.e. every five years) along with Minor Irrigation Census and Census of Water Bodies?

### Conjunctive use of water - Challenges

**Addl. Director General, MI Stat Division, Dept. of Water Resources, RD & GR, New Delhi,**

Q1. Does the MI census aptly cover the conjunctive use of Ground water & Surface water resources?

**(Focus)**

Q2. To what extent the irrigation departments / wings promote the conjunctive use of water resources?

**(Focus)**

### SECTION 3: CHALLENGES AND SUGGESTIONS

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

10.1.2 National level stakeholder - Member Secretary, Central Ground Water Authority,  
Department of Water Resources, RD & GR

**GENERAL GUIDELINES:**



- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **IRRIGATION CENSUS**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHS/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.



- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH IRRIGATION CENSUS SCHEME**

### **RESEARCHER TO NOTE:**

5. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
6. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.*

## **SECTION 1: DEEP DIVE INTO IRRIGATION CENSUS SCHEME USING REESIE FRAMEWORK: RELEVANCE**

### **RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

**What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**

Q1 – How far the MI Census data are used for forecasting water usage, distribution and identifying problems for Ground Water Irrigation Schemes? **(Validate)**

Q2 - To what extent, new schemes, new technologies are developed based on the MI Census data? **(Focus)**

## **EFFECTIVENESS**

### **ET1: Is the scheme design appropriate to address scheme objectives?**

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1 – Based on the data tables as obtained through Irrigation Census, what additional analyses are done by your office? **(Focus)**

Q2 – Apart from above, are external agencies hired for additional researches? If so, can you please briefly tell us nature of analyses being done?

**Is there evidence that assumptions have been tested and are valid?**



Q1 – To what extent, there has been changes in proposals for Ground Water Irrigation as a result of analyses of Irrigation Census results **(Focus)**

Q2 - To what extent, new MI schemes are developed by MI Dept. based on the MI Census data?  
**(Focus)**

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1 – Can you please list out the parameters and indicators pertaining to Ground water irrigation, which are not captured through Irrigation Census?

**ET2: How are scheme targets set and monitored?**

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1 – In what ways the monitoring for Ground Water is done based on the parameters set for Ground Water Irrigation as in Irrigation Census?

**ET3 How has the scheme performed against scheme objectives and annual targets?**

**What is the year wise scheme targets, if any, for the period 2015-16 onwards?**

Q1 – Do Irrigation Census provides estimates / predictions / forecasts pertaining to demand and supply side of ground water? If so, are the plans made on the basis of such estimates / predictions / forecasts?

OR

The CGWB, forecasts / estimate / predict Ground Water availability vis-à-vis usage? If so, can you please share the details of the process?

**What is the state-wise, year wise performance against target?**

Q1 – To what extent, the Minor Irrigation wings of Water Resources Department of the States are communicated of State wise estimates / predictions / forecasts made through Irrigation Census?

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1 – List of monitoring indicators (either referenced from Irrigation Census or framed by CGWB based on Irrigation Census results)



**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1 – Did Irrigation Census results helped in policy decisions particularly fund allocations for each components of Ground Water Irrigation? If so, can you share some details?

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1 - How can the scheme design be modified to recognize / replicate the positive factors and enhance performance? Provide success stories. *(Validate)*

**Sustainability - High dependency on groundwater for irrigation**

Q1. In what ways can the high dependency on ground water be reduced and replaced by lesser dependency on surface water be balanced as an alternative? Why? Please explain with details.

Q2. What are some of the factors that influence increased use of ground water resources for irrigation? How? Please explain. **(Focus)**

## **EFFICIENCY**

**EC2 Can the costs of the scheme be lowered?**

**Are there lower cost alternatives for achieving the scheme outcomes?**

Q1 – Can Irrigation Census be leveraged in way that it also documents low cost alternatives practiced by farmers?

**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1 – In what ways the MI Stat wing coordinates and obtain inputs from CGWB in course of preparing survey schedules, data analyses for ground water irrigation?

## **SUSTAINABILITY**

**4 SS2: Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1 – To what extent, the Irrigation Census be upscaled to achieve better data quality, better coverage and better analyses particularly for Ground Water Irrigation?



**5 SS3: Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1 – Do Irrigation Census captures the environmental aspect of ground water? If so, can you please tell us the relevant parameters so covered?

Q2 - Do Irrigation Census captures the social aspect of farmers using ground water? If so, can you please tell us the relevant parameters so covered?

**SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1 – In what ways, inadequate data, inadequate coverage of Ground Water Irrigation sources (if so), affects planning for Ground Water Irrigation?

**RELEVANCE**

**RL1: Is the scheme relevant in the present context?**

**Provide details of the relevant sectoral challenge, beneficiary need, national priority, SDG that pertain to the area in which the scheme is operating?**

Q1 – What are the major issues for Ground Water Irrigation that are being identified through Irrigation Census? **(Focus)**

**RL2 Is it appropriate to continue / prioritize this scheme?**

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1 – Do CGWB adopts similar survey particularly for Ground Water Irrigation, which will further substantiate findings on GWI? If yes, can you please share the details? If no, are there such plans?

**IMPACT**

**6 IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**



Q 1 – In what ways the Irrigation Census adequately address major issues for ground water irrigation?

## **EQUITY**

EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1 – To what extent the Irrigation Census have helped preparing policy frameworks for marginal, small and semi-medium farmers towards:

- Increased allocation of funds
- Subsidy on power usage for Ground Water Schemes
- Increased access to loans specifically for Minor Irrigation through Ground Water sources **(Focus)**

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability & Transparency - Availability of Data Records and Reports in public domain**

Q1 – How far the data on Ground Water Irrigation are available for use for:

- a. CGWB
- b. Ground Water wing of Water Resources Dept. at State level
- c. Farmers

### **Monitoring Mechanisms**

Q1 – Do CGWB, provides inputs and support during Irrigation Census particularly for GWI? If so, in what ways?

### **Financial Accountability**

Q1. Do you think that, increased allocations to be made towards automation of real time data capturing, data validation, better analyses? If so, can you elucidate in view of Ground Water Irrigation sources?

### **Any Best Practices**

Q1. In what ways some best practices on Ground water usage, replenishment of ground water sources may be captured through Irrigation Census? **(Focus)**



### **Gender mainstreaming - Inclusiveness in scheme design/planning**

Q1. Does Irrigation Census capture the involvement of women in ground water irrigation? **(Focus)**

Q2. In your opinion, do you think that role of women in Ground Water Irrigation may need to be explored more? If so, in what ways the same may be included as part of Irrigation Census?

### **Climate change & sustainability including adoption of climate-change resilient practices & diversifications - Climate resilience**

Q1. Do Irrigation Census cover the effect of rainfall, floods, droughts on ground water irrigation? If so, in what ways? **(Validate)**

Q2. Are Ground Water policies framed keeping factors like varying rainfall, droughts, disasters, other climate change factors? In what ways other departments / wings provide support to CGWB towards climate change?

### **Sustainable practices**

Q1. To what extent, Irrigation Census covers aspects like pollution of ground water and crop productivity? **(Validate)**

### **Use of IT/Technology in driving efficiency - Deployment of IT enabled mechanisms for monitoring of the Schemes**

Q1. What is the extent of use of GIS for Ground Water Sources? Are GIS used for capturing details of Ground water sources? **(Focus)**

Q2. Are there other technologies that are being used by CGWB for capturing the details of Ground Water sources? **(Validate)**

### **Stakeholder and Beneficiary behavioral change - Fund Allocation**

Q1. Considering the fact that, about 94% of Minor Irrigation sources are ground water, do you think mass awareness on appropriate Ground Water usage is of extreme necessity? **(Validate)**

Q2. If so, what are the nature of activities outlined for booking expenses under Awareness Generation?

### **Cropping pattern (Validate)**

Q1. Taking the current situation of ground water, do the analyses recommend a suitable cropping pattern? If so, what are the recommendations? **(Focus)**

### **Institutes and departments dedicated for R&D**

Q1. Can you please share list of Research Institutes which have contributed towards study of ground water sources?

Q2. What are the major findings? Do the findings are in sync with the findings of Irrigation Census?

### **Conjunctive use of water – Challenges**

Q1. Does the MI census cover the conjunctive use of Ground water & Surface water resources?

Q2. In what ways CGWB promotes the conjunctive use of water resources? **(Validate)**



### SECTION 3: CHALLENGES AND SUGGESTIONS

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

### 10.1.3 State level stakeholder – Census Commissioner – State Steering Committee

#### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:



- Can you explain what you mean by....?
- Earlier you said\_\_\_\_\_ but it also seems like\_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **IRRIGATION CENSUS**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHS/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH IRRIGATION CENSUS SCHEME**

### **RESEARCHER TO NOTE:**

7. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*



8. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.

## SECTION 1: DEEP DIVE INTO IRRIGATION CENSUS USING REESIE FRAMEWORK:

### RELEVANCE

#### **RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

**What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**

Q1 - Are analyses / report by GOI adequate enough to design new schemes pertaining to Minor Irrigation in the state? **(Focus)**

### EFFECTIVENESS

#### **ET1: Is the scheme design appropriate to address scheme objectives?**

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1 - Are the analyses and results of Irrigation Census discussed with the concerned departments / wings viz., Minor Irrigation wing of Water Resources Department, Panchayat & Rural Development etc. at State level? **(Focus)**

**Is there evidence that assumptions have been tested and are valid?**

Q1 – Prior to start of Irrigation Census, what are the aspects that are being cross checked to ensure timely completion, full coverage and human resource engagement?

Q2 – Are there alternative plans for exigencies? **(Focus)**

#### **ET2: How are scheme targets set and monitored?**

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1 - What are the challenges / issues with respect to functioning of the State Steering Committee particularly for Irrigation Census? **(Validate)**

Q2 - In what ways additional initiatives like the Mobile App has been effective in monitoring the progress of census activities at District, Block and Village level?



Q3 – In what way the delays / data quality issues at District, Block & Village level are dealt by the State Steering Committee? **(Focus)**

**What information is contained in utilization certificate issued by state govt? Are they credible and can they be relied upon as an indicator of scheme progress?**

Q1 - Do the fund transfer mechanism adopted by Gol affect execution of Irrigation Census utilization? If yes in what way?

Q2 – How are instances of cost escalation during and after Irrigation Census addressed? **(Focus)**

**ET3 How has the scheme performed against scheme objectives and annual targets?**

**What is the year wise scheme targets, if any, for the period 2015-16 onwards?**

Q1 – How is the census related work process monitored at State? How are the issues like delays, shortage of fund, other exigencies are addressed? **(Focus)**

Q2 - In what ways errors / inconsistencies in surveys are managed considering the fact that there are time targets and specified fund? **(Focus)**

**Identify states that have performed well? What are the underlying reasons for such performance?**

**Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q1 – What is nature of expertise and experience that are set as criteria for selection of supervisors, enumerators and analysts at State level?

Q2 - How far were the trainings effective in building the required capacity of the enumerators, supervisors and analysts? **(Validate)**

Q3 - Apart from the planned manpower for Irrigation Census, to what extent local people, CBOs are involved to augment the coverage, data validation etc.?

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1 – What are the Issues pertaining to:

- Identification of enumerators, supervisors, data analysts
- Training of the staff
- Inter & intra departmental Coordination
  - Ensuring proper logistical arrangements viz., availability of sufficient survey schedules, manpower, travel arrangements, other emergent situations **(Focus)**

**What is the planning process proposed under the scheme? Is the planning process adequately and effective followed? If not, what improvements are desirable?**



Q1 - To what extent other departments are involved in the entire process? **(Focus)**

Q2 - In what ways aspects like logistics, communication channels and provision for mitigating exigencies are incorporated in the operational plan? **(Validate)**

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1 - In what way can the role of the Steering Committee be upscaled in light of Irrigation Census?

**(Focus)**

Q2 – If applicable, could you please list factors which can be accounted for

> increased coverage of villages and MI schemes therein

> timely completion of survey works

> immediate addressing of operational issues

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1 – Could you please provide a list of other departments which have provided active support for planning and execution of Irrigation Census activities? **(Focus)**

Q2 – What type of technical and managerial support is extended by other such departments? **(Focus)**

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1 - Was the fund received in time? If not, kindly elaborate the issue. **(Focus)**

Q2 – What are the issues pertaining to UCs submitted by the districts? **(Focus)**

Q2 - What are the challenges, if any, faced during submission of Utilization Certificate to Govt. of India?

**(Validate)**

**Was there timely utilization of available funds? If not, what were the reasons?**

Q1 - What is the average time span between receipt of 1st & 2nd installments; between 2nd and 3rd installment? What is the cause of delay in receipt of instalments from Gol? **(Validate)**

Q2 – What criteria are followed by State while disbursing 1<sup>st</sup> installment, 2<sup>nd</sup> installment and 3<sup>rd</sup> & final installment to the Districts?



## **EFFICIENCY**

### **EC1 Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?  
What are the costs of the scheme? What is the monetary value of all costs?**

Q1 - What was the total fund released to the States towards 6<sup>th</sup> Irrigation Census? Please provide year-wise details. **(Validate)**

Q2 – Was there any gap between fund sanctioned and fund released to the State? If yes, what were the reasons? **(Validate)**

Q2 – Are there any extra costs borne by the State alone towards 6<sup>th</sup> Irrigation Census?

### **EC2 Can the costs of the scheme be lowered?**

**Are there lower cost alternatives for achieving the scheme outcomes?**

Q1 - Are there any Districts which have adopted new / different techniques thus saving time, cost or improving data quality (e.g., West Bengal & Andhra Pradesh have developed Mobile App on their initiative)? **(Validate)**

**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1 - What are the challenges with respect to coordination with other departments of the State with regards to Irrigation Census?

**What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1 – Can you provide a list of departments at State which work in convergence with the Nodal Department towards planning, execution, monitoring and report preparation for Irrigation Census?

Q1 - Can you describe the department wise nature of support / inputs? **(Focus)**

## **SUSTAINABILITY**

**SS3: Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**



Q1 - In what ways coverage of farmers / MI Scheme owners, agricultural labourers, share croppers etc. in Irrigation Census survey represent all class and caste of the society? **(Focus)**

Q2 – What is the extent of participation of women in trainings and survey? **(Validate)**

**SS2: Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1 - In absence of Gol funds, in what ways the States will be able to conduct the Census with its own resources? **(Validate)**

**SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1 - What are the risk factors that are considered during:

- estimating the coverage
- conducting surveys
- data tabulation
- data validation / data cleaning
- Analysis
- Publishing of Results / Reports **(Focus)**

Technical (Data Quality affecting the Survey)	Lack of Inter & Intra Departmental Coordn.	Delayed & unplanned expenses	Lack of political will	Gap between actual & planned coverage
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Estimating the coverage

Conducting Surveys

Data Tabulation

Data Validation /

Data cleaning

Analysis



Report  
publishing  
Dissemination  
of facts

## RELEVANCE

### RL1: Is the scheme relevant in the present context?

**Provide details of the relevant sectoral challenge, beneficiary need, national priority, SDG that pertain to the area in which the scheme is operating?**

Q1 - In what ways, the past MI Census (till 5<sup>th</sup> Irrigation Census) data were relevant to:

- budget estimation
- planning for Minor Irrigation schemes
- vital statistics for agriculture **(Focus)**

Q2 - Please provide a list of geographical areas that should have been covered in Minor Irrigation (MI) Census but are not covered presently. **(Focus)**

Q3 – What could be the reasons for not covering the aforesaid geographical areas? **(Focus)**

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1 – What are the State specific issues on MI and Water Bodies that have not been covered in 6<sup>th</sup> MI Census? **(Focus)**

### RL2 Is it appropriate to continue / prioritize this scheme?

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1 – Do you feel that Minor Irrigation Census is an important scheme contributing towards planning for future Minor Irrigation schemes, implementation of the proposed MI Schemes and monitoring of the ongoing Minor Irrigation schemes in the State?

Q2 - Are there any State funded surveys / census on Minor irrigation? **(Focus)**

Q3 - In what ways can the next (7<sup>th</sup>) Irrigation Census can be improved? **(Focus)**

Q4 - Are the State specific issues on Minor Irrigation covered through Irrigation Census?

## IMPACT



**IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1 – To what effect Irrigation Census results have helped in framing effective policies for Minor Irrigation?  
**(Focus)**

## **EQUITY**

**EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. As a result of Irrigation Census findings, what Policy frameworks are prepared for Marginal, Small and semi-medium farmers towards:

- Increased allocation of funds
- Subsidy on power usage for MI Schemes
- Increased access to loans **(Focus)**

**EQ2: Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1 - How do the states ensure that all farmers and owners of MI schemes, agricultural labourers, share croppers are included?

Q2 – What is the nature of awareness generation interventions undertaken at State level especially focused towards women?

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**



## **Accountability & Transparency - Availability of Data Records and Reports in public domain**

### **Census Commissioner**

- Q1. Are the State wise, District wise & Block wise analysis available on websites? **(Validate)**
- Q2. In what other ways the data and analyses are made available for easy access to public? **(Validate)**

## **Monitoring Mechanisms**

### **Census Commissioner**

- Q1. What monitoring mechanisms are adopted by the Steering Committee during the Irrigation Census? **(Focus)**
- Q2. Is there any award system adopted by the State to acknowledge the performance of the districts?

## **Financial Accountability**

### **Census Commissioner**

- Q1. To what extent, the funding for conducting Irrigation Census could be increased for better coverage, automated processes and wide publicity of the results? **(Validate)**

## **Any Best Practices**

### **Census Commissioner**

- Q1. Are there any specific examples wherein innovative practices have been adopted by a District pertaining to Data Collection, Data Validation, Analyses and dissemination of results? **(Focus)**
- Q2. What has been the driving factor for adopting innovative practices?

## **Climate change & sustainability including adoption of climate-change resilient practices & diversifications - Climate resilience**

### **Census Commissioner**

- Q1. In what ways the Irrigation Census covers the effect of rainfall, floods, droughts on minor irrigation? **(Validate)**
- Q2. Do the Dept. in close coordination with other department suggests policies for usage of minor irrigation schemes in synchronization with factors like rainfall and disaster situation? **(Focus)**

## **Sustainable practices**

### **Census Commissioner**

- Q1. Are issue like polluted ground water covered in Irrigation Census? If such issues are covered at State, do the Minor Irrigation Dept. aptly takes up the same? **(Focus)**

## **Climate impact**



## **Census Commissioner**

Q1. To what extent the Irrigation Census covers effect of flood / drought on minor irrigation? **(Validate)**

## **Use of IT/Technology in driving efficiency**

### **Enquiry Area - Use of latest technology to improve efficiency and effectiveness of scheme implementation**

#### **Census Commissioner**

Q1. What IT enabled technologies are used different from that recommended by Govt. of India?

Q2 - What are driving factors which have enabled the State to use new IT techniques and software on their own?

## **Stakeholder and Beneficiary behavioral change - Fund Allocation**

#### **Census Commissioner**

Q1. Nature of Awareness Generation programmes undertaken by the State towards execution of Irrigation Census? **(Focus)**

Q2. Amount of fund spent by the State towards such measures. **(Focus)**

## **Research & Development - Fund Allocation**

#### **Census Commissioner**

Q1. Do the Steering Committee approve Research Studies or Evaluations apart from Irrigation Census ? **(Validate)**

Q2. Is the current allocation for R & D for Irrigation Census adequate?

## **Institutes and departments dedicated for R&D**

#### **Census Commissioner**

Q1. Does the State obtain inputs from research institutes for assessing the state specific situation pertaining to MI Schemes? If so, can you please provide a list of such institutions?

Q2. To what extent, the research findings on Minor Irrigation are at par with the Irrigation Census findings?

## **Unlocking Synergies with other Government Program - Potential areas for synergy**

#### **Census Commissioner**

1. Which other departments at State level conduct similar type of surveys on Minor Irrigation?

2. To what extent the results of such surveys used for development of MI sources?



## Conjunctive use of water - Challenges

### Census Commissioner

Q1. Does the MI census aptly cover the conjunctive use of Ground water & Surface water resources?

(Validate)

Q2. To what extent the irrigation departments / wings promote the conjunctive use of water resources?

(Validate)

## Awareness

### Census Commissioner

Q1. To what extent do the farmers understand conjunctive use of water resources?

Q2. Have the State taken any initiative in creating awareness on conjunctive use of water resources amongst the farmers and MI scheme owners?

## SECTION 3: CHALLENGES AND SUGGESTIONS

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

SUGGESTIONS AND CORRECTIVE MEASURES	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

10.1.4 State level stakeholder – Chief Engineer / Executive Engineer: Minor Irrigation wing – Water Resources Department

**GENERAL GUIDELINES:**



- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **IRRIGATION CENSUS**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHS/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.



- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH IRRIGATION SCHEME**

#### **RESEARCHER TO NOTE:**

9. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.
10. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.

### **SECTION 1: DEEP DIVE INTO IRRIGATION CENSUS SCHEME USING REESIE FRAMEWORK:**

#### **RELEVANCE**

**RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

**What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**

Q1- Does the Water Resources Dept. generates additional reports specifically for the State for Minor Irrigation? If yes, please explain in what ways. **(Focus)**

#### **EFFECTIVENESS**

**ET1: Is the scheme design appropriate to address scheme objectives?**

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1 – To what extent the analyses and results of Irrigation Census are considered by Minor Irrigation wing of Water Resources Department, for preparation of DPRs?

Q2 - How far the results of Irrigation Census have helped the farmers towards optimal usage of Ground and Surface Water for irrigation? **(Validate)**



### **Is there evidence that assumptions have been tested and are valid?**

Q1 – Are there gaps between results of MI Census and regular monitoring reports on major indicators of Minor irrigation? If so what are the reasons? **(Focus)**

#### **ET2: How are scheme targets set and monitored?**

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1 – Are the processes of Minor Irrigation monitored by Minor Irrigation wing of Water Resources Dept at State? If so, please specify the roles? **(Focus)**

#### **ET3 How has the scheme performed against scheme objectives and annual targets?**

**What is the year wise scheme targets, if any, for the period 2015-16 onwards?**

Q1 - Does the performance of Minor Irrigation schemes as in annual reports widely varies from that in Irrigation Census? **(Validate)**

**What is the state-wise, year wise performance against target? (Validate)**

Q1 – How the quality of the data collected are assessed by the Water Resources Department? **(Focus)**

### **Efficiency**

#### **EC1 Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1 – To what extent the indirect effect of Minor Irrigation viz., access to better education, health, increased purchased capacity of consumable durables and assets of the farmers who irrigate through Minor Irrigation schemes, are covered in Irrigation Census? **(Validate)**

#### **EC2 Can the costs of the scheme be lowered?**

**What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1 – In what ways Water Resources Department extends support to the State Statistical Cell towards planning, execution, monitoring and report preparation for Irrigation Census. **(Focus)**

### **Sustainability**

**SS2: Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**



Q1 – Do Water Resource Department conducts Minor Irrigation surveys on their own? If so kindly provide the details? **(Focus)**

**SS3: Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1 – How the coverage of farmers / MI Scheme owners, agricultural labourers, share croppers etc. in Irrigation Census survey is ensured so that they represent all class and caste of the society?

Q2 – Extent of participation of women in trainings and survey? **(Validate)**

## **RELEVANCE**

**RL1: Is the scheme relevant in the present context?**

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1 – What are the State specific issues on MI and Water Bodies that have not been covered in 6th MI Census? **(Validate)**

**RL2 Is it appropriate to continue / prioritize this scheme?**

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1 – To what extent Minor Irrigation Census is an important scheme contributing towards planning for future Minor Irrigation schemes, implementation of the proposed MI Schemes and monitoring of the ongoing Minor Irrigation schemes in the State?

Q2 – Are there any additional State funded surveys / census on Minor irrigation and Water Bodies?

Q3 – What are the ways by which the next (7<sup>th</sup>) Irrigation Census can be further improved? **(Validate)**

## **IMPACT**

**IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1 – To what extent issues like migration, access to better education, access to better health facilities within the State are covered through Irrigation Census analyses? **(Focus)**



## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Gender mainstreaming - Inclusiveness in scheme design/planning**

Q1. To what extent is the role of women in minor irrigation covered through irrigation census?

Q2. Do the reports / results have special focus on inclusiveness of women in overall utilization and replenishment of water sources for irrigation? **(Focus)**

### **Decision making by women**

Q1. Do the results of Irrigation Census survey indicates that the women take major decisions regarding proper water utilization, recharging ground water etc. If so kindly provide such evidences. **(Focus)**

### **Climate change & sustainability including adoption of climate-change resilient practices & diversifications - Climate resilience**

Q1. How far the effect of rainfall, floods, droughts on minor irrigation are covered through Irrigation Census? **(Validate)**

### **Sustainable practices**

Q1. To what extent issues like polluted ground water are covered in Irrigation Census? If such issues are covered at State, do the Minor Irrigation Dept. aptly takes up the same? **(Validate)**

### **Research & Development - Fund Allocation**

Q1. Which areas of minor irrigation need to be explored more? **(Validate)**

### **Institutes and departments dedicated for R&D**

Q1. To what extent research institutes are engaged for providing inputs on state specific situation pertaining to MI Schemes? If so, can you please provide a list of such institutions?

Q2. To what extent, the research findings on Minor Irrigation are at par with the Irrigation Census findings? **(Validate)**

### **Unlocking Synergies with other Government Program - Potential areas for synergy**

1. In what ways the Minor Irrigation wing of Water Resources Dept. maintains coordination with the State Statistical Cell towards conducting Irrigation Census? **(Validate)**

### **Conjunctive use of water – Challenges**

Q1. How far the MI census includes the conjunctive use of Ground water & Surface water resources? **(Validate)**

## **SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?



- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

### 10.1.5 State level stakeholder – Nodal Officer - State Statistical Cell

#### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
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  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### **INTRODUCTION: SELF**

Thank you for giving us your valuable time.



- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **IRRIGATION CENSUS**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
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- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

#### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH IRRIGATION SCHEME**

##### ***RESEARCHER TO NOTE:***

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- 12. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.*

#### **SECTION 1: DEEP DIVE INTO IRRIGATION CENSUS USING REESIE FRAMEWORK: RELEVANCE**



**RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

**What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**

Q1- Apart from regular analyses of Irrigation Census data as per the guideline by Govt. of India, does the State generates additional reports specifically for the State? If yes, please explain in what ways.

**(Validate)**

**EFFECTIVENESS**

**ET1: Is the scheme design appropriate to address scheme objectives?**

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1 – In what ways, the analyses and results of Irrigation Census are discussed with the concerned departments / wings viz., Minor Irrigation wing of Water Resources Department, Panchayat & Rural Development etc. at State level?

Q2 - How far the results of Irrigation Census have helped the farmers towards optimal usage of Ground and Surface Water for irrigation? **(Validate)**

**Is there evidence that assumptions have been tested and are valid?**

Q1 - Prior to uploading and final submission of Irrigation census data to Govt. of India what is the process followed for validating the data so collected? **(Focus)**

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1- Is there any special initiative taken by the State Statistical Cell towards ensuring complete coverage, validation and timely submission of data? **(Validate)**

**ET2: How are scheme targets set and monitored?**

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1 - What are the challenges / issues with respect to functioning of State Statistical Cells particularly for Irrigation Census?

Q2 - In what ways additional initiatives like the Mobile App has been effective in monitoring the progress of census activities at District, Block and Village level?



Q3 – How are the delays, inappropriate data quality issues at District, Block & Village level are managed by the State Statistical Cell? **(Focus)**

**What information is contained in utilization certificate issued by state govt? Are they credible and can they be relied upon as an indicator of scheme progress? (Validate)**

Q1 – Who prepares the Utilization Certificates? What are the issues faced in collecting UCs from Districts?

Q2 – In what ways the instances of cost escalation during and after Irrigation Census addressed? **(Validate)**

### **ET3 How has the scheme performed against scheme objectives and annual targets?**

**What is the year wise scheme targets, if any, for the period 2015-16 onwards?**

Q1 – How is the census related work process monitored at State? How are the issues like delays, shortage of fund, other exigencies are addressed?

Q2 - In what ways errors / inconsistencies in surveys are managed considering the fact that there are time targets and specified fund? **(Validate)**

**What is the state-wise, year wise performance against target? (Validate)**

Q1 – How the quality of the data collected are assessed by the State Statistical Cell?

Q2 - What measures are taken to improve the data quality viz., missing data, errors, outliers etc. after submission by Districts? **(Focus)**

**Identify states that have performed well? What are the underlying reasons for such performance?**

**Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q1 – What are the basis and process of selection of Supervisors and Enumerators?

Q2 – To what extent the trainings organized for Supervisors and Enumerators are effective towards ensuring correctness and completeness of data collection? **(Focus)**

Q3 - Apart from the planned manpower for Irrigation Census, to what extent local people, CBOs are involved to augment the coverage, data validation etc.? **(Validate)**

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1 – What are the Issues pertaining to:

- Identification of enumerators, supervisors, data analysts
- Training of the staff
- Inter & intra departmental Coordination



- Ensuring proper logistical arrangements viz., availability of sufficient survey schedules, manpower, travel arrangements, other emergent situations **(Validate)**

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1 What is the proportion of supervisors & enumerators trained against those identified?

Q2 – Planned / Estimated population coverage and actual population coverage: Is there any gap identified therein?

Q3 – What is the percentage of null data received after survey

Q4 - What is the Mechanism of selecting samples for validation? **(Focus)**

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1 - In what way can the effectiveness of the State Statistical Cells be improved?

Q2 – How the following aspects

> increased coverage of villages and MI schemes therein

> timely completion of survey works

> immediate addressing of operational issues

Are ensured? **(Validate)**

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1 - How can the scheme design be modified to recognize / replicate the positive factors and enhance performance? Provide success stories. *(Validate)*

**Efficiency**

**EC1 Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1 – To what extent the indirect effect of Minor Irrigation viz., access to better education, health, increased purchased capacity of consumable durables and assets of the farmers who irrigate through Minor Irrigation schemes, are covered in Irrigation Census? **(Validate)**



## **EC2 Can the costs of the scheme be lowered?**

### **Are there lower cost alternatives for achieving the scheme outcomes?**

Q1 - Are there any Districts which have alternative techniques thus saving time, cost or improving data quality? **(Validate)**

### **Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1 - What are the issues with respect to coordination with the Steering Committee with regards to Irrigation Census? **(Validate)**

### **What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1 – List of other departments at State which extends support to the State Statistical Cell towards planning, execution, monitoring and report preparation for Irrigation Census.

Q1 – What are the department wise nature of support / inputs? **(Focus)**

## **SUSTAINABILITY**

### **SS2: Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

#### **Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1 – Are there any other ways vide which the States will be able to conduct the Census with its own resources in absence of Gol funds? **(Validate)**

### **SS3: Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

#### **Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1 – How the coverage of farmers / MI Scheme owners, agricultural labourers, share croppers etc. in Irrigation Census survey is ensured so that they represent all class and caste of the society?

Q2 – Extent of participation of women in trainings and survey? **(Validate)**

## **SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**



**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1 - What are the risk factors that are considered during:

- estimating the coverage
- conducting surveys
- data tabulation
- data validation / data cleaning
- Analysis
- Publishing of Results / Reports **(Validate)**

## **RELEVANCE**

**RL1: Is the scheme relevant in the present context?**

**Provide details of the relevant sectoral challenge, beneficiary need, national priority, SDG that pertain to the area in which the scheme is operating?** (Validate)

Q1 – To what extent the State Statistical Cells have used the past MI Census (till 5<sup>th</sup> Irrigation Census) for providing inputs to Minor Irrigation wing of Water Resources Department at the State? **(Focus)**

Q2 – Which geographical areas could not be covered in the 6<sup>th</sup> Irrigation Census?

Q3 – What could be the reasons for not covering the geographical areas **(Validate)**

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1 – What are the State specific issues on MI and Water Bodies that have not been covered in 6<sup>th</sup> MI Census? **(Validate)**

**RL2 Is it appropriate to continue / prioritize this scheme?**

**What would be the impact if the scheme were to be scaled down or stopped?** (Validate)

Q1 – To what extent Minor Irrigation Census is an important scheme contributing towards planning for future Minor Irrigation schemes, implementation of the proposed MI Schemes and monitoring of the ongoing Minor Irrigation schemes in the State?

Q2 – Are there any additional State funded surveys / census on Minor irrigation and Water Bodies?

Q3 – What are the ways by which the next (7<sup>th</sup>) Irrigation Census can be further improved?

## **IMPACT**



**IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1 – To what extent issues like migration, access to better education, access to better health facilities within the State are covered through Irrigation Census analyses? **(Focus)**

## **EQUITY**

**EQ2: Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1 – Are the proportions of Caste wise and income group wise population as in Population Census 2011 corroborate the same proportions in Irrigation Census? **(Focus)**

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability & Transparency - Availability of Data Records and Reports in public domain**

Q1. In what ways and means the State wise, District wise & Block wise analysis available? **(Validate)**

### **Monitoring Mechanisms**

Q1. Are monitoring mechanisms adopted by the State Statistical Cell is different from what recommended in GOI guidelines? If so, in what ways it is different? **(Validate)**

### **Financial Accountability**

Q1. How much additional funds is needed for ensuring better coverage, automated processes and wide publicity of the results? **(Validate)**

### **Any Best Practices**

Q1. Are there any specific example wherein innovative practices have been adopted by a District pertaining to Data Collection, Data Validation, Analyses and dissemination of results?

Q2. Reasons for adopting such approach? **(Validate)**

### **Gender mainstreaming - Inclusiveness in scheme design/planning**

Q1. To what extent is the role of women in minor irrigation covered through irrigation census?



Q2. Do the reports / results have special focus on inclusiveness of women in overall utilization and replenishment of water sources for irrigation? **(Focus)**

#### **Decision making by women**

Q1. Do the results of Irrigation Census survey indicates that the women take major decisions regarding proper water utilization, recharging ground water etc. If so kindly provide such evidences. **(Focus)**

#### **Climate change & sustainability including adoption of climate-change resilient practices & diversifications - Climate resilience**

Q1. How far the effect of rainfall, floods, droughts on minor irrigation are covered through Irrigation Census?

Q2. In what ways the State Statistical Cell suggests policies for usage of minor irrigation schemes in synchronization with factors like rainfall and disaster situation? **(Validate)**

#### **Sustainable practices**

Q1. To what extent issues like polluted ground water are covered in Irrigation Census? If such issues are covered at State, do the Minor Irrigation Dept. aptly takes up the same? **(Validate)**

#### **Use of IT/Technology in driving efficiency**

#### **Enquiry Area - Use of latest technology to improve efficiency and effectiveness of scheme implementation**

Q1. Have the State Statistical Cell adopted a different technology for Irrigation Census? If so, why? **(Validate)**

#### **Research & Development - Fund Allocation**

Q1. Which areas of minor irrigation need to be explored more?

Q2. Is the current allocation for R & D for minor irrigation adequate? **(Validate)**

#### **Institutes and departments dedicated for R&D**

Q1. To what extent research institutes are engaged for providing inputs on state specific situation pertaining to MI Schemes? If so, can you please provide a list of such institutions?

Q2. To what extent, the research findings on Minor Irrigation are at par with the Irrigation Census findings? **(Validate)**

#### **Unlocking Synergies with other Government Program - Potential areas for synergy**

1. In what ways the Steering Committee maintains coordination with the State Statistical Cell?

2. Which other departments at State level conduct similar type of surveys on Minor irrigation?

**(Validate)**

#### **Conjunctive use of water – Challenges**

Q1. How far the MI census includes the conjunctive use of Ground water & Surface water resources?

**(Validate)**

### **SECTION 3: CHALLENGES AND SUGGESTIONS**



- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

**10.1.6 District level stakeholder - District Level Monitoring Officer**

**GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

**INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:



- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **IRRIGATION CENSUS**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the district level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

#### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH IRRIGATION CENSUS SCHEME**

##### ***RESEARCHER TO NOTE:***

*13. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*

*14. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.*

#### **SECTION 1: DEEP DIVE INTO IRRIGATION CENSUS SCHEME USING REESIE FRAMEWORK: EFFECTIVENESS**



**ET1: Is the scheme design appropriate to address scheme objectives?**

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1 - In what way the Irrigation Census have influenced distribution and optimal usage of irrigation water from MI Schemes in the District? **(Focus)**

**Is there evidence that assumptions have been tested and are valid?**

Q1 - Prior to uploading and final submission of data to the State what are the mechanisms adopted by the District for testing the validity of the data collected? **(Validate)**

**ET3 How has the scheme performed against scheme objectives and annual targets?**

**What is the year wise scheme targets, if any, for the period 2015-16 onwards?**

Q1 - How the estimated coverage of MI Irrigation Census and Census of Water Bodies is ensured?

Q2 - In case of errors / inconsistencies in filled up survey schedules what are the corrective actions taken?

**Identify states that have performed well? What are the underlying reasons for such performance?**

**Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q1 - How far were the trainings effective in building the required capacity of the enumerators, supervisors? **(Validate)**

Q2 – In what ways the participation of the identified Enumerators and Supervisors in the trainings are ensured? **(Focus)**

Q3 - Apart from the planned manpower for Irrigation Census, to what extent local people, CBOs are involved to augment the coverage, data validation etc.? **(Focus)**

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1 – What were the issues pertaining to:

- Identification of enumerators, supervisors, data analysts
- Training of the staff
- Logistical arrangement during 6<sup>th</sup> Irrigation Census **(Focus)**

**What is the planning process proposed under the scheme? Is the planning process adequately and effective followed? If not, what improvements are desirable?**

Q1 - Do the District have a specific operational plan? **(Validate)**

Q2 – What are the contents of the operational plan? **(Focus)**



Q3 - What factors are taken into consideration for preparing the plan? **(Focus)**

## **EFFICIENCY**

### **EC2 Can the costs of the scheme be lowered?**

#### **Are there lower cost alternatives for achieving the scheme outcomes?**

Q1 – Can you please elaborate on any low cost alternatives (*initiative by the District*) in terms of coverage, ensuring timely completion of the survey, data validation? **(Validate)**

Q2 - In case such low cost alternatives in respect of the survey have been adopted, discuss the benefits. **(Focus)**

## **RELEVANCE**

### **RL1: Is the scheme relevant in the present context?**

#### **Provide details of the relevant sectoral challenge, beneficiary need, national priority, SDG that pertain to the area in which the scheme is operating?**

Q1 - In what ways, the MI Census data are relevant to:

- administrative uses (Fund management, HR Allocations, etc.)
- planning for Minor Irrigation
- vital statistics for agriculture **(Focus)**

Q2 – Could you provide a list of geographical areas that should have been covered in MI Census but are not covered? **(Focus)**

Q3 – Reasons for limited coverage of the geographical areas within the district **(Validate)**

#### **What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1 - District specific issues on Minor Irrigation & Water Bodies that have not been covered in 6th MI Census **(Validate)**

Q2 – Please elucidate on the reasons for which some District specific issues pertaining to Minor Irrigation could not be covered?

## **EQUITY**

**EQ2: Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**



**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1 - Nature of awareness generation interventions pertaining to Irrigation Census and / or Minor Irrigation & Water Bodies undertaken at District level especially focused towards women

- a) When the interventions were undertaken? Before Irrigation Census or after publishing of census reports
- b) What were the focus of such awareness generation measures?

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability & Transparency- Availability of Data Records and Reports in public domain**

#### **District Level Monitoring Officers**

Q1. Are the District wise & Block wise analyses available online? **(Validate)**

Q2. In what other ways the data and analyses are made available for easy access to public? **(Validate)**

### **Monitoring Mechanisms**

#### **District Level Monitoring Officers**

Q1. Apart from the monitoring mechanisms adopted as deliberated in the guidelines, are there any other means of monitoring specifically adopted by the District or Sub Divisions or Blocks? **(Focus)**

### **Any Best Practices**

#### **District Level Monitoring Officers**

Q1. Any specific example wherein innovative practices have been adopted by a Sub Division / Block pertaining to Data Collection, Data Validation, Analyses and dissemination of results? **(Focus)**

Q2. What has been the driving factor for adopting such initiative?

### **Beneficiary involvement**

#### **District Level Monitoring Officers**

Q1. To what extent the surveys are conducted in a participatory way (involving local people, farmers , MI Scheme owners)?

### **Community institutions**

#### **District Level Monitoring Officers**



Q1. Are NGOs, CBOs, local clubs, SHGs etc. involved in conducting Irrigation Census? If so, in what ways the local organizations were involved?

### **Gender mainstreaming**

#### **Inclusiveness in scheme design/planning**

##### **District Level Monitoring Officers**

Q1. To what extent is the role of women in minor irrigation covered through irrigation census? **(Validate)**

Q2. Do the reports / results have special focus on inclusiveness of women in overall utilization and replenishment of water sources for irrigation? **(Validate)**

#### **Gender-friendly infrastructure and policies**

##### **District Level Monitoring Officers**

Q1. Any evidences of women empowerment in the district pertaining to optimal water usage, conservation of power w.r.t minor irrigation as a strategy for dissemination of MI Census findings? **(Focus)**

#### **Decision making by women**

##### **District Level Monitoring Officers**

Q1. Do the results of Irrigation Census survey indicates that the women take major decisions regarding proper water utilization, recharging ground water etc. If so evidences to justify it. **(Focus)**

#### **Climate change & sustainability including adoption of climate-change resilient practices & diversifications - Climate resilience**

##### **District Level Monitoring Officers**

Q1. In what ways the Irrigation Census covers the effect of rainfall, floods, droughts on minor irrigation? **(Validate)**

Q2. Do the Dept. in close coordination with other departments suggest policies for appropriate usage of minor irrigation schemes in synchronization with factors like rainfall and disaster situation? **(Focus)**

#### **Sustainable practices**

##### **District Level Monitoring Officers**

Q1. Do the crop productivity in some way is affected by polluted ground water? If so, to what extent the this is covered in Irrigation Census? **(Focus)**

#### **Stakeholder and Beneficiary behavioral change - Fund Allocation**

##### **District Level Monitoring Officers**



Q1. Nature of Awareness Generation programmes towards smooth execution of Irrigation Census undertaken by the District **(Focus)**

Q2. Amount of fund spent towards such measures **(Focus)**

### **Cropping pattern**

#### **District Level Monitoring Officers**

Q1. Are District specific cropping pattern are recommended by Agricultural Dept. based on the results of MI Census? **(Focus)**

### **Conjunctive use of water - Challenges**

#### **District Level Monitoring Officers, Supervisors**

Q1. Do the MI census aptly covers the conjunctive use of Ground water & Surface water resources?

### **Awareness**

#### **District Level Monitoring Officers, Supervisors**

Q1. To what extent the farmers do have the understanding of conjunctive use of water resources (as perceived while interacting with farmers, MI Scheme owners, agricultural labourers, share croppers during MI Census survey)?

Q2. Have the District taken any initiative in creating awareness on conjunctive use of water resources amongst the farmers and MI scheme owners?

## **SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from an implementation point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	



*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



# Annexure 11 Primary Survey Guide – LTIF

The primary survey guide for 'Long Term Irrigation Fund' is provided below.

## 11.1 Discussion Guide for KII

### 11.1.1 National level stakeholder – Joint Secretary and Financial Advisor [Department of Water Resources, RD & GR]

#### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **LTIF**. Since you are a key



stakeholder in the scheme overseeing planning and implementation at the national level your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

### **RESEARCHER TO NOTE:**

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

## **SECTION 1: DEEP DIVE INTO LTIF SCHEME USING REESIE FRAMEWORK:**

### **EFFECTIVENESS**

ET1: Is the scheme design appropriate to address scheme objectives?

#### **Is there evidence that assumptions have been tested and are valid?**

Q1. Is there any evidence/ example of how funds released under LTIF helped in reviving stalled AIBP projects affected due to fund constraints (say expedite completion of ongoing projects, arrest the increasing interest burden, etc.)? Please share some sample case studies in this aspect.

ET2: How are scheme targets set and monitored?

#### **Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**



Q1. Provide details of the monitoring mechanisms (deployed by DoWR/ NWDA/ NABARD) for each project for which funds have been sanctioned under LTIF. Please share details like indicators tracked, departments responsible for tracking the indicators, data sharing mechanism, etc. (focus)

Q2. Do you propose any other indicators for effective monitoring of these projects (from funding perspectives)? (focus)

ET3: How has the scheme performed against scheme objectives and annual targets?

**What is the year wise scheme targets, if any, for the period 2015-16 onwards?**

Q1. Provide details of outstanding loan balances of Centre under LTIF since 2016-17. (focus)

Q2. Provide details of the loans serviced (payments made in relation to repayment of principal and interest, interest subvention subsidy for state shares) under LTIF since 2016-17. (focus)

**Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q1. Have there been any instances of default of payments (on due date) by Centre and/ or states? If Yes, provide the details including reasons for default

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. What are the key issues and challenges (say funding crunch/ lack of interest for LTIF bonds, institutional structure, delay in repayment, etc.) that are affecting the scheme? (focus)

**Gaps in broad sectoral outcomes - Project Management issues and Slow project execution**

Q1. Considering the historic figures of high cost and time over runs in major and medium irrigation projects, are there any instances of revising lending terms (like moratorium period, etc.) in case of stalled projects for which loan has already been disbursed? If Yes, please provide some evidences. (focus)

ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1. Do you suggest any change in the scheme (like funding mechanisms, repayment terms & conditions, etc.) for better performances? (focus)

**EFFICIENCY**

EC1: Did the benefits of the scheme exceed costs?

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. Mention some benefits that accrued to the projects (like lesser cost of funding, timely completion) because of funding through LTIF. (focus)

EC2: Can the costs of the scheme be lowered?

**Are there lower cost alternatives for achieving the scheme outcomes?**



Q1. Are there any lower cost alternatives for funding major and medium irrigation projects?

## **SUSTAINABILITY**

SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. Mention the key risks for Department of Water Resources, RD & GR (DoWR) under this scheme (say increasing interest burden on stalled projects, higher interest subvention subsidies owing to costlier market borrowings by NABARD, etc.) (focus)

SS3: Is the scheme financially and institutionally sustainable? How can sustainability be improved?

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. Are such schemes financially sustainable considering the increasing costs of mobilization of funds? (focus)

## **RELEVANCE**

RL1: Is the scheme relevant in the present context?

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1. Could you provide a list of the AIBP projects that were stuck due to fund constraints before the introduction of LTIF?

Q2. To what extent do you feel funds released through LTIF helped in progress of these stalled/ ongoing AIBP projects and CADWM works? (focus)

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1. Do you propose extension of funds under LTIF to other PMKSY schemes and water resources/ irrigation projects? If Yes, provide some reasons to substantiate your claim. (focus)

RL2: Is it appropriate to continue / prioritize this scheme?

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1. Do you propose any other alternative sources of fund (say other government infrastructure funds like RIDF, govt. bonds, MFIs including private sector/ CSR funds.) that may be leveraged in place of LTIF or merged with LTIF? (focus)

## **SECTION 2: CROSS SECTIONAL THEMES**



**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Accountability & Transparency-Availability of Data Records and Reports in public domain**

**What data records are available for the scheme in public domain?**

Q1. To what extent social audit/ monitoring are conducted by states? Which are the most progressive states in this aspect?

**Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population- Funds allocated under TSP/ SCSP and other provisions for vulnerable communities**

**What is the fund allocated under TSP & SCSP for each scheme?**

Q1. What percent of funds under LTIF are kept earmarked for TSP and SCSP each year (2016-17,2017-18, 2018-19)? (focus)

**Development, dissemination & adoption of innovative practices, technology & know-how- Fund allocation towards promotion of innovation**

**Fund allocation towards promotion of innovation**

**What percent of total allocation is directed towards development, dissemination and adoption of innovative practices and technology? How much of it is utilized?**

Q1. Provide estimate of funds under LTIF which has been incurred for concurrent evaluation/ social audit, third party monitoring and evaluation, IEC, IT and professional services, administration expenses

**SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

• <b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



## 11.1.2 National level stakeholder - Director General [National Water Development Agency]

### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **LTIF**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes



- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### PROFILE OF THE STAKEHOLDER

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

### RESEARCHER TO NOTE:

1. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.
2. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.

## SECTION 1: DEEP DIVE INTO LTIF SCHEME USING REESIE FRAMEWORK:

### EFFECTIVENESS

ET1: Is the scheme design appropriate to address scheme objectives?

#### Is there evidence that assumptions have been tested and are valid?

Q1. Is there any evidence/ example of how funds released under LTIF helped in reviving stalled AIBP projects affected due to fund constraints (say expedite completion of ongoing projects, arrest the increasing interest burden, etc.)? Please share some sample case studies in this aspect. (focus)

ET2: How are scheme targets set and monitored?

#### Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?

Q1. How do NWDA monitor each project for which funds have been sanctioned under LTIF? Provide details like monitors tracked, departments responsible for monitoring and integrating national level data, frequency of monitoring checks. (focus)



Q2. Do you propose any other indicators for effective monitoring of these projects (from funding perspectives)? (focus)

Q3. Does the NWDA submit progress reports (including PERT /BAR/ CPM charts as mentioned in operation guidelines) to NABARD half-yearly? If Yes, share some sample report for last financial year (focus)

Q4. Does the Project Management Unit (PMU) of NWDA conduct site-visits to the projects? If Yes, please provide list of the projects visited and frequency of visits. Also, share some sample reports of the site-visits.

ET3: How has the scheme performed against scheme objectives and annual targets?

**What is the year wise scheme targets, if any, for the period 2015-16 onwards?**

Q1. Provide details of outstanding loan balances of Centre under LTIF since 2016-17. (focus)

Q2. Provide details of the loans serviced (payments made in relation to repayment of principal and interest, interest subvention subsidy for state shares) under LTIF since 2016-17. (focus)

**What is the state wise, year wise performance against target?**

Q1. Provide details of the loans serviced (payment of principal, interest and interest subvention to states) under LTIF since 2016-17. (focus)

**Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q1. Have there been any instances of default of payments (on due date) by Centre? If Yes, provide the details including reasons for default. (focus)

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. What are the key issues and challenges (for e.g. funding crunch/ lack of interest for LTIF bonds, institutional structure, repayment issues, etc.) that are affecting the scheme? (focus)

**Gaps in broad sectoral outcomes - Project Management issues and Slow project execution**

Q1. Considering the historic figures of high cost and time over runs in major and medium irrigation projects, are there any instances where provisions for lending terms (like moratorium period, etc.) have been revised in case of stalled projects for which loan has already been disbursed? If yes, please provide some evidences to support your answer. (focus)

ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?

**Was there timely utilization of available funds? If not, what were the reasons?**

Q1. Was there timely utilization of funds provided under LTIF? Please share details of the utilization of funds released under LTIF. (focus)

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**



Q1. Do you suggest any change in the scheme (like funding mechanisms, repayment terms & conditions, etc.) for better performances? (focus)

## **EFFICIENCY**

EC1: Did the benefits of the scheme exceed costs?

### **What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. Mention some benefits that accrued to the projects (like lesser cost of funding, timely completion, etc.) because of funding through LTIF. (focus)

### **What are the costs of the scheme? What is the monetary value of all costs?**

Q1. What has been the actual weighted average cost of mobilization of funds to NABARD both for Centre shares? Please share data for the period during 2016-17 to 2018-19 (focus)

EC2: Can the costs of the scheme be lowered?

### **Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1. Are there any instances of delay in fund releases due to lack of coordination between ministries (or departments)? If Yes, provide some evidences (focus)

## **SUSTAINABILITY**

SS3: Is the scheme financially and institutionally sustainable? How can sustainability be improved?

### **Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. Are such schemes financially sustainable considering the increasing costs of mobilization of funds? (focus)

## **RELEVANCE**

RL1: Is the scheme relevant in the present context?

### **Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1. To what extent do you feel funds released through LTIF helped in progress of the stalled/ ongoing AIBP projects and CADWM works? (focus)

### **What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1. Do you propose extension of funds under LTIF to other PMKSY schemes and water resources/ irrigation projects? If Yes, provide some reasons to substantiate your claim. (focus)

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability & Transparency-Availability of Data Records and Reports in public domain**



### What data records are available for the scheme in public domain?

Q1. To what extent social audit/ monitoring are conducted by the states? Which are the most progressive states in this aspect? (focus)

#### SECTION 3: CHALLENGES AND SUGGESTIONS

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

### 11.1.3 National level stakeholder - Chief General Manager [Finance Department, NABARD]

#### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:



- What makes you say that?
- What was it about \_\_\_\_ that made you decide to \_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said\_\_\_\_\_ but it also seems like\_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **LTIF**. Since you are a key stakeholder in the scheme overseeing fund flow at the national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## **RESEARCHER TO NOTE:**

3. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*



4. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.

## SECTION 1: DEEP DIVE INTO LTIF SCHEME USING REESIE FRAMEWORK:

ET2: How are scheme targets set and monitored?

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. Provide details of the monitoring mechanisms deployed NABARD (like data collection mechanisms, MIS portal, etc.) for each project for which funds have been sanctioned under LTIF. Please share some monitoring reports prepared by NABARD during last year. (focus)

Q2. Do you propose any other indicators for effective monitoring of these projects (from funding perspectives)? (focus)

Q3. Does the NWDA submit progress reports (including PERT /BAR/ CPM charts as mentioned in operation guidelines) to NABARD half-yearly? If Yes, provide share some sample reports. (validate)

Q4. Does NABARD conduct site-visits to sample projects? If Yes, provide list of projects visited since 2016-17 and share some sample reports.

ET3: How has the scheme performed against scheme objectives and annual targets?

**What is the year wise scheme targets, if any, for the period 2015-16 onwards?**

Q1. Provide details of outstanding loan balances of both Centre and States under LTIF since 2016-17. (focus)

Q2. Provide details of the loans serviced by both Centre and States (payments made in relation to repayment of principal and interest, interest subvention subsidy for state shares) under LTIF since 2016-17. (focus)

**Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q1. Has there been any instances of default of payments (on due date) by Centre and/ or states? If Yes, provide the details including reasons for default (validate)

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. What are the key issues and challenges (for e.g. funding crunch/ lack of interest for LTIF bonds, institutional structure, repayment issues, etc.) that are affecting the scheme? (focus)

**Gaps in broad sectoral outcomes - Project Management issues and Slow project execution**

Q1. Are there any instances of NABARD providing additional conditions in case of unsatisfactory project progresses? If Yes, provide some details like (name of the project, conditions imposed/ suggested, reasons for delay, etc.)?



Q2. Considering the historic figures of high cost and time over runs in major and medium irrigation projects, are there any instances when lending terms (like moratorium period, etc.) need to be revised in case of stalled projects for which loan has already been disbursed? (validate)

ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?

**Was there timely utilization of available funds? If not, what were the reasons?**

Q1. Was there timely utilization of funds provided under LTIF? Provide some evidences (focus)

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1. Do you suggest any change in the scheme (like funding mechanisms, repayment terms & conditions, etc.) for better performances and ensuring scheme sustainability? (focus)

**EFFICIENCY**

EC1: Did the benefits of the scheme exceed costs?

**What are the costs of the scheme? What is the monetary value of all costs?**

Q1. What has been the actual weighted average cost of mobilization of funds to NABARD both for Centre and State shares? Please share data for the period during 2016-17 to 2018-19 (focus)

EC2: Can the costs of the scheme be lowered?

**Are there lower cost alternatives for achieving the scheme outcomes?**

Q1. Are there any lower cost alternatives for funding major and medium irrigation projects?

**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1. Are there any instances of delay in fund releases due to lack of coordination between ministries (or departments)? If Yes, provide some evidences to substantiate your answer. (focus)

**SUSTAINABILITY**

SS1: What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. What are the key risks for faced by NABARD (say delay in repayments, credit crunch, opportunity cost, etc.) under this scheme?

SS3: Is the scheme financially and institutionally sustainable? How can sustainability be improved?



### **Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. Are such schemes financially sustainable considering the increasing costs of mobilization of funds?

(focus)

#### **RELEVANCE**

RL2: Is it appropriate to continue / prioritize this scheme?

### **What would be the impact if the scheme were to be scaled down or stopped?**

Q1. In place of funding through LTIF, do you suggest any other cheaper alternative sources of funds that may be leveraged for funding major and medium irrigation projects? (focus)

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability & Transparency-Availability of Data Records and Reports in public domain**

#### **What data records are available for the scheme in public domain?**

Q1. To what extent social audit/ monitoring are conducted by the states? Which are the most progressive states in this aspect? (focus)

#### **Evaluation Mechanism**

#### **What process / impact evaluation studies conducted in the last decade - frequency, quality, coverage, etc.**

Q1. Has NABARD conducted any impact assessment studies for the projects for which funds were released under LTIF? If Yes, please share some evidences.

#### **Financial Accountability**

#### **What funding mechanisms are being used?**

Q1. List the main sources of fund for NABARD for funding Centre and State shares under LTIF

## **3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?



<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

### **THANK AND END**

#### 11.1.4 State level stakeholder - Secretary [Irrigation Department]

##### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

##### **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water



Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **LTIF**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

#### **RESEARCHER TO NOTE:**

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.*

#### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:



- Tell me more about \_\_\_\_\_
- Can you give an example of \_\_\_\_\_?
- What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

### **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **LTIF**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?



## **RESEARCHER TO NOTE:**

3. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.
4. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.

## **SECTION 1: DEEP DIVE INTO LTIF SCHEME USING REESIE FRAMEWORK:**

### **EFFECTIVENESS**

ET3: How has the scheme performed against scheme objectives and annual targets?

#### **What is the year wise scheme targets, if any, for the period 2015-16 onwards?**

Q1. Out of the total expenditure for AIBP projects since 2016-17, what percentage of funds has been sourced through LTIF funds from NABARD? Provide details of the outstanding loan balances since 2016-17? (validate)

#### **What is the state wise, year wise performance against target?**

Q1. Provide details of the loans serviced (payments made in relation to repayment of principal and interest) under LTIF since 2016-17. (focus)

#### **Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q1. Has there been any instances of default of payments (on due date) by the state? If Yes, provide the details including reasons for default. (focus)

ET4: Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?

#### **How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1. Do you suggest any change in the scheme (like funding mechanisms, repayment terms & conditions, etc.) for making it more attractive to states? (focus)

### **EFFICIENCY**

EC1: Did the benefits of the scheme exceed costs?

#### **What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**



Q1. Mention some benefits that accrued to the projects (like lesser cost of funding, timely completion, etc.) because of funding through LTIF. (focus)

## RELEVANCE

RL1: Is the scheme relevant in the present context?

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1. Is there any AIBP project in the state that was being negatively affected owing to fund constraints (say lack in Central/ State grants) before the introduction of LTIF (i.e. before 2016-17)? To what extent do you feel funds released through LTIF helped in progress of these stalled/ ongoing AIBP projects and CAD works (say timely completion of projects, arrest of the increasing interest burden). Please provide some evidences to substantiate your claim. (focus)

RL2: Is it appropriate to continue / prioritize this scheme?

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1. Do you propose any other alternative sources of fund (say other government infrastructure funds like RIDF, govt. bonds, MFIs including private sector/ CSR funds.) that may be leveraged in place of LTIF or merged with LTIF for funding the major and medium irrigation projects in the state? (focus)

## SECTION 2: CROSS SECTIONAL THEMES

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population- Funds allocated under TSP/ SCSP and other provisions for vulnerable communities**

Q1. What percent of funds under LTIF are kept earmarked for TSP and SCSP each year (2016-17,2017-18, 2018-19)? (focus)

## SECTION 3: CHALLENGES AND SUGGESTIONS

- Broadly, what are the main challenges/ limitations that you see in this scheme from an implementation point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?



<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



# Annexure 12 Primary Survey Guide – NRCP

The primary survey guide for ‘National River Conservation Plan’ is provided below.

## 12.1 Discussion Guide for KII

### 12.1.1 National level stakeholder – Advisor, National River Conservation Directorate

#### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India’s policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **NRCP**. Since you are a key stakeholder in the scheme advising the scheme in your current role at national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to



successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

### **RESEARCHER TO NOTE:**

*15. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*

*16. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer these. If they don't, researcher should add additional probes to help answer those questions.*

### **SECTION 1: DEEP DIVE INTO NRCP SCHEME USING REESIE FRAMEWORK:**

#### **RELEVANCE**

**RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

**What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**

Q1. What is your overview of the NRCP scheme in terms of its objectives?

Q1. What are the output and outcome parameters to measure scheme performance?

#### **EFFECTIVENESS**

**ET1: Is the scheme design appropriate to address scheme objectives?**

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1 –: i) Specify the key inputs, activities, outputs, outcomes and impacts from the scheme - was there any change in any of these (especially 'outcomes and impacts' actually achieved vis-à-vis what was



planned?

Q2. Are the outputs for the other components of the scheme except interception & diversion of sewerage and construction of STPs such as

- Construction of electric crematoria
- Construction of low-cost sanitation
- Afforestation
- Riverfront development works
- Training & workshop for public awareness
- People participation

part of the output-outcome framework?

**Is there evidence that assumptions have been tested and are valid?**

Q1. Are the components in the scheme effective to achieve the objective of the scheme? If yes, please provide previous studies related to the performance of the scheme. If no, what changes in scheme design may be necessary. (Focus)

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1. How can the scheme design be modified to ensure the inclusion of pollution sources other than the sources considered in the scheme? (Focus)

**ET2: How are scheme targets set and monitored?**

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. How are the output-outcome targets for the scheme set?

Q2. Which dept. sets the targets?

Q3. Is there any mechanism to independently verify the progress reported on projects by the supervising entity through audits or other methods? Provide details of such mechanism?

Q4. Do the states regularly capture the progress data? Please provide us the report shared by states regarding the progress of the scheme. (Validate)

**What information is contained in utilization certificate issued by state govt? Are they credible and can they be relied upon as an indicator of scheme progress?**

Q1 - Does the State issue the utilization certificate regularly and What information is contained? Please provide us some utilization certificates issued by State.

Q2 - Are they credible and can they be relied upon as an indicator of scheme progress?

**ET3 How has the scheme performed against scheme objectives and annual targets?**

**What is the year wise scheme targets, if any, for the period 2015-16 onwards?**



Q1. What is the year wise & component wise targets of the scheme and the achievements against the target?

**What is the state wise, year wise performance against target?**

Q1. How has been the performance of the states against the target? (Validate)

**Identify states that have performed well? What are the underlying reasons for such performance?**

Q1. What are the parameters used to define that a state is performing well?

**Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q1. What are the parameters used to define that a state is performing poorly? (Validate)

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. Are there any modification or amendment needed in the existing Water & Environment Acts? What are these?

Q2. Was the coordination between Central & State Pollution Control Board made on regular basis?

Please provide MoM of some meetings and the actions taken basis that.

Q3. What are the other bottlenecks, issues & challenges in the implementation of the scheme? (Focus)

**Gaps in broad sectoral outcomes - Project Management issues and Slow project execution**

ET3/5: Q1. What are the project management techniques being presently used by the ministry? Is there any provision for improvement and how? (Focus)

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1. What are the structural & non-structural indicators apart from those considered in the scheme that may be included to effectively monitor the scheme performance? (Validate)

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. What are the positive factors that have enhanced scheme performance? (Validate)

Q2. Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance? (Validate)

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**



Q1. Do you suggest any change in scheme design more its effective performance and how can these be implemented? (Focus)

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. Should the Govt. encourage the State agency to adopt the modern technique for sewer treatment and what steps have been taken in this regard? (Validate)

Q2. What are the negative factors that have reduced scheme performance? (Focus)

**How can the scheme design be modified to mitigate the negative factors?**

Q1. How can the scheme design be modified to mitigate the negative factors? (Focus)

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1. What is the fund releasing mechanism? Are there delays in fund release? If yes, what are the key reasons for the same. (Focus)

Q2. Is the utilization certificate submitted in a timely manner?

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1. Are there any suggested long and short term interventions for improving structural and non-structural interventions? If yes, what are these? (Focus)

## **Efficiency**

### **EC1 Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. National Mission for Clean Ganga has adopted a hybrid annuity model where the private partner is responsible for asset creation and O&M for, say 15 years. Would such a model be suitable in the case of NRCP? Has any evaluation been done in this regard? (Validate)

### **EC2 Can the costs of the scheme be lowered?**

**Are there lower cost alternatives for achieving the scheme outcomes?**

Q1. Is there scope to lower the cost of projects without sacrificing scheme objectives? Please explain with supporting evidence? (Validate)

Q2 - Is there scope to bring in private sector to achieve cost efficiencies? If so, in what areas? (Validate)

**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**



Q1. Are the organization set up align as per the guideline for planning and implementation of the scheme?

(Focus)

Q2. Are regular meetings held between the Ministry, NRCD & CPCB for implementing the scheme effectively? Please provide MoM of some meetings. (Focus)

Q3. Are regular meetings held between the Central & State Implementing Authority to monitor the progress of the scheme? Please provide MoM of some meetings. (Focus)

### **What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1. Is there any plan to converge the scheme with other central/state level schemes? If yes, please explain how this can be done. (Focus)

### **Need for scheme convergence**

EC2/3: Q1 -What are the methodologies presently adopted by the authority to avoid duplicity in current schemes across Schemes, Departments at different levels (i.e. National/State/District/Block) during scheme design? (Focus)

Q2. What are the challenges in achieving convergence? (Focus)

Q3. What activities are undertaken to ensure convergence at community level? Are there any Action Plans prepared at State/District/Block level to ensure the same? (Focus)

## **SUSTAINABILITY**

**SS3: Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

### **Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1. In what ways did the scheme improve the environmental condition of the project area? (Validate)

Q2. In what ways did the scheme improve the social condition of the project area?

Q3. How can environmental and social sustainability be improved? (Validate)

**SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1 - Over the past five years, what have been the top 3 reasons for project failure with respect to each of the following aspects. (Validate)



- a. institutional
- b. financial
- c. technical,
- d. socio-economic,
- e. political
- f. environmental

Q1.1 - Have such reasons been studied and documented? If yes, please share the same.

Q1.2 - In case of a breakdown / dysfunction in the scheme, who is responsible for repair and maintenance? Has the present mechanism been effective in ensuring service continuity of projects?

## **EQUITY**

**EQ2: Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1. Which stakeholders are involved in deciding the selection of project? How is the mechanism to involve them? (Validate)

## **RELEVANCE**

**RL1: Is the scheme relevant in the present context?**

**Provide details of the relevant sectoral challenge, beneficiary need, national priority, SDG that pertain to the area in which the scheme is operating?**

Q1. How does the scheme provide a sustainable solution for a cleaner eco system along the polluted stretch of river? Is there any study that you can share in this regard? (Focus)

Q2. As per our understanding, the scheme is operating to reduce pollution of surface water sources and thereby, improve agricultural productivity & ecosystem of the river. Is there any other sectoral challenge, beneficiary need, national priority, SDG where the scheme is addressing? If yes, please provide details. (Focus)

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**



Q1. How effective has the scheme been in addressing the above sectoral challenges like reduction of pollution level in river water, improve environmental condition of towns, increase agricultural productivity etc.? (Focus)

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1. Is there any provision to include major tributaries receiving water without treatment and discharging them into the main river? If yes, what measures are taken? (Focus)

Q2. Are there other areas that the scheme should potentially address to improve outcomes at the sectoral level? Please explain with relevant details. (Focus)

**RL2 Is it appropriate to continue / prioritize this scheme?**

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1 - Is there any alternative scheme that can deliver similar outcomes? Further, how effective are such alternative schemes, if any? Please share relevant details? (Focus)

Q2 Would taking a river basin approach deliver better outcomes in respect of this scheme? If yes, provide details as to how this can be effectively implemented. (Focus)

Q3 - There are other schemes like AMRUT, UIDSSMT, which also focus on similar objective. So, does the scheme duplicate activities undertaken by these Govt. initiatives? If not, how the interventional areas are different across these different schemes? (Focus)

**From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**

Q1. The components like catchment area treatment, direct runoff from agriculture field and the unsewered part of the town which directly discharging into river are also the major sources of pollution which are not addressed by the scheme. Is there any provision to include these in the scheme? (Focus)

**SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Accountability & Transparency- Availability of Data Records and Reports in public domain**

Q1. What are the measures undertaken for capturing data related to the scheme performance? (Focus)

Q2. Do you have any dedicated MIS system for recording & updating the database of the scheme? If yes, please provide details. If no, what is the plan for its implementation? (Focus)

**Monitoring Mechanisms**

Q1 -How robust is the monitoring mechanism? Is there any mechanism to independently verify the progress reported by the supervising entity through audits or other methods? If yes, please provide some information around it. If no, are you planning to bring such mechanism and what is the timeline for that and at what level? (Focus)



## **Evaluation Mechanisms**

Q1 -Impact evaluation report is available for schemes in 10 identified towns in Region 2 of India (2014). Is there any evaluation study conducted on NRCP (from 2015 to till date)? If yes, please share the study reports (Focus)

Q2 - As per the guidelines, do all the states conduct inspection of the scheme for their states by 3rd party? Please provide some information and share some reports, if available. Also, let us know what the frequency, quality and coverage of the studies are (Focus)

## **Financial Accountability**

Q1 -Are the demand for fund from State on regular basis? If not, what are the reasons? (Validate)

## **Any Best Practices**

Q1 - Can you provide some examples of innovative initiatives/best practices in terms of accountability/transparency? (Focus)

## **Direct/Indirect Employment Generation- Employment generation**

Q1 - What is the level of employment generation through schemes in the sector and overall sectoral contribution in National employment generation? (Validate)

Q2 - What is the improvement in income levels? (Validate)

## **Private sector involvement**

Q1 - Is there scope for private sector to be involved at any stage (e.g. during O&M phase) with a view to increase employment opportunities? If yes, how can it be implemented? If no, what are the challenges? (Focus)

## **Gender mainstreaming- Inclusiveness in scheme design/planning**

Q1. Is there a specific mention of gender equality and equity considerations in the scheme guidelines/objectives, i.e. has the scheme been designed keeping gender considerations in mind? Please discuss (Validate)

## **Gender-friendly infrastructure and policies**

Q1. Mention how the project contributed to increase women empowerment (say higher income, literacy, better decision taking roles, etc.) (Validate)

## **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population- Funds allocated under TSP/ SCSP and other provisions for vulnerable communities**

Q1 - What is the fund allocated under TSP & SCSP for each scheme? Please share details (Validate)

## **Use of IT/Technology in driving efficiency- Deployment of IT enabled mechanisms for monitoring of the Scheme**

Q1. Is geotagging and use of geotagged photographs being done? (Focus)

If yes,



- a. Mention what are the benefits accrued due to geo-tagging
- b. Mention the challenges in this regard

#### **Use of latest technology to improve efficiency and effectiveness of scheme implementation**

Q1 - Which states are leading in terms of technology use and which are lagging behind? (Focus)

#### **Development, dissemination & adoption of innovative practices, technology & know-how- Fund allocation towards promotion of innovation**

Q1 - What percent of total allocation is directed towards development, dissemination and adoption of innovative practices and technology? How much of it is utilized? (Focus)

#### **Stakeholder and Beneficiary behavioral change- Fund Allocation**

Q1. What percent of total allocation is directed towards Awareness generation or sensitization? What is the utilization rate? and How much impact has it been able to generate in terms of behavior change? (Focus)

#### **Research & Development- Fund Allocation**

Q1 - Is there any percentage of total allocation is directed towards R&D in the field of river conservation? Is yes, what percentage? How much of that percent is being utilized? (Focus)

#### **Potential areas for synergy**

Q1 - What are the areas for potential convergence / synergy across govt. programs? (Focus)

#### **Reforms, Regulations- Adoption of models acts and reforms at governance, institutional and administrative level**

Q1 - What measures are being taken to ensure effective implementation and compliance of adopted acts/rule/regulations? (like in areas of safety, accountability, transparency etc.) (Focus)

#### **Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme- Private Sector Participation**

Q1 - Is there any private investment in any states for this program? If yes, please share some information. If no, are you expecting any? Please provide details (Focus)

#### **Public-Private Partnership**

Q1 - Is there any PPP model prevalent in this area? If yes, how well has that functioned and what are the challenges? If no, can it be profitable/ help to realize the scheme outcomes at a lower cost? (Validate)

### **SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?



<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

## 12.1.2 National level stakeholder - Additional Director, Central Pollution Control Board

### **SECTION 1: DEEP DIVE INTO NRCP SCHEME USING REESIE FRAMEWORK:**

#### **EFFECTIVENESS**

#### **ET1: Is the scheme design appropriate to address scheme objectives?**

##### **Is there evidence that assumptions have been tested and are valid?**

Q1. What is your overview of the NRCP scheme in terms of its objectives?

Q2. Have you conducted any study on pollution along the selected stretches of river? What are the outcomes? Can you please share these studies. (Focus)

##### **What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1. How can the scheme design be modified to ensure the inclusion of other pollution sources other than the sources considered in the scheme? (Focus)

#### **ET3 How has the scheme performed against scheme objectives and annual targets?**

##### **What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. Are there any modification or amendment needed in the existing Water & Environment Acts? What are these? (Focus)

Q2. Was the coordination between Central & State Pollution Control Board made on regular basis?

Please provide MoM of some meetings and the actions taken basis that. (Focus)

Q3. What are the other bottlenecks, issues & challenges in maintaining the water quality as per standards? (Focus)



**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1. Do you suggest any change/ additional indicators that may be tracked to monitor the water quality? If yes, what are these indicators?

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. What are the positive factors that have enhanced scheme performance? (Validate)

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1. Are there any suggested long and short term interventions for improving water quality in polluted stretches of river? If yes, what are these? (Focus)

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q2. Do you suggest any change in scheme design, especially with respect to monitoring of water quality and how that information is used in the implementation phase with a view to improve scheme performance? If yes, what measures are necessary?? (Focus)

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. How many effluent measuring stations are set up across the identified polluted stretches of river? (Validate)

**How can the scheme design be modified to mitigate the negative factors?**

Q1. Are there any factors which adversely affect the performance of the scheme? If yes, what are these? (Focus)

## **Efficiency**

**EC2 Can the costs of the scheme be lowered?**

**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**



Q1. Are the organization set up align as per the guideline for planning and implementation of the scheme?

(Focus)

Q2. Are regular meetings held between the Ministry, NRCD & CPCB for implementing the scheme effectively? Please provide MoM of some meetings. (Focus)

## RELEVANCE

### RL1: Is the scheme relevant in the present context?

**Provide details of the relevant sectoral challenge, beneficiary need, national priority, SDG that pertain to the area in which the scheme is operating?**

Q1. How does the scheme provide a sustainable solution for a cleaner eco system along the polluted stretch of river? Is there any study that you can share in this regard? (Focus)

Q2. As per our understanding, the scheme is operating to reduce pollution of surface water sources and thereby, improve agricultural productivity & ecosystem of the river. Is there any other sectoral challenge, beneficiary need, national priority, SDG where the scheme is addressing? If yes, please provide details. (Focus)

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1. Do you think the scheme is effective to reduce the pollution level in river water? If yes, please provide some study related to reduction of pollution level of river water after implementation of the scheme. (Validate)

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1. Do you suggest any other areas that the scheme should potentially address to improve outcomes at the sectoral level? If yes, what are these? (Focus)

### RL2 Is it appropriate to continue / prioritize this scheme?

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1 – Does the Govt. focus more on this scheme to maintain city sanitation and river eco system? (Focus)

**From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**

Q1. Do you suggest to include other components of pollution abatement works like catchment area treatment, direct runoff from agriculture field and the unsewered part of the town in the scheme to deliver the outcome more effectively? In your opinion what are the other components apart from these? (Focus)

## SECTION 2: CROSS SECTIONAL THEMES



**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Accountability & Transparency- Availability of Data Records and Reports in public domain**

Q1. What are the measures undertaken for capturing water quality data related to the scheme performance? (Focus)

Q2. Do you have any dedicated MIS system for recording & updating the database of the scheme? If yes, please provide details. If no, what is the plan for its implementation? (Focus)

**Monitoring Mechanisms**

Q1. How robust is the monitoring mechanism? Is there any mechanism to independently verify the progress reported by the supervising entity through audits or other methods? If yes, please provide some information around it. If no, are you planning to bring such mechanism and what is the timeline for that and at what level? (Focus)

**Financial Accountability**

Q1 -Are the demand for fund from State on regular basis? If not, what are the reasons? (Focus)

**Any Best Practices**

Q1 - Can you provide some examples of innovative initiatives/best practices in terms of accountability/ transparency? (Focus)

**SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



### 12.1.3 State level stakeholder - Chairman cum Managing Director, State Water Supply & Sewerage Board

#### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organization in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **NRCP**. Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.



- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

### **RESEARCHER TO NOTE:**

- *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
- *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.*

### **SECTION 1: DEEP DIVE INTO NRCP SCHEME USING REESIE FRAMEWORK:**

#### **RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

**What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**

Q1. What is your overview of the NRCP scheme in terms of its objectives?

Q2. The objectives of the scheme are to reduce the pollution load of river water and also to improve the environmental condition of polluted stretches of river. Are all the components of the scheme effective to deliver the outcome of the scheme?

### **EFFECTIVENESS**

#### **ET1: Is the scheme design appropriate to address scheme objectives?**

**Is there evidence that assumptions have been tested and are valid?**

Q1. Has the department conducted any study on impact evaluation regarding the performance of the scheme? If yes, please provide details.

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**



Q1. What are the other components apart from those considered in the scheme more effective to achieve the goal followed in the same nature of Scheme like AMRUT, SMART CITY etc.?

Q2. How did the above components make the scheme more effective?

### **ET2: How are scheme targets set and monitored?**

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. How do the states regularly capture the progress data? Please share the report maintained by states regarding the progress of the scheme?

### **ET3 How has the scheme performed against scheme objectives and annual targets?**

**What is the year wise scheme targets, if any, for the period 2015-16 onwards?**

Q1. How has the target been set and is it achievable?

**What is the state-wise, year wise performance against target?**

Q1. How has been the performance of the states against the target and what are challenges to achieve the target? (Focus)

**Identify states that have performed well? What are the underlying reasons for such performance?**

Q1. What methodologies or measures can be adopted to improve the performance of the scheme?

**Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q1. Are you aware about the measures taken by the States performing well and what activities can be taken to improve the performance? (Focus)

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. Are the projects under the scheme monitored regularly and how? (Focus)

Q2. What are the key issues during project implementation? What mitigation measures are taken against these issues? (Focus)

Q3. Has the state conducted any study for identifications and mitigations of the issues and bottlenecks for implementation of the scheme? If yes, please provide. (Focus)

**Gaps in broad sectoral outcomes - Project Management issues and Slow project execution**

ET3/5: Q1. What are the project management techniques being presently used by the authority? Is there any provision for improvement and how? (Focus)

Q2. What are the top 5 reasons for project cost overrun?

Q3. What are the top 5 reasons for project time overrun?

Q4. What mitigation measures are adopted to avoid project time and cost overrun issues?

**What is the planning process proposed under the scheme? Is the planning process adequately and effective followed? If not, what improvements are desirable.**



Q1 - Which are the areas in the planning process that need to be strengthened? (Focus)

Q2 - How can the planning process be improved overall? (Focus)

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1. What are the structural & non-structural indicators apart from those considered in the scheme that may be included to effectively monitor the scheme performance? (Focus)

Q2. Does the state monitor some or all of those indicators? If yes, can you share the relevant data. (Focus)

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. What are the positive factors that have enhanced scheme performance? (Focus)

Q2. Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance? (Focus)

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1. Do you suggest any change in scheme design more its effective performance and how can these be implemented? (Focus)

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. Are the state willing to adopt modern technique in treatment of sewerage? Is there any STP where state adopt any modern technology for treatment of sewerage? (Focus)

Q2. What are the negative factors that have reduced scheme performance? (Focus)

**How can the scheme design be modified to mitigate the negative factors?**

Q1. Has state any suggestions for modification of scheme design to mitigate the negative factors which they have faced during implementation?

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1 What are the project wise details provided when: i) request for funds was made by you, ii) funds released by the approving authority, iii) funds released by you to the next level / contractor? (Focus)

Q2. Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons? (Validate)



Q3. Are there positive and / or negative financial factors that have impacted scheme performance? If yes, please discuss with relevant data. (Focus)

Q4. What are the key financial factors that have an impact on the scheme performance? (Focus)

**Was there timely utilization of available funds? If not, what were the reasons?**

Q1 - Can you provide details of funds unutilized at the end of each year? (Validate)

Q2 - Can you provide month-wise details of how available funds were used? (Validate)

Q3 - Is there a tendency of expenditure towards the end of the year? If yes, why? (Focus)

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1. Are there any suggested long and short term interventions for improving structural and non-structural interventions? If yes, what are these? (Focus)

**Efficiency**

**EC1 Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. How the tangible like house level connection, reuse of treated water etc. and intangible benefits like environmental improvement in town etc. of the scheme was assessed?

Q2. What is the contractual model e.g. construction contracts, O&M contracts, followed for projects under the scheme?

Q3. Which financial model was used to calculate the benefit cost ratio? For example, Hybrid Annuity based PPP Model is used in NMCG project?

**EC2 Can the costs of the scheme be lowered?**

**Are there lower cost alternatives for achieving the scheme outcomes?**

Q1. Is there any evidence to implement lower cost alternatives to achieve the goal in other similar type scheme in national level? (Focus)

Q2 - Is there scope to bring in private sector to achieve cost efficiencies? If so, in what areas? (Focus)

**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1. Is there any review meeting between the Central & State Implementing Authority to monitor the progress of the scheme? Please share the MoM of the meeting. (Focus)

**What is the scope for convergence with other schemes of the Central and State Government as well as Private Sector/CSR efforts?**

Q1. Is there any plan to converge the scheme with other central/state level schemes those have same objectives and in what ways? (Focus)



## Gaps in broad sectoral outcomes - Wastewater reuse policies necessity in all states

EC3/5: Q1. What are the measures taken to encourage the industries to reuse waste water? What challenges have faced during implementation?

### Sustainability

**SS2: Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. What is the plan for generation of fund for O&M purpose? (Focus)

Q2. What is the allocation of fund for O&M purpose? (Focus)

Q3 - What is the number and quality of human resources available for O&M phase? (Validate)

**SS3: Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1. In what ways did the scheme improve the environmental condition of the project area? (Focus)

Q2. In what ways did the scheme improve the social condition of the project area? (Focus)

Q3. How can environmental and social sustainability be improved? (Focus)

**SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.

Q1 - Over the past five years, what have been the top 3 reasons for project failure with respect to each of the following aspects. (Focus)

- a. institutional
- b. financial
- c. technical,
- d. socio-economic,
- e. political
- f. environmental

Q1.1 - Have such reasons been studied and documented? If yes, please share the same?

Q1.2 - In case of a breakdown / dysfunction in the scheme, who is responsible for repair and maintenance? Has such a mechanism been effective in ensuring continued benefits from the scheme?



## Gaps in broad sectoral outcomes - Capacity building of the organizations/utilities creating and managing Water Resources infrastructure and providing service

SS1: Q1. How many trainings/workshops was conducted to enhance the knowledge for O&M of the plant of the stakeholder?

Q2. What steps were undertaken to engage the sectoral experts for preparation of DPRs?

Q3. How many trainings/workshops regarding the modern technique in the field of Sewerage Treatment Process?

### EQUITY

**EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?

Q1. To what extent did the infrastructure created under the scheme provide access to women and other class of people specifically in case of low-cost sanitation and bathing ghat along river bank? (Focus)

**EQ2: Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?

Q1. Are people from all sectors of society involved for selection of project area? What is the mechanism to involve them? (Focus)

### RELEVANCE

**RL1: Is the scheme relevant in the present context?**

Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?

Q1. To what extent did the scheme able to tackle the sectoral challenges like reduction of pollution level in river water, improve environmental condition of towns, increase agricultural productivity d/s of polluted stretches etc.? (Focus)



**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1. What measures are proposed to reuse the treated water in domestic, industrial & agriculture purpose? (Focus)

Q2. Are there other areas that the scheme should potentially address to improve outcomes at the sectoral level? Please explain with relevant details. (Focus)

**RL2 Is it appropriate to continue / prioritize this scheme?**

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1 - Is there any scheme in state level which delivers same outcome? If yes, can you share some data/information about it? (Focus)

**From among the areas of interventional gaps identified above, which are the areas more important than the area addressed by the scheme? And why?**

Q1. What are the other factors (not considered in scheme design) identified during implementation which can deliver the outcome more effectively?

**Impact**

**IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. To what extent did the scheme improve the livelihood status of the project area? (Focus)

Q2. To what extent did the scheme improve the river ecology? (Focus)

**Water security - Using recycled water for agriculture**

IM1//: Q1. What are the measures taken by implementing authority to encourage the of reusing of treated water for irrigation? What challenges have faced during implementation?

**SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Accountability & Transparency- Availability of Data Records and Reports in public domain**

1. What are the measures undertaken for capturing data related to the scheme performance? (Focus)

2. Do you have any dedicated MIS system for recording & updating the database of the scheme? If yes, please provide details. If no, what is the plan for its implementation? (Focus)

**Monitoring Mechanisms**



Q1 - How does your state collect and manage the data? (Focus)

Q2 - Do you face any challenges in current data management system? If yes, what are the challenges? (Focus)

### **Evaluation Mechanisms**

Q1 - As per the guidelines, do the states carryout a third-party evaluation study regarding the performance of the scheme? Please provide some information and share some reports, if available. Also, let us know what are the frequency, quality and coverage of the studies? (Focus)

### **Financial Accountability**

Q1 - Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what are the reasons? (Validate)

### **Any Best Practices**

Q1 - Can you provide some examples of innovative initiatives/best practices in terms of accountability/transparency? (Focus)

### **Direct/Indirect Employment Generation- Employment generation**

Q1 - To what extent employment has generated, for skilled as well as unskilled jobs, on account of the scheme? (Focus)

Q2 - To what extent income level of people engaged in post construction stage i.e., O&M of STPs, Low cost sanitation etc. has increased due to this scheme? (Focus)

Q3 - What is the women participation (%) in the scheme at your state? Which projects are leading and which are lagging in this regard? (Focus)

### **Any Best Practices**

Q1 - Are there any best practices, in terms of direct/ indirect employment generation, noticeable at your state? (Focus)

### **Private sector involvement**

Q1 - Is there scope for private sector to be involved at any stage (e.g. during O&M phase) with a view to improve efficiency or for other reasons? If yes, how can it be implemented? If no, what are the challenges? (Focus)

### **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population- Funds allocated under TSP/ SCSP and other provisions for vulnerable communities**

Q1 - Have the TSP & SCSP funds been able to improve equity? Please justify your logic? (Focus)

Q2 - Are you facing any challenges in this regard? (Focus)

### **Inclusion of vulnerable groups in scheme as well as sector**

Q1 - What are the interventions implemented for specific vulnerable groups? (Focus)

### **Use of IT/Technology in driving efficiency- Deployment of IT enabled mechanisms for monitoring of the Scheme**



In case of a scheme to create physical assets, is geotagging and use of geotagged photographs being done? (Focus)

Q1. Is geotagging and use of geotagged photographs being done? (Focus)

If yes,

a. Mention what are the benefits accrued due to geo-tagging

b. Mention the challenges in this regard

Q1. How is technology being used for on-ground data collection? (Focus)

Q2. Do you envisage any other advanced technologies for data collection and monitoring purposes? (Focus)

### **Use of latest technology to improve efficiency and effectiveness of scheme implementation**

Q1 - What are the technologies being used in project implementation, service delivery? Provide details? (Focus)

#### **Any Best Practices**

Q1 - Any best practices/ innovative initiatives that your state has taken in technological intervention to improve the process? (Focus)

### **Development, dissemination & adoption of innovative practices, technology & know-how- Fund allocation towards promotion of innovation**

Q1 - What percent of total allocation is directed towards development, dissemination and adoption of innovative practices and technology? How much of it is utilized? (Focus)

#### **Contribution of improved practices in increasing outcomes**

Q1 - What is the impact of innovative technologies and practices on scheme outcomes? (Focus)

#### **Any Best Practice or innovation**

Q1 - Any best practices in this aspect (Focus)

### **Stakeholder and Beneficiary behavioral change- Fund Allocation**

Q1. What percent of total allocation is directed towards Awareness generation or sensitization? What is the utilization rate? and How much impact has it been able to generate in terms of behavior change? (Focus)

#### **Challenges faced**

Q1 - What are the major challenges? Are there any areas which need more attention in terms of bringing behavior change? (Focus)

#### **Any Best Practices**

Q1 - Any best practices in this aspect (Focus)

### **Unlocking Synergies with other Government Program**

#### **Any best practices of the same**

Q1 - Any best practices in terms of reduction of pollution of river and improvement of city environment with other schemes (like- AMRUT, Swachh Bharat etc.) (Validate)

#### **Potential areas for synergy**



Q1 - What are the areas for potential convergence / synergy across govt. programs? (Validate)

**Reforms, Regulations- Adoption of models acts and reforms at governance, institutional and administrative level**

Q1 - What measures are being taken to ensure effective implementation and compliance of adopted acts/rule/regulations? (like in areas of safety, accountability, transparency etc.) (Validate)

**Any best practice**

Q1 - Any best practices with respect to reforms, regulations (Validate)

**Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme- Private Sector Participation**

Q1 - Is there any private investment in your states for this program? If yes, please share some information. If no, are you expecting any? Please provide details (Focus)

**Public-Private Partnership**

Q1 - Is there any PPP model prevalent in this area? If yes, how well has that functioned and what are the challenges? If no, can it be profitable/ help to realize the scheme outcomes at a lower cost? (Focus)

**FPOs/SHGs/Cooperative's Participation**

Q1 - Are there any private sector, community/collectives/cooperatives and civil society involved in any activities under this Scheme? If yes, please mention the activities (Focus)

**Any best practice**

Q1 - Any best practices with respect to participation of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme (Focus)

**SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from an implementation point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*



## THANK AND END

### 12.1.4 State level stakeholder - Chairman, State Pollution Control Board

#### SECTION 1: DEEP DIVE INTO NRCP SCHEME USING REESIE FRAMEWORK:

##### EFFECTIVENESS

###### ET2: How are scheme targets set and monitored?

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1. What is your overview of the scheme NRCP in terms of its objectives?

Q2. How do the states regularly capture the water quality data? Please share the report maintained by states regarding the pollution level of water under the scheme? (Focus)

###### ET3 How has the scheme performed against scheme objectives and annual targets?

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. Has the Board conducted any study for identifications and mitigations of the issues related to water pollution along the bank of the river? If yes, please provide. (Focus)

**What is the planning process proposed under the scheme? Is the planning process adequately and effective followed? If not, what improvements are desirable.**

Q1 - Which are the areas in the planning process that need to be strengthened for improving river water quality? (Focus)

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1. Does the Board monitor all the indicators for maintaining the standard quality of water? If yes, can you share the relevant data. (Focus)

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. Have you identified the positives factors within the scheme which helps in maintaining water quality? (Focus)



Q2. Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance? (Focus)

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1. Are there any suggested long and short term interventions for improving eco system of the identified stretches of river? If yes, what are these? (Focus)

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1. Do you suggest any change in scheme design more its effective performance and how can these be implemented? (Focus)

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. How many effluent measuring stations are set up across the identified polluted stretches of river? (Focus)

Q2. What are the negative factors that have reduced scheme performance? (Focus)

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1. Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons? (Validate)

Q2. Are there positive and / or negative financial factors that have impacted scheme performance? If yes, please discuss with relevant data. (Focus)

Q3. What are the key financial factors that have an impact on the scheme performance? (Focus)

**Was there timely utilization of available funds? If not, what were the reasons?**

Q1 - Can you provide details of funds unutilized at the end of each year? (Validate)

Q2 - Can you provide month-wise details of how available funds were used? (Validate)

## Efficiency

### EC2 Can the costs of the scheme be lowered?

**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1. Is there any review meeting between the Central & State Implementing Authority to monitor the progress of the scheme? Please share the MoM of the meeting. (Focus)



## Sustainability

**SS3: Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1. Did the scheme improve the environmental condition of the project area and in what ways? (Focus)

Q2. In what ways did the scheme improve the social condition of the project area? (Focus)

Q3. How can environmental and social sustainability be improved? (Focus)

## RELEVANCE

**RL1: Is the scheme relevant in the present context?**

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1. To what extent did the scheme able to tackle the above sectoral challenges like reduction of pollution level in river water, improve environmental condition of towns, increase agricultural productivity d/s of polluted stretches etc.? (Focus)

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1. Do you think all the areas are addressed in the scheme to improve outcomes at the sectoral level? Please explain with relevant details. (Focus)

## Impact

**IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. To what extent did the scheme improve the river ecology? (Focus)

## SECTION 2: CROSS SECTIONAL THEMES

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Accountability & Transparency- Availability of Data Records and Reports in public domain**

1. What are the measures undertaken for capturing water quality data related to the scheme performance?

2. Do you have any dedicated MIS system for recording & updating the database of the scheme? If yes, please provide details. If no, what is the plan for its implementation? (Focus)



### Monitoring Mechanisms

Q1 - How does your state collect and manage the data?

Q2 - Do you face any challenges in current data management system? If yes, what are the challenges?

(Focus)

### Financial Accountability

Q1 - Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what are the reasons? (Focus)

### Any Best Practices

Q1 - Can you provide some examples of innovative initiatives/best practices in terms of accountability/transparency? (Focus)

## SECTION 3: CHALLENGES AND SUGGESTIONS

- Broadly, what are the main challenges/ limitations that you see in this scheme from an implementation point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

SUGGESTIONS AND CORRECTIVE MEASURES	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

### 12.1.5 Village/Town level stakeholder - Chairman or Engineers of Municipality

#### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:



- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

### **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organization in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme **NRCP**. Since you are a key stakeholder in the scheme implementation at the village level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from national, state, district level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**



- Could you please mention since when have you been associated with this municipality? What are your current roles and responsibilities?

**RESEARCHER TO NOTE:**

17. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.
18. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, researcher should add additional probes to help answer those questions.

**SECTION 1: DEEP DIVE INTO NRCP SCHEME USING REESIE FRAMEWORK:  
EFFECTIVENESS**

**ET1: Is the scheme design appropriate to address scheme objectives?**

**Is there evidence that assumptions have been tested and are valid?**

- Q1. What is your overview of the scheme in terms of its implementation at the municipality level?
- Q2. Can you please provide us the information about the performance of the scheme component wise such as
- To what extent did the effluent from treatment plant discharging into river meet the standard norms?
  - Has the people been encourage to use the facility created under the scheme?

Please provide supporting evidence with respect to the above.

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

- Q1. Are the components considered in the scheme effective to reduce the pollution level of river water? How does the components be modified to get more effective outcome? (Validate)

**ET3 How has the scheme performed against scheme objectives and annual targets?**

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

- Q1. Does the status/ progress report send to State level monitoring/ implementing authority regularly? (Validate)
- Q2. Is there any issue for land acquisition? If yes, to what was the progress of the project hampered due to this issue?
- Q3. What are the other bottlenecks, issues & challenges in the implementation of the scheme? (Focus)

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**



**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1. What are the negative factors that have reduced scheme performance? (Focus)

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1. Has the utilization certificate submitted in time? (Validate)

Q2. How much time was required for releasing of fund? (Validate)

Q3. Is there any instance of affecting the progress of the project due to fund crisis? If yes, please share some document.

**Was there timely utilization of available funds? If not, what were the reasons?**

Q1 - Can you provide details of funds unutilized at the end of each year? (Focus)

Q2 - Can you provide month-wise details of how available funds were used? (Focus)

## **SUSTAINABILITY**

**SS2: Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1. What is the plan for generation of fund for O&M purpose? (Focus)

Q2. How much is the Allocation of fund for O&M purpose and who bears this cost? (Validate)

Q3 - What is the number and quality of human resources available for O&M phase? (Focus)

**SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1. What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes. (Focus)

## **EQUITY**



**EQ1: Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1. To what extent did the infrastructure created under the scheme provide access to women and other class of people specifically in case of low-cost sanitation and bathing ghat along river bank? (Focus)

**EQ2: Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1. Are people from all sectors of society involved for selection of project area? (Focus)

## **IMPACT**

**IM1: Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1. To what extent did the scheme reduce the pollution level in river water? (Validate)

Q2. To what extent did the scheme improve the livelihood status of the project area? (Validate)

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability & Transparency**

#### **Financial Accountability**

Q1 - Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what are the reasons? (Validate)

#### **Direct/Indirect Employment Generation- Employment generation**



Q1 - To what extent employment has generated, for skilled as well as unskilled jobs, on account of the scheme? (Validate)

Q2 - To what extent income level of people engaged in post construction stage i.e., O&M of STPs, Low cost sanitation etc. has increased due to this scheme? (Validate)

Q3 - What is the women participation (%) in the scheme at your state? Which projects are leading and which are lagging in this regard? (Validate)

#### **Any Best Practices**

Q1 - Are there any best practices, in terms of direct/ indirect employment generation, noticeable at your state? (Focus)

#### **Private sector involvement**

Q1 - Is there scope for private sector to be involved at any stage (e.g. during O&M phase) with a view to improve efficiency or for other reasons? If yes, how can it be implemented? If no, what are the challenges? (Focus)

#### **Use of IT/Technology in driving efficiency- Deployment of IT enabled mechanisms for monitoring of the Scheme**

In case of a scheme to create physical assets, is geotagging and use of geotagged photographs being done? (Validate)

Q1. Is geotagging and use of geotagged photographs being done?

If yes,

a. Mention what are the benefits accrued due to geo-tagging

b. Mention the challenges in this regard

Q1. How is technology being used for on-ground data collection? (Focus)

Q2. Do you envisage any other advanced technologies for data collection and monitoring purposes? (Focus)

#### **Use of latest technology to improve efficiency and effectiveness of scheme implementation**

Q1 - What are the technologies being used in project implementation, service delivery? Provide details (Focus)

#### **Contribution of improved practices in increasing outcomes**

Q1 - What is the impact of innovative technologies and practices on scheme outcomes? (Focus)

#### **Any Best Practice or innovation**

Q1 - Any best practices in this aspect (Focus)

### **SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from an implementation point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can be more beneficial for the people?



<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



# Annexure 13 Primary Survey Guide – FMBAP

The primary survey guide for 'Flood Management and Border Areas Program' is provided below.

## 13.1 Discussion Guide for KII

13.1.1 Nation level stakeholder - Senior Joint Commissioner, Flood Management,  
DoWR RD&GR, Ministry of Jal Shakti, Govt. of India

### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme - Flood Management and Border Area Programme (FMBAP). Since you are a key stakeholder in the scheme overseeing



planning and implementation at the national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

#### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH FMBAP SCHEME**

##### **RESEARCHER TO NOTE:**

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

#### **SECTION 1: DEEP DIVE INTO FMBAP SCHEME USING REESIE FRAMEWORK:**

##### **RELEVANCE**

**RL1: Is the scheme relevant in the present context?**

**Provide details of the relevant sectoral challenge, beneficiary need, national priority, SDG that pertain to the area in which the scheme is operating?**

Q1- Could you please provide an overview of the scheme in terms of the areas of sectoral challenge, beneficiary need, national priority, SDG which the scheme is designed to address?

Q2 – To what extent the coverage of land and population has increased over X, XI & XII Plan?

Q3 – In what ways, flood forecasts over the years have benefitted the population residing in flood zones?

**(Focus)**



**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1 - What are the nature and extent of protection provided through FMP & RMBA Components of FMBAP? **(Validate)**

Q2 - In what way, the issue of reclamation of land have been successfully addressed through the scheme? **(Focus)**

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1 – As evident from Memorandum for Expenditure Finance Committee on FMBAP what are the reasons for “Spillover portions of work” approved earlier? **(Focus)**

Q2 - What are the other flood control schemes under the aegis of GOI?

**RL2 Is it appropriate to continue / prioritize this scheme?**

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1 – To what extent the States are self-sufficient or have developed adequate capabilities of managing the FMBAP measures on their own? **(Focus)**

Q2 – For how many completed FMP projects, no further Central Assistance are provided? Can you please tell us how the States are maintaining such projects? **(Focus)**

Q2 - To what extent, other similar schemes viz., Dam Safety Studies and Planning (DSSP) and Community Based Disaster Preparedness (CBDP) have substantiated the desired outcome? **(Focus)**

**RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

**What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**

Q1 - Which key areas / components under the scheme could not be executed as planned? Provide reasons for the same. **(Validate)**

**Do the scheme objectives as stated in the EFC note appear in the scheme guidelines?**

Q1 - Status of Flood Plain Zoning across States

Q2 - What are the policy measures taken for:

- awareness generation,
- peoples' participation towards flood preparedness
- maintenance of flood protection structures

Please provide details of activities undertaken in line with the policy measures. **(Focus)**

**Gaps in broad sectoral outcomes - R&D in the sector**



Q1. List of Researches on Flood Protection & Prevention measures accepted by Gol

Q2. To what extent the research findings pertaining to flood control measures are widely disseminated?

## **EFFECTIVENESS**

ET1: Is the scheme design appropriate to address scheme objectives?

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1 – Nature of technical inputs provided to the States so far as Structural measures are concerned

Q2 - List of key achievements of River Management Activities & Works Related to Border Areas (RMBA) activities, considering the fact that funding for RMBA have increased over the periods 2017-18, 2018-19 & 2019-20. **(Focus)**

**Is there evidence that assumptions have been tested and are valid?**

Q1 - Based on past evaluation report, it is seen that the population and area covered have substantially decreased in XII Plan as compared to XI plan. What are the reasons?

Q2 - Are there any evidences showing that interventions under FMBAP have impacted migration, incidences of diseases, and such other socio-economic parameters? **(Focus)**

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1 - What additional measures are required to reduce rate of migration, pollution, improve hygiene, health? **(Focus)**

Q2 - Nature of technological improvements required for structural interventions to improve anti-erosion, drainage development, flood proofing works & catchment area treatment **(Focus)**

ET2: How are scheme targets set and monitored?

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1 - What are the validation mechanisms adopted for assessing the physical progress by State? **(Focus)**

Q2 - What are the criteria for assessing the demand of funds by the States? **(Focus)**

**What information is contained in utilization certificate issued by state govt? Are they credible and can they be relied upon as an indicator of scheme progress?**

Q1 – Is the information provided through the Utilization Certificates as submitted by the States adequate to assess the progress?



Q2 - What measures are taken to assess the validity of the information (particularly expenditures) contained in the UCs? **(Focus)**

### **ET3 How has the scheme performed against scheme objectives and annual targets?**

#### **What are the year wise scheme targets, if any, for the period 2015-16 onwards?**

Q1 – Apart from the scheme targets like physical units as elaborated in plan documents, are there targets set like estimated population, land, properties etc. that are set? If so, how are the estimates calculated? If no, are these done by the States? **(Validate)**

Q2 - What are the monitoring indicators adopted by the Department for assessing performance against physical and financial targets of the States? **(Focus)**

Q3 - What steps are taken to assist the States' to improve their performance? **(Validate)**

#### **What is the state wise, year wise performance against target?**

Q1 - Are there studies undertaken to review the steps taken for quality control of the works completed and in-progress? If yes, can you please share.

Q2 - What measures are taken to address the target- achievement gaps by the States? **(Focus)**

#### **Identify states that have performed well? What are the underlying reasons for such performance?**

#### **Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q1 - How do you measure the performance of the States? Which states are well performing well? What are the key reasons for their good performance? **(Focus)**

Q2 – Is there any annual Capacity Building Plan prepared for augmenting the capacities of the States?

Q3 - Any scope for including Flood Management performance indicators in CWMI?

#### **What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1 What are the key challenges faced in the way of effective execution of structural and non-structural measures planned under FMBAP? **(Focus)**

Q2 – Are there any Standard Operating Procedure (SOP) in place for implementing the interventions? If so, will it be possible to share the same?

#### **What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable.**

Q1 - To what extent GIS is being used for planning and monitoring of the Structural components? Are there any policies / directives by Gol in this regard? **(Focus)**

Q2 – Are there any Standard Operating Procedure (SOP) in place for implementing the interventions? If so, will it be possible to share the same?



Q2 - What other measures like

- capacity building,
- awareness generation
- Constitution and operationalization of River Basin Authorities

are considered as part of the entire planning process

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1 - List of indicators that are monitored regularly to assess performance of the components of both FMP (Flood Management Programme) & RMBA (River Management & Border Area Programmes) under the scheme. **(Focus)**

Q2 - Are there reports which tells about the performance of the States and component wise performance based on the indicators devised?

**Gaps in broad sectoral outcomes - Financing in the sector**

Q1. Are there instances where funds allotted to States for execution of interventions under FMBAP are parked / diverted? If so, what are the reasons

Q2. Considering the adherence to conditions required for receipt of funds and conditions required to be fulfilled for release of funds, how can there be a balanced approach so that funds are released such that works are completed expeditiously?

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1 - What are the reasons for lesser proportionate fund release to states during XII Plan as compared to that in XI plan? **(Focus)**

Q2 – What are the basis for release of 2<sup>nd</sup> and subsequent installments to the States? Are there gaps between demand of funds by the States and release of funds? If so, what are the reasons? **(Focus)**

Q3 - In what way it is ensured that the fund utilization is commensurate to physical progress?

**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**



Q1 – On what aspects / issues the monitoring agencies (CWC, GFCC & Brahmaputra Board) provide support to FMBAP for its better execution? **(Focus)**

Q2 - Nature of technical inputs received from NDMA & other institution like Flood Management Institute, etc. which help in monitoring the scheme & improve the quality of works undertaken

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1 - List of interventions (Structural & Non-Structural) that have been additionally taken up viz., strengthening of River Basin Authorities, Development of Dam Break Models, Flood Plain Zoning, providing infrastructural facilities & Capacity Building measures **(Focus)**

Q2 - To what extent fund allocation has been increased for the purpose

Q3 - To what extent the international matters like India - Bangladesh Cooperation, India - Bhutan Cooperation, India - China Cooperation, India - Pakistan and India - Nepal Cooperation are followed up?

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1 - List of FMBAP measures (both under FMP & RMBA) planned but not taken up yet and reasons for the same; particularly pertaining to coordination between basin states and dissemination of inflow forecasts of the reservoirs, constitution of River Basin Authorities **(Validate)**

**How can the scheme design be modified to mitigate the negative factors?**

Q1 – What measures have been adopted to maintain the structural measures (Check Dams/Reservoirs, Embankments, bank revetments, RCC Porcupines etc.)? **(Validate)**

Q2 - What measures have been adopted to improve the performance of Flood Forecasting & Warning Units?

Q3 - In what ways the community and CBOs perform towards

a) Maintenance of structural measures

b) timely transmission of flood forecasts and maintenance of structural measures? **(Validate)**

Q4 – Are there any specific case studies pertaining the above initiatives?

## **EQUITY**

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**



**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1 -Do FMBAP have the scope for preparing Flood Management Plans (FMPs)? If so, are there any guidelines issued in this regard? **(Validate)**

Q2 - In what way FMPs are prepared in a participatory way so that there is representation of all geographical areas, inclusion of people across all castes, income group and gender? **(Scope)**

**EQ2 Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1 - In what ways the Department ensures inclusion of beneficiaries across all caste, income groups and gender in the plans for Structural & Non-structural measures?

Q2 – At national perspective, does the proportions of Caste and economic class classifications as in FMPs at par with that in Census 2011? **(Validate)**

## **IMPACT**

IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1 - In what way the environment (land & water) and social factors like health, community infrastructures, power, drinking water are taken care of through the interventions of FMBAP? **(Focus)**

## **EFFICIENCY**

**EC1 Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1 – Have any studies been conducted to measure benefits and cost for projects implemented under the scheme? If yes, please share.



Q2 - How are the Benefit Cost Ratio worked out? Are there any guidelines prepared and disseminated to the States in this regard? **(Focus)**

**EC2 Can the costs of the scheme be lowered?**

**Are there lower cost alternatives for achieving the scheme outcomes?**

Q1- Are there any alternative low-cost interventions (structural & non-structural) that are implemented without diluting the scheme objectives? **(Focus)**

Q2 – In what ways, monitoring agencies i.e., CWC, GFCC & Brahmaputra Board have low-cost interventions / models in place? How far such interventions are feasible in terms of increasing the efficiency of FMBAP? **(Validate)**

**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1 – List of Ministries / Departments which are actively involved in providing support towards FMBAP.

Q2 - Type of supports that are provided by other Ministries / Departments with respect to flood preparedness. **(Focus)**

**SUSTAINIBILITY**

**SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1- Demand and allocation of O&M funds to States for structural & non-structural components **(Focus)**

Q2 - Reasons for gap between demand and allocation in respect of O&M

**SS5 Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1 - In what way following environmental impacts been realized as a result of implementation of FMBAP

Measures:

- Catchment run-offs & erosion
- Denudation of lands
- Reduced loss of vegetation
- Reduced salt intrusion of water

Please provide supporting evidence. **(Focus)**



Q2 - In what way following social impacts have been realized as a result of implementation of FMBAP measures:

- Improved security & safety
- Sustained income
- Lesser incidences of conflicts
- Lesser displacements

Can you share studies or other relevant data in respect of the above? **(Focus)**

**SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1 – **Technical Risks** – Does adoption of newer technologies or continuing with existing technologies affect the sustainability of the measures?

**Financial Risks** – More investment on structural or non-structural measures

**Economic Risks** – To what extent the Benefit – Cost Ratio is likely to increase

**Social Risks** – In what ways, FMBAP addresses social issues like migration, incidences of diseases, loss of labour

**Political Risks** – During last one year to what extent Flood Preparedness are discussed / debated in Lok Sabha and Rajya Sabha

**Environmental Risks** – How much focus is given to Climate Change issues in Flood Preparedness Plan? **(Focus)**

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability & Transparency- Availability of Data Records and Reports in public domain**

Q1. List of parameters that are being considered for decision making viz. fund release, performance analysis of states **(Validate)**

Q2. Do the monitoring agencies viz., Central Water Commission (CWC), Ganga Flood Control Commission (GFCC) & Brahmaputra Board (BB) adopt same approach / method for monitoring FMP & RMBA activities. If not, what different approach each of these monitoring agencies adopt?

### **Monitoring Mechanisms**



Q1. In what ways the Water Resources projects in neighbouring countries are monitored?

Q2. Which aspects of Flood Protection are monitored for border areas? **(Focus)**

### **Evaluation Mechanisms**

Q1. On what issues of flood protection, evaluation studies have been conducted?

Q2. List of recommendations of evaluation studies that has been taken into account for programme improvement **(Validate)**

### **Financial Accountability**

Q1. What aspects of States' performance is critical in deciding the fund release? **(Focus)**

Q2. Are there instances where funds allotted to States for execution of interventions under FMBAP are remaining unutilized? If so, what are the reasons? **(Validate)**

Q3. Considering the adherence to conditions required for release of funds, in what ways it affects the overall progress? **(Focus)**

### **Beneficiary involvement**

Q1. Are there scopes for participatory flood prevention in FMBAP?

Q2. Nature of participatory flood prevention activities within the scope of FMBAP? **(Focus)**

### **Employment generation**

#### **What is the level of employment generation through schemes in the sector and overall sectoral contribution in National employment generation?**

Q1. Scope of engaging local manpower for flood prevention activities

Q2. To what extent employments are generated at local level through FMBAP activities? **(Focus)**

### **Women participation (%) in the Sector/Program**

Q1. Which aspects of Flood Preparedness wherein Women Participation is critical are considered within the domain FMBAP? **(Focus)**

Q2. Are there policies particularly aimed at gender participation in flood protection interventions?

### **Gender mainstreaming- Inclusiveness in scheme design/planning**

Q1. Given the fact that many studies reveal that women play a pivotal role in disaster preparedness, to what extent, gender issues are addressed viz., health, hygiene, safety, food security, child care as a part of flood preparedness? **(Focus)**

### **Gender-friendly infrastructure and policies**



Q1. Do the policies / guidelines focus on gender issues? If so, list of such issues that are strongly addressed in the policy frameworks?

### **Climate change & sustainability including adoption of climate-change resilient practices & diversifications- Climate resilience**

Q1. To what extent Disaster Risk Reduction (DRR) & Climate Change Adaptation (CCA) are mainstreamed in FMBAP? **(Focus)**

Q2. Are the DRR & CCA plans attracting financial & technical support from national & international funding agencies?

### **Awareness and capacity building**

Q1. To what extent the capacity building of women is taken up as an integral part of FMBAP?

Q2. Extent of involvement of women in awareness generation towards flood preparedness. **(Focus)**

### **Climate impact**

Q1. On account of variation in rainfall, are the aspects like cropping pattern, soil management, being included in the DPRs / Flood Management Plans?

Q2. In what way FMBAP may be redesigned to include measures towards reducing crop loss, soil erosion? **(Focus)**

### **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population- Funds allocated under TSP/ SCSP and other provisions for vulnerable communities**

Q1. % allocation of total budget towards Tribal Sub Plan & SC Sub Plan? **(Validate)**

Q2. On what basis the TSP & SCSP are allocated to the States? **(Focus)**

### **Inclusion of vulnerable groups in scheme as well as sector**

Q1. Are there any specific flood prevention policies particularly for the disadvantaged groups?

### **Use of IT/Technology in driving efficiency- Deployment of IT enabled mechanisms for monitoring of the Schemes**

Q1. To what extent Geotagging of flood prevention structures are done?

Q2. How are the Geotagging data used for monitoring the progress of structural measures? **(Focus)**

### **How is technology being used for on-ground data collection?**



- Q1. List of technologies that are used for
- a. Flood forecasting
  - b. Hydrological observations
  - c. Inflow forecasts **(Validate)**
- Q2. Any other technologies apart from the above that are considered?

### **Use of latest technology to improve efficiency and effectiveness of scheme implementation**

Q1. Have the accuracy and frequency of flood forecasts increased over the years? If so, what are the reasons?

### **Technology to address key challenges**

Q1. Apart from flood forecasting techniques, are there other on ground techniques being used to safeguard housing, public/common infrastructures, infrastructures related to power generation?  
**(Validate)**

### **Stakeholder and Beneficiary behavioural change- Fund Allocation**

Q1. As per the reports only 0.3% of the total budget is allocated towards awareness generation. On what basis, the allocations are decided? **(Focus)**

### **Research & Development- Fund Allocation**

Q1. What was the fund allocation done for R & D prevention / DRR in the last Financial Year?  
Q2. List of such R & D works commissioned, submitted and accepted

### **Institutes and departments dedicated for R&D**

Q1. What inputs are provided by Institutes working on Flood Management in India viz.,

- National Disaster Management Authority (NDMA)
- All India Disaster Mitigation Institute
- Centre for Flood Management Studies, National Institute of Hydrology, Roorkee
- Flood Management Organization within CWC

### **Challenges in undertaking R&D efforts**

Q1. What are the reasons due to which some recommendations made through R & D works could not be accepted and integrated in policies on Flood Preparedness?

### **Unlocking Synergies with other Government Program- Potential areas for synergy**



Q1. In what ways different departments are complementary to each other for execution of an intervention? Please explain the roles and responsibilities of each department for major interventions of FMP & RMBA. **(Focus)**

### **Reforms, Regulations- Adoption of models acts and reforms at governance, institutional and administrative level**

Q1. List of mandatory and optional reforms measures to be achieved by the States in light of flood prevention. **(Focus)**

Q2. How the reform measures so undertaken by the States are monitored / validated?

### **Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme- Public-Private Partnership**

Q1. Type of private agencies which are actively involved in providing support for flood protection measures particularly in the areas of policy framework, planning, monitoring, capacity building etc,

Q2. Nature of such support

Q3. Challenges faced in course of such initiatives

### **Water sharing treatise / agreements and diplomacy- International water agreements**

Q1. What are issues pertaining to:

a) Flood forecasting on rivers common to India & Nepal, India & Bhutan, India & China, India & Bangladesh

Investigation of Water Resources projects in Neighbouring countries particularly for

- Pancheshwar Multipurpose Project

- Kosi High Dam

- Naumure Multipurpose Project

b) Flood protection / Anti-erosion works in border areas with Pakistan & Bangladesh **(Focus)**

#### **Interstate water agreements**

Q1. List of existing inter-state agreements

Q1. What are the range of issues that are covered in the water sharing agreements between states?

How well are such agreements are enforced? **(Focus)**

### **SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?



- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
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*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

13.1.2 Nation level stakeholder - Chief Engineer, Central Water Commission, FMO,  
DoWR, RD & GR, Ministry of Jal Shakti, New Delhi

**GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
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  - Tell me more about \_\_\_\_\_
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  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

**INTRODUCTION: SELF**

Thank you for giving us your valuable time.



- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme - Flood Management and Border Area Programme (FMBAP). Since you are a key stakeholder in the scheme overseeing planning and implementation at the national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

#### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH FMBAP SCHEME**

##### **RESEARCHER TO NOTE:**

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

#### **SECTION 1: DEEP DIVE INTO FMBAP SCHEME USING REESIE FRAMEWORK:**

##### **RELEVANCE**

<b>RL1: Is the scheme relevant in the present context?</b>
--



**Provide details of the relevant sectoral challenge, beneficiary need, national priority, SDG that pertain to the area in which the scheme is operating?**

Q1- Could you please provide an overview of the scheme in terms of the areas of sectoral challenge, beneficiary need, national priority, SDG which the scheme is designed to address?

Q2 – To what extent the measures taken viz., flood protection works, anti-erosion measures and river training works have benefitted the flood affected population over the years? **(Focus)**

Q3 – Other than the works mentioned above, are there other relevant flood protection measures? Can you please tell us of such extra measures?

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1 – How far the measures taken so far have reduced damages to crops, houses, cattle and public utilities?

Q2 – To what extent, more land has been reclaimed through implementation of the policies? **(Validate)**

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority and SDG?**

Q1 - What are the issues faced in course of executing the Structural and non-structural measures?

**(Focus)**

Q2 – What are the issues faced in adopting a technology for Structural and non-structural measures?

**(Focus)**

**Adequacy - Low total water storage capacity as well as water storage capacity per capita in dams**

Q1. Should there be any change to protocol adopted as to the in respect of sequence of filling up of dams in monsoon to avoid floods and at the same time ensure high storage volume for the rest of the year?

Q2. Is there any design, or O&M or other innovations that may be adopted required to support such optimization?

**Gaps in broad sectoral outcomes - Capacity building of the organizations/utilities creating and managing Water Resources infrastructure and providing service**

Q1. Nature of Capacity Building activities undertaken

Q2. Overview of personnel's who are provided trainings.

Q3. Do the State Annual Plan for Flood Management include CB capacity building & Awareness Generation activities?



## **RL2 Is it appropriate to continue / prioritize this scheme?**

### **What would be the impact if the scheme were to be scaled down or stopped?**

Q1 - To what extent the States are self-sufficient in maintaining the completed structural components?

**(Validate)**

Q2 – To what extent, the Central Assistance for FMP & RMBA activities are going to change in the next allocation? **(Focus)**

### **Equity - High spatial variance in surface water availability and River interlinking**

Q1. To what extent the National Waterways Project (NWP) scheme is functional?

Q2. Are any inter-basin transfer projects being undertaken? Please provide status of transfer of water from river basin to another of the same.

## **RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

### **What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**

Q1 – Which components of FMBAP could not be implemented as per the plan? What are the reasons for which the components could not be implemented as per the targets?

Q2 – Can you please provide the list of indicators for flood preparedness? Gaps in results of the indicators as per planned documents vis-à-vis reports.

### **Do the scheme objectives as stated in the EFC note appear in the scheme guidelines?**

Q1 – What is the status of

- Flood Plain Zoning
- living with floods
- catchment area treatment
- Soil & moisture conservation

across states? **(Focus)**

Q2 – How much importance is given towards

- awareness generation,
- peoples' participation towards flood preparedness
- maintenance of flood protection structures using local resources

Please provide details of activities undertaken in line with the policy measures. **(Validate)**

### **Gaps in broad sectoral outcomes - R&D in the sector**



Q1 – Are there any research works which has taken place for Flood Preparedness during last one year?  
Can you please provide us the list of such researches?

Q2 - To what extent the research findings pertaining to flood control measures are widely disseminated across all staff starting from Govt. of India to the Panchayat officials? **(Validate)**

## **EFFECTIVENESS**

### **ET1: Is the scheme design appropriate to address scheme objectives?**

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1 - What are the prime reasons for reducing the ACA from Rs.6124.87 Cr. In XI Plan to Rs.4412.60 Cr. In XII Plan? **(Validate)**

Q2 – What are the key achievements of River Management Activities & Works Related to Border Areas (RMABA) activities? **(Validate)**

**Is there evidence that assumptions have been tested and are valid?**

Q1 – What are the reasons for the fact that the population and area covered have substantially decreased in XII Plan as compared to XI plan? **(Validate)**

Q2 – Can you please provide us instances wherein it is seen that interventions under FMBAP have impacted factors like migration, incidences of diseases, and such other socio-economic parameters? **(Focus)**

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1 – In order to reduce rate of migration, pollution, improve hygiene, incidences of disease what additional measures are required? **(Validate)**

Q2 - Nature of technological improvements required for structural interventions to improve anti-erosion, drainage development, flood proofing works & catchment area treatment **(Validate)**

**Overall nature and responsiveness of Water sector planning - Lack of proper planning and data management**

Q1. Is there a time bound action plan to accelerate flood forecasts on real time basis?

Q2. To what extent there is access to other relevant data from other departments like Minor Irrigation Dept., Dept. of Agriculture, Dept. of Animal Husbandry etc. for planning and execution of the scheme? If yes, please indicate the nature of data required and the extent of coordination that is forthcoming from these departments?



Q3. To what extent, Is data on flood preparedness is shared available on public platforms? If yes, what kind of data is available?

### **ET2: How are scheme targets set and monitored?**

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1 – In what ways, CWC validates the progress made by the States? What mechanisms are adopted for such assessments? **(Focus)**

Q2 – How are the demand for Central Assistance by States are assessed? List of criteria considered for the same. **(Validate)**

**What information is contained in utilization certificate issued by state govt? Are they credible and can they be relied upon as an indicator of scheme progress?**

Q1 – To what extent the information contained in the UCs that are submitted by the States are adequate?

Q2 - What measures are taken to assess the validity of the information (particularly receipt and expenses) contained in the UCs? **(Validate)**

### **ET3 How has the scheme performed against scheme objectives and annual targets?**

**What are the year wise scheme targets, if any, for the period 2015-16 onwards?**

Q1 – How are the targets viz., protection to be provided to x% of population, y% of land to be protected etc. are set? How are the targets calculated at the end of CWC? **(Focus)**

Q2 – On what basis the monitoring indicators are devised for assessing performance by the States? **(Validate)**

Q2 – Are there any reports where explains the indicator wise performance of the States?

**What is the state wise, year wise performance against target?**

Q1 – Is there any ranking system or other mechanisms vide which the States are ranked as per the performances made towards physical and financial targets? If so, can you please share the details of such ranking system? **(Focus)**

Q2 - What measures are taken to address the target- achievement gaps by the States?

**Identify states that have performed well? What are the underlying reasons for such performance? Identify states that have performed poorly? What are the underlying reasons for such performance?**

Q1 - How are well performing States identified? Which states are performing well? What are the key factors identified for identifying a State as “Well Performer”? **(Focus)**



Q2 – Similarly as above, which States are identified as not-so-well performing? To what extent, these States fall below the performance benchmarks? **(Focus)**

#### **What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1 – Are there any Standard Operating Procedure (SOP) in place for implementing the interventions?

Q2 – What are the reasons that the SOPs are not followed resulting in gap between targets and achievements? **(Validate)**

#### **Adequacy - Low total water storage capacity as well as water storage capacity per capita in dams**

Q1. In what ways the States manage excess water from Dams during and after monsoon?

Q2. How far the River Basin Authorities provide support towards augmenting the storage capacity in dams?

Q3. To what extent GIS has been used in connection with inflow forecasts to check the adequacy excessiveness of water (which is likely to be a risk factor) during and after floods?

Q4. In what ways, the have the River Basin Authorities have contributed to flood forecasting and warning systems?

#### **Gaps in broad sectoral outcomes - Staffing levels**

Q1. Total staff strength: Region wise technical and non-technical staff of CWC

Q2. Total staff strength: (River Basin Organizations) RBO wise technical and non-technical staff.

#### **Gaps in broad sectoral outcomes - Project Management issues and Slow project execution**

Q1. Time overrun for ongoing FMBAP Projects, of Structural and non-Structural measures

Q2. Release of fund down the level starting from GOI to State to District, Block and Panchayats.

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

#### **Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1 – Have the demand for funds have decreased in XII Plan as compared to XI Plan? **(Validate)**

Q2 - In what way it is ensured that the fund utilization commensurate with physical progress?

#### **What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**



Q1 – With which Departments / Wings do CWC interact / coordinate on regular basis? On which aspects of FMBAP does such communications take place? **(Focus)**

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1 – What Structural & Non-Structural interventions that has been additionally taken up viz., Development of Dam Break Models, Flood Plain Zoning, providing infrastructural facilities & Capacity Building measures? **(Validate)**

Q2 – How much fund allocations are made for the aforesaid interventions?

Q3 - To what extent the international matters like India - Bangladesh Cooperation, India - Bhutan Cooperation, India - China Cooperation, India - Pakistan and India - Nepal Cooperation are followed up?

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1 - List of Flood Forecast measures planned but not taken up yet and reasons for the same; particularly pertaining to functioning of Flood Forecasting Stations, Level Forecasting Stations and Inflow Forecasting Stations? **(Focus)**

**How can the scheme design be modified to mitigate the negative factors?**

Q1 - What measures have been adopted or are planned to be taken up to improve the performance of Flood Forecasting & Warning Units? **(Focus)**

Q2 - In what ways CWC has taken necessary steps to enable the community and CBOs perform towards timely transmission of flood forecasts and maintenance of structural measures? **(Focus)**

**Adequacy - Low total water storage capacity as well as water storage capacity per capita in dams**

Q1. Current status of inter-state issues pertaining to release of water from dams.

Q2. Role of regional boards in mitigating the issue of flood on account of release of excess water from one State to another.

## **EQUITY**

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**



**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1 -Do the flood management plans (FMPs) prepared ensure participatory, inclusive and gender sensitive approach are included?

Q2 - In what way FMPs are prepared in a participatory way so that there is representation of flood affected population across all flood affected areas?

**EQ2 Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1 - In what ways the CWC and other monitoring authorities ensures that there is inclusion of beneficiaries across all caste, income groups and gender in the plans for Structural & Non-structural measures?

**Equity - High spatial variance in surface water availability and River interlinking**

Q1. In what ways the River Basin Organizations have ensured supply of water to the lower riparian states, and to states which face acute shortage of irrigation water?

Q2. To what extent the National River Linking Project (NRLP) has been successful in Flood control through managing surplus water?

Q3. To what extent the NRLP has contributed towards recharging the groundwater thereby increasing the stock; evidences / reports to substantiate the objective?

**IMPACT**

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1 – What impacts the measures of FMBAP are made with respect to normalizing the daily life of flood affected population? **(Focus)**

Q2 – To what degree, FMBAP has contributed towards ensuring safe drinking water, sanitation, resisting land degradation? **(Focus)**



## Sustainability - Climate Change

Q1. How does FMBAP (or perhaps other flood related schemes) need to be modified to address the impacts of climate change? **(Focus)**

### **EFFICIENCY**

#### **EC1 Did the benefits of the scheme exceed costs?**

##### **What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1 – In light of Techno-economic appraisal of flood control proposals by the States, are the Benefit Cost Ratio (BCR) aspect included in the proposals? If so, how is the BCR validated?

#### **EC2 Can the costs of the scheme be lowered?**

##### **Are there lower cost alternatives for achieving the scheme outcomes?**

Q1- Are there any reports / studies specifying alternative low-cost interventions (structural & non-structural) that are / may be implemented without diluting the scheme objectives? **(Validate)**

##### **Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1 - In what way other Ministries / Departments with respect to flood preparedness are involved? **(Validate)**

Q2 - Nature of inputs received from other Ministries / Departments. **(Validate)**

### **SUSTAINIBILITY**

#### **SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

##### **Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1- Are there gaps between the demand and allocation of O & M funds for maintenance of functional structural & non-structural components? What are the reasons for such gaps? **(Validate)**

Q2 – Is there a need to have CWC monitoring offices below the regional level? **(Focus)**

##### **Access - Widening IPC-IPU Gap**

Q1. - Any policies that has have helped in integrating surface water irrigation system with flood control measures?

#### **SS5 Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**



**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1 – What are the impacts of implementation of following FMBAP Measures: **(Focus)**

- Catchment run-offs & erosion
- Denudation of lands
- Reduced loss of vegetation
- Reduced salt intrusion of water

Q2 – As a result of implementation of FMBAP measures to what extent the following social impacts have been realized: **(Focus)**

- Improved security & safety
- Sustained income
- Lesser incidences of conflicts
- Lesser displacements

**SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1 – In view of the risks as deliberated below, how the risks are mitigated? **(Focus)**

<b>Risks</b>	<b>Explanation</b>	<b>Comments</b>
Technical Risks	In what ways adoption of newer technologies or existing technologies affect the sustainability of the measures	
Financial Risks	Emphasis on Structural measures may have diluted the execution of non-structural measures	
Economic Risks	To what extent the Benefit Cost Ratio is likely to increase	
Social Risks	To what extent the social issues like migration, incidences of diseases, safety, loss of man-days are addressed?	
Political Risks	How frequently the issue of flood preparedness and flood control are discussed in Rajya Sabha	



Environmental Risks                      How far the Climate Change Adaptations are included in the DPRs / Flood Management Proposals

### **Adequacy - Low total water storage capacity as well as water storage capacity per capita in dams**

- Q1. How are the storage capacities of reservoirs and dams are checked on regular basis?
- Q2. To what extent the information so collected are used to the benefit of the farmers?

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability & Transparency- Availability of Data Records and Reports in public domain**

- Q1. What factors are considered for decision making with respect to fund release, performance analysis of states? **(Validate)**
- Q2. In what ways the monitoring reports are available for public viewing? In what different ways such information are disseminated for public viewing? **(Focus)**

### **Monitoring Mechanisms**

- Q1. How the Water Resources projects in neighbouring countries are monitored by CWC? **(Focus)**
- Q2. Which aspects of Flood Protection and Flood Preparedness are monitored for border areas? **(Focus)**

### **Evaluation Mechanisms**

- Q1. During last one year how many evaluations have been conducted? On what issues of flood protection, evaluation studies have been conducted?
- Q2. What were the recommendations of the evaluation studies that has been taken into account for programme improvement? **(Validate)**

### **Financial Accountability**

- Q1. What aspects of States' performance are considered in deciding the fund release? **(Validate)**
- Q2. Other aspects that determine the quantum and periodicity of fund release. **(Validate)**

### **Beneficiary involvement**

- Q1. To what extent there are scopes for participatory flood prevention in FMBAP? **(Validate)**

### **Direct/Indirect Employment Generation- Employment generation**



### **What is the level of employment generation through schemes in the sector and overall sectoral contribution in National employment generation?**

Q1. In what ways local manpower are engaged for flood prevention activities? **(Validate)**

### **Gender mainstreaming- Inclusiveness in scheme design/planning**

Q1. In what ways gender issues are addressed viz., health, hygiene, safety, food security, child care as a part of flood preparedness? **(Validate)**

### **Gender-friendly infrastructure and policies**

Q1. Do the infrastructures which are constructed under FMBAP, actively considers factors like sanitation, women safety, easy access etc.? **(Validate)**

### **Climate change & sustainability including adoption of climate-change resilient practices & diversifications- Climate resilience**

Q1. What aspects of Climate Change Adaptation are mainstreamed in FMBAP? **(Validate)**

### **Awareness and capacity building**

Q1. In what ways the capacity building of local women is taken up as an integral part of FMBAP? **(Validate)**

Q2. Extent of involvement of women in awareness generation. **(Validate)**

### **Climate impact**

Q1. On account of variation in rainfall, are the aspects like cropping pattern, soil management, in light of varying rainfall being included in the guidelines?

Q2. In what way FMBAP may be redesigned to include measures towards reducing crop loss, soil erosion? **(Validate)**

### **Inclusion of vulnerable groups in scheme as well as sector**

Q1. How are the disadvantaged groups are considered during planning? **(Validate)**

### **Use of IT/Technology in driving efficiency- Deployment of IT enabled mechanisms for monitoring of the Schemes**

Q1. List of technologies that are being used by CWC as part of regular monitoring of:

- A) Physical Progress of Structural works
- B) Flood Forecasting and inflow forecasting
- C) Hydrological observations **(Focus)**



### **Use of latest technology to improve efficiency and effectiveness of scheme implementation**

Q1. States which are actively using Flood Forecasting & Hydrological Observation

Q2. Factors that distinguishes these states from others w.r.t use of technologies **(Validate)**

### **Technology to address key challenges**

Q1. What on- ground techniques are used to ensure safeguarding housing, public/common infrastructures, infrastructures related to power generation? **(Validate)**

### **Stakeholder and Beneficiary behavioural change- Fund Allocation**

Q1. What proportion of CWC budget for flood protection and preparedness is allocated for awareness generation, capacity building of stakeholders? **(Focus)**

### **Research & Development- Fund Allocation**

Q1. Fund allocation done for R & D on flood prevention / Disaster Risk Reduction (DRR) Plans

Q2. List of such R & D works commissioned, submitted and accepted **(Validate)**

### **Institutes and departments dedicated for R&D**

Q1. What coordination exist between CWC and

- All India Disaster Mitigation Institute
- Centre for Flood Management Studies, National Institute of Hydrology, Roorkee
- Flood Management Organization within CWC

With respect to research works and / or evaluation studies flood prevention and preparedness **(Validate)**

### **Challenges in undertaking R&D efforts**

Q1. Apart from the areas on Structural & Non-structural measures, additional areas of research pertaining to flood mitigation, DRR, CCA that may have helped in framing policies **(Validate)**

### **Reforms, Regulations- Adoption of models acts and reforms at governance, institutional and administrative level**

Q1. How the reform measures so undertaken by the States are monitored / validated by CWC or its regional offices?

### **Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme- Public-Private Partnership**



- Q1. Type of private agencies which are actively involved in providing inputs for flood protection measures particularly in the areas of policy framework, planning, monitoring, capacity building etc, **(Validate)**
- Q2. Nature of such support
- Q3. Challenges faced in course of such initiatives

**Water sharing treatise / agreements and diplomacy- International water agreements**

- Q1. What are the issues pertaining to:  
 Flood forecasting on rivers common to India & Nepal, India & Bhutan, India & China, India & Bangladesh  
 Investigation of Water Resources projects in Neighbouring countries particularly for  
 - Pancheshwar Multipurpose Project  
 - Kosi High Dam  
 - Naumure Multipurpose Project  
 Flood protection / Anti-erosion works in border areas with Pakistan & Bangladesh **(Validate)**

**Interstate water agreements**

- Q1. What are the range of issues covered in the water sharing agreements between states? How well are such agreements enforced?

**SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



### 13.1.3 State level stakeholder - State Nodal Official (State Flood Control / Irrigation Department / PWD / Water Resources Department)

#### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme - Flood Management and Border Area Programme (FMBAP). Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from nation, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes



- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH FMBAP SCHEME**

#### **RESEARCHER TO NOTE:**

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

### **SECTION 1: DEEP DIVE INTO FMBAP SCHEME USING REESIE FRAMEWORK:**

#### **EFFECTIVENESS**

ET1: Is the scheme design appropriate to address scheme objectives?

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1 – Are fund allocations by Govt. of India adequate for implementing all activities proposed in the DPRs?

**(Validate)**

Q2 – What additional amount of State share has been planned as compared to the State Share proposed in the previous year? **(Focus)**

**Is there evidence that assumptions have been tested and are valid?**

Q1 - Apart from increased funding by the Ministry what are the State's initiatives that have led to improved results (viz., increase in population protected, increase in quantum of land protected, decreased loss of crops and vegetables etc.) in Flood Management?



Q2 – On account of continued interventions, how far the factors like migration, incidences have decreased over the years? **(Focus)**

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1 – What changes / alterations in flood preparedness / protection plans are required to ensure that migration is reduced, ground water is less polluted, there are less salt intrusions, increased availability of safe drinking water? **(Focus)**

Q2 - Nature of technological improvements required for structural interventions so as to effectively execute anti-erosion, drainage development, flood proofing works & catchment area treatment

**Adequacy - Low total water storage capacity as well as water storage capacity per capita in dams**

Q1. What mechanisms are presently available for communicating the inflow forecasts of the dams? Is there scope to improve the forecast and its communication? In what ways? **(Focus)**

**Gaps in broad sectoral outcomes - Staffing levels**

Q1. Is there inadequacy of staff for FMBAP, are there any plans for engaging a Project Monitoring Unit (PMU) for supporting the Department in management and monitoring? **(Validate)**

**Gaps in broad sectoral outcomes - Project Management issues and Slow project execution**

Q1. What are the reasons for time overrun for ongoing FMBAP Projects? Please explain with supporting reasons.

Q2 – What is the average time lag between submission of UCs and receipt of fund from GOI?

**Overall nature and responsiveness of Water sector planning - Groundwater Level Monitoring**

Q1. To what extent, the State attempts to measure the groundwater level before and after floods?

Q2. In case, the same is monitored by Central Ground Water Board (CGWB), are the data, information disseminated to the Flood Management wing at State Level? How is that data used for FMBAP scheme?

**(Focus)**

**ET2: How are scheme targets set and monitored?**

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1 – How the estimation of protections is made through DPRs & Flood Management Plans (FMPs)? **(Focus)**



Q2 – How are progress assessed as against the targets enumerated in flood preparedness plans? **(Focus)**

**What information is contained in utilization certificate issued by state govt? Are they credible and can they be relied upon as an indicator of scheme progress?**

Q1 - List of Reports and other supporting documents that are prepared and submitted by the State in the event of submitting the UCs to GOI

Q2 - What are the mechanisms adopted by the State to check the utilization and the subsequent physical progress prior to submission of UC (viz., field visits, meetings with district officials, video conferences, checking of relevant records etc.)

**ET3 How has the scheme performed against scheme objectives and annual targets?**

**What are the year wise scheme targets, if any, for the period 2015-16 onwards**

Q1 - For assessing the effectiveness of FMBAP interventions what monitoring indicators are adopted by the State?

Q2 – What are the major gaps identified? **(Focus)**

**What is the state wise, year wise performance against target?**

Q1 – Has the performance of the State for major flood preparedness indicators improved? If so, for which indicators? **(Focus)**

Q2 – What are the reasons for improved results?

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1 - Which components / interventions of FMBAP have not been substantially implemented as planned? Reasons for not implementing the components / interventions? **(Validate)**

Q2 – What are the issues faced during implementation of the approved plans? **(Focus)**

**What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable.**

Q1 - What factors are taken into consideration while preparing state budget for flood mitigation interventions? **(Focus)**

Q2 - How the River Basin Authorities and Monitoring Agencies (CWC / BB / GFCC) support the State in preparing plans? **(Validate)**

Q3 - To what extent the State uses GIS, softwares, applications etc. for planning of flood preparedness activities, particularly flood forecasting and inflow forecasting? **(Validate)**



**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1 – Apart from the set of indicators as per GOI guidelines are there any State specific indicators? If so, what are they? **(Focus)**

Q2 - Kind of reports obtained from the districts on intervention-based performances

**Adequacy - Low total water storage capacity as well as water storage capacity per capita in dams**

Q1. How do the State manage the excess inflow of water from Dams during and after monsoon? Do the State have any Standard Operating Procedure in place for such events?

Q2. Details of River Basin Authorities being already set up along with the guidelines prepared towards effective functioning of the authorities

Q3. In what ways, the River Basin Authorities have contributed to flood forecasting and warning systems?

**Quality - Quality related issues for groundwater**

Q1. Given the fact that groundwater pollution does occur after floods, who assesses the same? Are there any evidences vide which groundwater pollution is assessed?

Q2. Data on groundwater pollution for last 5 years.

Q3. What measures are undertaken for groundwater pollution abatement?

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1. Kindly provide us the details of fund utilization vis-à-vis fund receipt. Is fund utilization for instalments received so far is below 70% (70% fund utilization being the benchmark for submission of UCs)

Q2 - Reasons for

- underutilization of funds (if any)
- delayed submission of UCs (if any)

Q2 - Reasons for variance between Physical and Financial progress **(Focus)**

*[Physical progress for a component may be relatively higher than fund utilized towards the component or vice versa]*

**Was there timely utilization of available funds? If not, what were the reasons?**



Q1 – What is the time lag for structural measures undertaken in the State? To what extent it has led to delayed utilization of funds?

Q2 - What are the issues faced by the States towards timely submission of UCs to GOI?

Q2 - How do the States tackle the issue of implementation of FMBAP interventions in light of fund shortage? **(Focus)**

**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1 - What are the reasons that have resulted in reducing the flood damages caused over the years? **(Focus)**

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1 – To what extent actions have been initiated by the State towards

- Preparation of Dam Break Models
- Preparation of River Basin wise Emergency Action Plan
- Flood plain zoning **(Focus)**

Q2 - What are the capacity building measures that are taken up for the State and district officials by State Flood Control board? **(Focus)**

**How can the scheme design be modified to mitigate the negative factors?**

Q1 – Has there been increase in frequency and accuracy of flood and inflow forecasts? If yes what measures have been adopted to improve the performance of Flood Forecasting & Warning Units within the State?

Q2 - How the community and CBOs are involved towards timely transmission of flood forecasts and maintenance of structural measures? **(Focus)**

**Adequacy - Low total water storage capacity as well as water storage capacity per capita in dams**

Q1. What are the issues involved in respect of inter-state water sharing issues including release of water from dams? How are such issues being presently addressed? Please provide evidence in support of your answer.

Q2. Role of regional boards in mitigating the issue of flood on account of release of excess water from one state to another.

**Equity - High loss in canal network**



Q1. In what ways the State, has adequately taken up measures to protect the canals from floods viz., measures to counter the inundation of canals, distillation of canals etc.

### **Access - Gap in irrigation coverage**

Q1. To what extent there has been increase of ground water table as a result of flood and increase in net irrigated areas in both rainfed zones and Hilly Areas?

Q2. Any policies adopted by the State that has helped in integrating surface water irrigation system with flood control measures?

### **Water Security - Agriculture Sector Contribution**

Q1. Are there techniques that uses excess flood water for irrigation of agricultural lands situated in rainfed areas particularly during summer?

Q2. Please provide evidences where such techniques are used?

### **EQUITY**

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1 -To what extent the flood management plans (FMPs) prepared ensure inclusion of participatory, inclusive and gender sensitive approach?

Q2 – How far the FMPs that are prepared, are done in a participatory way so that there is representation of flood affected population across all flood affected areas of the State? **(Focus)**

**EQ2 Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1 – How are the exclusions of a class of people are managed at the State level?

### **Equity - High spatial variance in surface water availability and River interlinking**



EQ1:

Q1. In what ways the River Basin Organizations have ensured supply of water to the lower riparian states, and to states which face acute shortage of irrigation water?

Q2. To what extent the National River Linking Project (NRLP) has been successful in Flood control by managing surplus water?

## **IMPACT**

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1 – To what magnitude the environment (land & water) and social factors like health, community infrastructures, power, drinking water are taken care of through the interventions of FMBAP? **(Focus)**

### **Sustainability - Climate Change**

Q1. How does FMBAP (or perhaps other flood related schemes) need to be modified to address the impacts of climate change? (e.g. flood forecasting, early warning systems, dam operation procedures, flood prevention works, etc.)

## **EFFICIENCY**

**EC1 Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1 - At State level, how the Benefit Cost Ratio worked out?

Q2 - What are the factors considered for calculating the Benefit Cost Ratio?

### **Adequacy - Low total water storage capacity as well as water storage capacity per capita in dams**

Q1. How are the storage capacities of reservoirs and dams are checked on regular basis as a support mechanism of monitoring flood?

Q2. To what extent the information so collected are used to the benefit of the farmers?

**EC2 Can the costs of the scheme be lowered?**

**Are there lower cost alternatives for achieving the scheme outcomes?**



Q1 - List of low-cost interventions with respect to flood preparedness at state level

Q2 - To what extent the cost is lowered during implementation as against the proposed cost for FMBAP interventions? **(Focus)**

Q3 - Are there evidences of cost reductions? If yes, can such evidences be provided? **(Validate)**

**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1 – What kind of support / inputs are provided by other Departments / Pvt. Agencies / CBOs at State pertaining to flood preparedness interventions? **(Focus)**

**Adequacy - Low total water storage capacity as well as water storage capacity per capita in dams**

Q1. Is there inter-state coordination in respect of water flow through dams / reservoirs, so as to minimize extent of floods arising due to the dams? If yes, please explain the nature of such coordination. **(Focus)**

**Overall nature and responsiveness of Water sector planning - Greater coordination between the various central government level organizations and the state government departments**

Q1. In what ways the different departments controlling specific schemes coordinate with each other on flood preparedness? [Ex. In what ways Flood Control wing coordinate with Dept. of Agriculture & Rural Development] **(Focus)**

**SUSTAINIBILITY**

**SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1- Requirement and allocation for O&M and the gap thereof? **(Validate)**

Q2 – Have the State institutionalized local organizations for effective flood management? If so, kindly provide the details. **(Focus)**

**Access - Widening IPC-IPU Gap**

Q1. Comparison of IPC-IPU Gap in flood affected villages and villages which were not affected due to effective flood protection measures.

**SS5 Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**



Q1 - In what way following environmental impacts been realized as a result of implementation of FMBAP

Measures:

- Catchment run-offs & erosion
- Denudation of lands
- Reduced loss of vegetation
- Reduced salt intrusion of water

Please provide supporting evidence.

Q2 - In what way following social impacts have been realized as a result of implementation of FMBAP

measures:

- Improved security & safety
- Sustained income
- Lesser incidences of conflicts
- Lesser displacements

Please provide supporting evidence.

**SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1 - Impact of flood protection measures so far, in terms of evidences in the following areas: **(Focus)**

**Technical:** O & M policies are in place

**Institutional:** Inter & intra departmental communication; inter state communication

**Financial:** Reduced budget towards structural measures & increased budget towards non-structural measures

**Economic:** Lesser land, crop & property damages

**Social:** Community participation, reduced migration

**Environmental:** Denudation of lands, salt intrusion, pollution

#### **RELEVANCE**

**RL1: Is the scheme relevant in the present context?**

**Provide details of the relevant sectoral challenge, beneficiary need, national priority, SDG that pertain to the area in which the scheme is operating?**

Q1 – To what extent the flood damages in the State has reduced over X, XI & XII Plan?

Q2 – To what magnitude, the quantum of land has been increasingly protected over X, XI & XII Plan?

**(Focus)**



**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1 - What protective measures have been undertaken by the State and the extent of the measures that are executed in the State (completed & ongoing)? **(Focus)**

Q2 - What new interventions are planned for the next year? Can you please elaborate on such interventions? **(Focus)**

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1 – Are there areas pertaining to flood protection which were not achieved or not implemented? If so, can you please tell us such interventions?

Q2 – What are the reasons that the said interventions / activities could not be achieved as per the target or could not be implemented? **(Focus)**

**Adequacy - Low total water storage capacity as well as water storage capacity per capita in dams**

Q1. Has the storage capacity of the dams reduced over the years? If so, what are the reasons? **(Focus)**

Q2. Is the storage capacity of the dams maintained over the years? If so, what initiatives has been taken at the end of the State? **(Focus)**

**Gaps in broad sectoral outcomes - Capacity building of the organizations/utilities creating and managing Water Resources infrastructure and providing service**

Q1. Do the State Annual Plan for Flood Management include Capacity Building & Awareness Generation activities?

Q2. What are broad contents of the Capacity Building Plan?

**RL2 Is it appropriate to continue / prioritize this scheme?**

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1 – How far the requirement of fund for new schemes in the State has reduced over the years?

Q2 - Are there any State sponsored schemes on Flood Protection which may be upscaled so that the desired outcomes are met? Please elaborate on the scheme? **(Focus)**

**RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

**What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**



Q1 – What indicators with respect to Flood Preparedness and Protection are met fully / partly / not met?

**(Focus)**

Q2 – What are the reasons for partial fulfillment of such components / areas? **(Focus)**

### **Do the scheme objectives as stated in the EFC note appear in the scheme guidelines?**

Q1 – What is the status of Flood Plain Zoning in the State? Is the Flood Plain Zoning Bill implemented in the State? **(Focus)**

Q2 - Has the State has acquired land for Structural measures under FMBAP? If so, kindly elaborate the mechanisms through which land is acquired for such Structural measures. **(Focus)**

Q3 – What initiatives taken by the State towards increasing peoples' participation for maintenance of flood protection structures? **(Focus)**

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability & Transparency- Availability of Data Records and Reports in public domain**

Q1. Monitoring parameters considered for decision making viz., physical progress vis-à-vis fund utilization by the districts and / or blocks

Q2. List of reports submitted by State to various Govt, agencies

### **Monitoring Mechanisms**

Q1. To what extent, the flood control measures are monitored in border areas?

Q2. In what ways, the monitoring agencies (CWC, GFCC & BB) provide support to the States on monitoring of FMBAP components?

### **Evaluation Mechanisms**

Q1. On what issues of flood protection, evaluation studies have been conducted?

Q2. What are the State specific issues that has been pointed out through evaluation studies?

### **Citizen Accountability**

Q1. In what ways the monitoring agencies adopt participatory monitoring techniques?

Q2. To what extent the public views on quality of structural measures and effectivity of the non-structural measures are sought during monitoring visits?

### **Financial Accountability**



Q1. What aspects of Districts' performance are especially taken care of while assessing the fund utilization by the Districts?

Q2. In absence of Additional Central Assistance (ACA), in what ways State ensures continuation of physical progress?

#### Any Best Practices

Q1. Any best practices pertaining to maintenance of assets, monitoring of works by beneficiaries?

Q2. To what extent the same are replicated to other areas affected / partially affected by floods

#### Beneficiary involvement

Q1. To what extent there are scopes for participatory flood prevention in FMBAP?

Q2. If so, what kind of support the State extends to the Districts or down the level?

#### Direct/Indirect Employment Generation- Employment generation

Q1. Nature of works which requires semi-skilled and unskilled manpower at local level for flood protection measures

Q2. To what extent local manpower are employed for construction of structural measures

#### women participation (%) in the Sector/Program

Q1. To what extent, women are engaged in monitoring of work quality of the structural measures

Q2. Are there any other activities pertaining to flood prevention where women participation is ensured?

#### Gender mainstreaming- Inclusiveness in scheme design/planning

Q1. To what extent, issues pertaining to safety, security and health of women are considered in FMPs and DPRs

#### Any Best Practices

Q1. Evidences that women groups (SHGs, Mahila Mandals) are actively involved in community plans for structural and non-structural measures?

#### Climate change & sustainability including adoption of climate-change resilient practices & diversifications- Climate resilience

Q1. In what ways Hazard, Risk, Vulnerability & Capacity Assessment (HRVCA) are considered as part of overall planning?

*Note: Hazard, Risk, Vulnerability and Capacity Assessment (HRVCA) is concerned with collecting,*



*analyzing and systematizing information on a given community's vulnerability to hazards in a structured and meaningful way.*

#### Awareness and capacity building

Q1. On what issues of flood prevention and mitigation women are trained?

Q2. Extent of involvement of women in awareness generation towards flood protective measures that to be undertaken at community level?

#### Climate impact

Q1. What measures are taken during pre-flood periods towards reducing crop loss, soil erosion?

#### Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population- Funds allocated under TSP/ SCSP and other provisions for vulnerable communities

Q1. In what ways the ST & SC population of flood affected regions get substantial support under FMPs?

#### Inclusion of vulnerable groups in scheme as well as sector

Q1. Any specific flood prevention activities particularly for the disadvantaged groups (viz., physically challenged person, mentally challenged person)?

#### Use of IT/Technology in driving efficiency- Deployment of IT enabled mechanisms for monitoring of the Schemes

Q1. How are the Geotagging data are used for monitoring the progress of structural measures?

#### How is technology being used for on-ground data collection?

Q1. List of technologies viz., software, applications that are used for

a. Flood forecasting

b. Hydrological observations

#### Use of latest technology to improve efficiency and effectiveness of scheme implementation

Q1. What factors has driven the State in using the techniques like GIS, Remote Sensing, etc. in a better way?

Q2. To what extent the flood forecasting / inflow forecasting have improved in the State?

#### Technology to address key challenges



Q1. Apart from flood forecasting techniques, other on ground techniques that are being used to safeguard housing, public/common infrastructures, infrastructures related to power generation

#### Development, dissemination & adoption of innovative practices, technology & know-how- Fund allocation towards promotion of innovation

Q1. Evidences of innovative practices pertaining to flood protection, disaster risk reduction in the State

Q2. Initiatives to document and disseminate the innovative practices

Q3. Financial support measures taken to encourage such initiatives

#### Stakeholder and Beneficiary behavioral change- Fund Allocation

Q1. Apart from the fund received from Gol towards awareness generation, additional fund spent for the purpose from the end of the State?

#### Mechanisms to promote and ensure behavior change

Q1. What activities are undertaken at District/Block level to promote good practices towards flood prevention?

#### Challenges faced

Q1. What are the major issues faced in terms of:

- a. Peoples' Participation
- b. distribution of benefits of the assets so created
- c. timely execution using local resources

#### Cropping pattern

Q1. Does crop planning form an integral part of FMPs / DPRs? If so, what factors are considered while doing the crop planning especially pre and post flood situations?

#### Research & Development- Institutes and departments dedicated for R&D

Q1. List of studies / evaluations / research papers on the flood mitigation, DRR, CCA by AIDM, NIH-Roorkee, FMO or any other international agencies like OECD, GIZ, Water International

Q2. In what ways the results of the studies have helped the State in reducing the risks due to flood

#### Challenges in undertaking R&D efforts

Q1. Apart from the areas on Structural & Non-structural measures, additional areas of research pertaining to flood mitigation, DRR, CCA that may have helped in framing policies, effective execution and improved monitoring



### Any Best Practices

Q1. Any innovative practices at State / District / Panchayat / ULB / Village level pertaining to flood prevention?

Q2. In case of such evidences, how have the State disseminated the results to Gol, other States

### Unlocking Synergies with other Government Program- Convergence (Inter-Ministerial/ Inter-Departmental/Financial/ Human Resource/ Administrative / Institutional/ Schemes)

Q1. Nature of inter-departmental coordination required for construction / repairing works under Structural measures

Q2. Role of other departments in execution of such works

### What are the challenges hindering effective convergence?

Q1. What are the challenges that are faced by the Nodal Dept. with respect to inter-departmental coordination considering:

- time lag

- resource lag

that affects the project execution

Q2. How the challenges are addressed at State level?

### Potential areas for synergy

Q1. In what ways different departments are complementary on each other for execution of an intervention?

Q2. Intervention wise interdependency link between different departments

### Reforms, Regulations-Adoption of models acts and reforms at governance, institutional and administrative level

Q1. List of mandatory and optional reforms measures to be achieved by the States

Q2. Challenges faced in fulfilling the reform measures

### Water sharing treatise / agreements and diplomacy- International water agreements

Q1. What are issues pertaining to:

- > Flood forecasting on rivers common to India & Nepal, India & Bhutan, India & China, India & Bangladesh

- > Investigation of Water Resources projects in Neighboring countries particularly for

- Pancheshwar Multipurpose Project

- Kosi High Dam



- Naumure Multipurpose Project

> Flood protection / Anti-erosion works in border areas with Pakistan & Bangladesh

### Interstate water agreements

Q1. What are the range of issues covered in the water sharing agreements between states? How well are such agreements enforced?

### SECTION 3: CHALLENGES AND SUGGESTIONS

- Broadly, what are the main challenges/ limitations that you see in this scheme from an implementation point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

### 13.1.4 State level stakeholder - Officials of State Technical Advisory Committee / State Flood Control Board

#### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?



- What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_ that made you decide to \_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme - Flood Management and Border Area Programme (FMBAP). Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from nation, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH FMBAP SCHEME**

### **RESEARCHER TO NOTE:**



1. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.
2. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.

## **SECTION 1: DEEP DIVE INTO FMBAP SCHEME USING REESIE FRAMEWORK:**

### **EFFECTIVENESS**

#### **ET1: Is the scheme design appropriate to address scheme objectives?**

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1 - Have the State allocation for structural measures increased in XII plan as compared to XI plan? If so to what extent? **(Validate)**

Q2 - List of key achievements by the State towards River Management Activities & Works Related to Border Areas (RMBA) activities

**Is there evidence that assumptions have been tested and are valid?**

Q1 - Apart from increased funding by the Ministry what are the State's initiatives that have led to improved results in Flood Management? Please explain with supporting evidence.

Q2 - In what way factors like migration, incidences of diseases have changed over the years because of continued interventions? **(Validate)**

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1 - What additional measures are required to reduce rate of migration, pollution, improve hygiene, health? **(Validate)**

Q2 - Nature of technological improvements required for structural interventions so as to improve anti-erosion, drainage development, flood proofing works & catchment area treatment

**Adequacy - Low total water storage capacity as well as water storage capacity per capita in dams**

Q1. How the State Flood Control Board / State Technical Advisory Committee monitor inflow forecasts of the dams? Is there scope to improve the forecast and its communication? In what ways? **(Validate)**



### **Gaps in broad sectoral outcomes - Project Management issues and Slow project execution**

Q1. What are the reasons for time overrun for ongoing FMBAP Projects, of Structural and non-Structural measures? **(Validate)**

Q2 – Are there shortage in manpower at State for implementation of FMBAP? If so to what extent? **(Validate)**

### **Overall nature and responsiveness of Water sector planning - Groundwater Level Monitoring**

Q1. To what extent, the State Technical Advisory Committee / State flood Control Board measures the groundwater level before and after floods? **(Validate)**

Q2. In case, the same is monitored by Central Ground Water Board (CGWB), are the data, information disseminated to the Flood Management wing at State Level? How is that data used for FMBAP scheme? **(Validate)**

#### **ET2: How are scheme targets set and monitored?**

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1 - What mechanisms do the States adopt for estimating the component wise targets that are reflected in DPRs & Flood Management Plans (FMPs)

Q2 - What are the validation mechanisms adopted for assessing the progress as against the targets set?

#### **ET3 How has the scheme performed against scheme objectives and annual targets?**

**What are the year wise scheme targets, if any, for the period 2015-16 onwards**

Q1 - What are the monitoring indicators adopted by the State for assessing the effectiveness of FMBAP interventions?

Q2 - What steps are taken to augment the progress of the schemes?

**What is the state wise, year wise performance against target**

Q1 - Do the State assess the target achievement gaps? If yes, what measures are taken to minimize the same?

**Identify states that have performed well? What are the underlying reasons for such performance?**

Q1 - What are the mechanisms adopted by the State to rank the performance of the districts and awarding system adopted if any? **(Focus)**

**What are the key bottlenecks, issues & challenges in the implementation of the scheme**



Q1 - List the major issues at the end of the State towards implementation of the FMBAP Scheme **(Validate)**

Q2 - What corrective measures are taken in this regard? **(Focus)**

**What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable.**

Q1 - What are the basis for preparing state budget for flood mitigation interventions?

Q2 - In what ways the River Basin Authorities support the State in preparing plans?

Q3 - To what extent the State uses GIS, software, applications etc. for planning? **(Focus)**

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1 - Kind of reports prepared by the State on indicator wise performance

Q2 - Kind of reports obtained from the districts on intervention-based performances

**Adequacy - Low total water storage capacity as well as water storage capacity per capita in dams**

Q1. How do the State manage the excess inflow of water from Dams during and after monsoon? Do the State have any Standard Operating Procedure in place for such events? **(Validate)**

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1 - Reasons for

- underutilization of funds (if any)
- delayed submission of UCs (if any)

Q2 - Reasons for variance between Physical and Financial progress *[Physical progress for a component may be relatively higher than fund utilized towards the component or vice versa]* **(Validate)**

**Was there timely utilization of available funds? If not, what were the reasons?**

Q1 - What are the issues faced by the States towards timely submission of UCs to Gol

Q2 - How do the States tackle the issue of implementation of FMBAP interventions in light of fund shortage? **(Validate)**



**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1 – What are the achievements pertaining to flood preparedness during last three years?

Q2 - Strategies adopted for ensuring regular communication between State & Districts with respect to execution of FMBAP interventions

**What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance? Assess potential impact of each such intervention with a view to enable prioritization.**

Q1 - What actions have been initiated by the State towards

- Preparation of Dam Break Models
- Preparation of River Basin wise Emergency Action Plan
- Flood plain zoning **(Validate)**

Q2 - What are the capacity building measures that are taken up for the State and district officials by State Flood Control board? **(Validate)**

**What are the negative factors that have reduced scheme performance? Categorize the negative factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1 - List of FMBAP measures (both FMP & RMBA) planned yet not taken up and reasons for the same particularly pertaining to coordination between basin states and dissemination of inflow forecasts of the reservoirs.

Q2. Are there lack of communication and coordination between Basin States? If not, how the inflow forecasts of the Reservoirs are communicated to your end?

**How can the scheme design be modified to mitigate the negative factors?**

Q1 - What measures have been adopted to improve the performance of Flood Forecasting & Warning Units within the State?

Q2 - In what ways the community and CBOs perform towards timely transmission of flood forecasts and maintenance of structural measures?

## **EQUITY**



**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity? (Validate)**

Q1 -Do the flood management plans (FMPs) prepared ensure participatory, inclusive and gender sensitive approach are included? If yes, please explain.

Q2 - In what way FMPs are prepared in a participatory way so that there is representation of all geographical areas? If yes, please explain.

**EQ2 Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1 - In what ways the State ensures inclusion of beneficiaries across all caste, income groups and gender in the plans for Structural & Non-structural measures? **(Validate)**

### **Equity - High spatial variance in surface water availability and River interlinking**

Q1. To what extent, River Basin Management (capturing run-offs, minimizing soil erosion and reducing pollution) has been done by River Basin Organizations?

Q2. In what ways, the River Basin Organizations have contributed to increase in surface water in the State?

Q2. To what extent the National River Linking Project (NRLP) has been successful in Flood control through by managing surplus water? **(Validate)**

### **IMPACT**

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1 - In what way the environment (land & water) and social factors like health, community infrastructures, power, drinking water are taken care of through the interventions of FMBAP?



Q2 - Have the incidences of infections reduced due to improved health interventions? **(Validate)**

### **Sustainability - Climate Change**

Q1. Are Climate Change Adaptations (CCA) considered as a major part of the guidelines? If so, what are the components? **(Validate)**

*[Climate Change refers to change in regional climate patterns and is experienced through heavy rainfall, extreme weather conditions like drought, frequent floods]*

### **EFFICIENCY**

#### **EC1 Did the benefits of the scheme exceed costs?**

##### **What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1 – How the Benefit Cost Ratio (BCR) of the structural measures is worked out for the State?

Q2 - What are the factors considered for calculating the Benefit Cost Ratio?

#### **EC2 Can the costs of the scheme be lowered?**

##### **Are there lower cost alternatives for achieving the scheme outcomes?**

Q1 – Are there ways to List of lower the cost of project interventions? If yes, please explain with supporting evidence. at state level?

Q2 – To what extent the cost is lowered as compared to proposed estimated cost achieved in course of implementation of the respect of FMBAP interventions? Please explain how such cost reduction was achieved? **(Validate)**

Q3 – Can you please tell us instances of cost reductions?

##### **Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1 - List of initiatives by other Departments / Pvt. Agencies / CBOs at State pertaining to flood preparedness interventions

### **SUSTAINABILITY**

#### **SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

##### **Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1- Demand Requirement and receipt allocation of for O & M and the gap thereof? funds for maintenance of functional Structural & non-structural components



Q2 – In what ways the State have mobilized local organizations for effective flood management? If so, kindly provide the details. **(Validate)**

**SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? Identify risk that have high probability of occurrence and / or high impact if the risk materializes.**

Q1 - Impact of flood protection measures so far, in terms of evidences for following areas:

**Technical:** O & M policies are in place

**Institutional:** Inter & intra departmental communication; interstate communication are regular

**Financial:** Reduced budget towards structural measures & increased budget towards non-structural measures

**Economic:** Lesser land, crop & property damages

**Social:** Community participation, reduced migration

**Environmental:** Reduced denudation of lands, salt intrusion, pollution

## **RELEVANCE**

**RL1: Is the scheme relevant in the present context?**

**Provide details of the relevant sectoral challenge, beneficiary need, national priority, SDG that pertain to the area in which the scheme is operating?**

Q1 – What were the extent of flood damages during X, XI & XII Plan in the State?

Q2 – What were the quantum of Land protected over the years from floods? **(Validate)**

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1 - List of protective measures undertaken by the State and the extent of the measures executed in the State (completed & ongoing)

Q2 - What are the additional interventions that are planned for the next year? **(Validate)**

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority and SDG?**

Q1 - List of issues faced during implementation of FMBAP scheme interventions vis-à-vis gaps in the outcome



Q2 - Issues faced on account of coordination with multiple agencies at Centre? Please explain in detail.

### **Adequacy - Low total water storage capacity as well as water storage capacity per capita in dams**

Q1. Should there be any change as to the sequence of filling up of dams in monsoon to avoid floods and at the same time ensure high storage volume for the rest of the year?

Q2. Are there any design or O&M innovations that may be adopted to support such optimization?

### **Gaps in broad sectoral outcomes - Capacity building of the organizations/utilities creating and managing Water Resources infrastructure and providing service**

Q1. Nature of Capacity Building activities undertaken at State level on FMBAP

Q2. Overview of personnel's who are provided trainings.

Q13. Do the State Annual Plan for Flood Management include CB Capacity Building & Awareness Generation activities? **(Validate)**

#### **RL2 Is it appropriate to continue / prioritize this scheme?**

##### **What would be the impact if the scheme were to be scaled down or stopped?**

Q1 - Have the requirement of funds for new schemes at State has reduced over the years and in what way?

Q2 - Are there any State sponsored schemes which may be upscaled so that the desired outcomes are met? **(Validate)**

#### **RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

##### **What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**

Q1 - Which key areas / components could not be executed as per the planned scale in the coming years

Q2 – What are the reasons for under execution of such components / areas?

##### **Do the scheme objectives as stated in the EFC note appear in the scheme guidelines?**

Q1 - What mechanisms are adopted by the States towards implementing Flood Plain Zoning Bill?

Q2 - To what extent the State has acquired land for Structural measures under FMBAP?

Q3 – Which initiatives taken by the State towards increasing peoples' participation for maintenance of flood protection structures? **(Validate)**

## **SECTION 2: CROSS SECTIONAL THEMES**



**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Accountability & Transparency- Availability of Data Records and Reports in public domain**

- Q1. Which parameters are majorly considered for data reports and is available for public viewing?
- Q2. List of reports submitted by State Flood Control Board / State Technical Advisory Committee to various Govt, agencies **(Focus)**

**Monitoring Mechanisms**

- Q1. Who monitors the flood preparedness and control measures in border areas? What are major activities undertaken?
- Q2. In what ways, the monitoring agencies (CWC, GFCC & BB) provide support to the States on monitoring of FMBAP components? **(Validate)**

**Evaluation Mechanisms**

- Q1. Which areas of flood preparedness has been covered through evaluation studies?
- Q2. Which State specific issues has been pointed out through evaluation studies? **(Validate)**

**Citizen Accountability**

- Q1. To what extent residents of the State are made aware about causes of floods and their roles in flood prevention?
- Q2. How far the monitoring information are obtained from the local residents? What kind of information is obtained from the local people during monitoring visits?

**Financial Accountability**

- Q1. In what ways Districts are assessed in light of fund utilization?
- Q2. How does the State make progress during non-availability of Central Assistance? **(Focus)**

**Beneficiary involvement**

- Q1. What kind of roles of the flood affected population is considered in the DPRs / FMPs? **(Validate)**

**Direct/Indirect Employment Generation- Employment generation**

- Q1. Nature of works which requires semi-skilled and unskilled manpower at local level for Flood prevention interventions?
- Q2. To what extent local manpower are employed for construction of structural measures? **(Validate)**

**Women participation (%) in the Sector/Program**



Q1. In what ways Mahila Samitis / Self Help Groups are engaged in monitoring of work quality of the structural measures? **(Focus)**

#### Gender mainstreaming- Inclusiveness in scheme design/planning

Q1. List of issues pertaining to safety, security and health of women that are considered in FMPs and DPRs **(Validate)**

#### Gender-friendly infrastructure and policies

Q1. In what ways, the State ensures gender participation in the pre-flood preparedness activities?

#### Climate change & sustainability including adoption of climate-change resilient practices & diversifications- Climate resilience

Q1. In what ways Hazard, Risk, Vulnerability & Capacity Assessment (HRVCA) are considered as part of overall planning?

*Note: Hazard, Risk, Vulnerability and Capacity Assessment (HRVCA) is concerned with collecting, analyzing and systematizing information on a given community's vulnerability to hazards in a structured and meaningful way.*

#### Awareness and capacity building

Q1. Is there any Annual Capacity Building Plan in place? If so does the plan includes awareness generation and capacity building of local people?

Q2. To what extent women are involved in awareness generation towards flood protective measures that to be undertaken at community level?

#### Climate impact

Q1. In order to reduce crop loss, soil erosion what measures are taken during pre-flood periods?

#### Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population- Funds allocated under TSP/ SCSP and other provisions for vulnerable communities

Q1. Is the allocation for TSP / SCSP adequate enough to cover the SC / ST population of the flood affected regions?

#### Inclusion of vulnerable groups in scheme as well as sector

Q1. Do the DPRs / FMPs have scope for specific interventions particularly for the disadvantaged groups (viz., physically challenged person, mentally challenged person)?



## Use of IT/Technology in driving efficiency- Deployment of IT enabled mechanisms for monitoring of the Schemes

Q1. To what degree the State uses IT for regular monitoring of flood prevention activities?

### How is technology being used for on-ground data collection?

Q1. Which software, applications that are used for Flood forecasting Hydrological observations?

### Technology to address key challenges

Q1. Apart from flood forecasting techniques, other on ground techniques that are being used to safeguard housing, public/common infrastructures, infrastructures related to power generation

## Development, dissemination & adoption of innovative practices, technology & know-how- Fund allocation towards promotion of innovation

Q1. Are there state specific measures pertaining to flood protection, disaster risk reduction in the State?

Q2. If so, are these documented and disseminated?

Q3. Financial support measures taken towards these activities

### Mechanisms to promote and ensure behaviour change

Q1. Nature of initiatives that are undertaken at District/Block level to promote good practices towards flood prevention?

### Challenges faced

Q1. What are the major issues faced in terms of:

- a. Planning for flood preparedness measures
- b. Coordination with other department
- c. Timely execution of interventions **(Focus)**

### Cropping pattern

Q1. Does crop planning form an integral part of FMPs / DPRs? If so, what factors are considered while doing the crop planning especially pre and post flood situations? **(Validate)**

## Research & Development- Institutes and departments dedicated for R&D

Q1. List of studies / evaluations / research papers on the flood mitigation, DRR, CCA by AIDM, NIH-Roorkee, FMO or any other international agencies like OECD, GIZ, Water International

Q2. In what ways the results of the studies have helped the State in reducing the risks due to flood



### Challenges in undertaking R&D efforts

Q1. Apart from the areas on Structural & Non-structural measures, additional areas of research pertaining to flood mitigation, DRR, CCA that may have helped in framing policies, effective execution and improved monitoring? **(Validate)**

### Unlocking Synergies with other Government Program- Convergence (Inter-Ministerial/ Inter-Departmental/Financial/ Human Resource/ Administrative / Institutional/ Schemes)

Q1. What kind of inter-departmental coordination are required for construction / repairing works under Structural measures?

Q2. What kind of inter-departmental coordination are required for activities like measuring hydrological observations, flood and inflow forecasting? **(Validate)**

### Potential areas for synergy

Q1. With which departments close coordination is maintained for FMBAP?

Q2. Can you please tell us about the nature of coordination maintained with other departments?

**(Validate)**

### Reforms, Regulations-Adoption of models acts and reforms at governance, institutional and administrative level

Q1. What are the mandatory and optional reforms measures as specified by GOI?

Q2. What are the issues faced in fulfilling the reform measures? **(Validate)**

### Water sharing treatise / agreements and diplomacy- International water agreements

Q1. What are the issues pertaining to:

> Flood forecasting on rivers common to India & Nepal, India & Bhutan, India & China, India & Bangladesh

> Investigation of Water Resources projects in Neighboring countries particularly for

- Pancheshwar Multipurpose Project

- Kosi High Dam

- Naumure Multipurpose Project

> Flood protection / Anti-erosion works in border areas with Pakistan & Bangladesh **(Validate)**

### Interstate water agreements

Q1. What are the range of issues covered in the water sharing agreements between states? How well are such agreements enforced? **(Validate)**



### SECTION 3: CHALLENGES AND SUGGESTIONS

- Broadly, what are the main challenges/ limitations that you see in this scheme from an implementation point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

### 13.1.5 District level - District Magistrate / District Level Authorities in-charge of FMBAP

#### **GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?



## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the scheme - Flood Management and Border Area Programme (FMBAP). Since you are a key stakeholder in the scheme overseeing implementation at the district level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from nation, state and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH FMBAP SCHEME**

### **RESEARCHER TO NOTE:**

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

## **SECTION 1: DEEP DIVE INTO FMBAP SCHEME USING REESIE FRAMEWORK:**



## **EFFECTIVENESS**

### **ET1: Is the scheme design appropriate to address scheme objectives?**

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1 - To what extent the fund allocation has increased / decreased towards:

- Structural measures
- Non-structural measures

Q2 - To what extent geographical area coverage under FMBAP over the years have increased?

Q3 - What are mechanisms of monitoring the performance / effectivity of the completed structural measures like Dams, Drainage works, Embankments etc.

**Is there evidence that assumptions have been tested and are valid?**

Q1 - In what way flood situation in light of area protected and population benefited have improved in the District over the years

Q2 - Are there any changes observed for migration rate, incidences of diseases during and after flood

**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1 - In what ways the District address issues of migration, pollution, hygiene and health arising due to flood situations

Q2 - What measures are taken to ensure evidences of reduced erosion, water logging, etc.

### **ET2: How are scheme targets set and monitored?**

**Have scheme targets been set? Who sets the scheme target? Which scheme parameters (e.g. target / outputs, outcomes) are monitored? How and by whom?**

Q1 - What inputs do the district provide to the State for preparing DPRs and (Flood Management Plans) FMPs

Q2 - What monitoring mechanism do the district adopt for assessing the progress vis-à-vis the targets?

**What information is contained in utilization certificate issued by state govt? Are they credible and can they be relied upon as an indicator of scheme progress?**

Q1 - Physical and financial progress reports that are submitted by the District and frequency of such reports

### **ET3 How has the scheme performed against scheme objectives and annual targets?**



### **What is the state wise, year wise performance against target**

- Q1 – How are the annual / half-yearly / quarterly targets are set?
- Q2 - How do the District assess the gaps in achievement against the targets?
- Q3 - What steps are taken by the District authorities to minimize the gaps?

### **What are the key bottlenecks, issues & challenges in the implementation of the scheme**

- Q1 - List the major issues at the end of the District towards implementation of the FMBAP Scheme
- Q2 - What measures are taken in this regard?
- Q3 - Nature of support received from the State authorities towards taking corrective measures

### **What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable.**

- Q1 - Planning process for FMBAP adopted by the District
- Q2 - Type of trainings imparted to the District Officials on FMBAP

### **What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

- Q1 - List of reports and returns from the end of the Districts which specifies performance of indicators
- Q2. Are there techniques that uses excess flood water for irrigation of agricultural lands situated in rainfed areas particularly during summer?
- Q3. Please provide examples where such techniques are used?
- Q4. Local protective measures taken before flood for minimizing erosion of agricultural land at lower end of the cultivable areas?
- Q5. Do the WUA get information on flood forecasts and inflow forecasts from dams? If yes, how do WUAs act upon such information.
- Q6. How and when the forecasts are disseminated to the members and non-members of the village?
- Q7. Are there instances of change in agricultural practices on account of increasing and regular instances of floods?

### **Quality - Quality related issues for groundwater**

- Q1. Given the fact that groundwater pollution does occur after floods, who assesses the same?
- Q2. Data on groundwater pollution for last 5 years.
- Q3. List of measures undertaken for pollution abatement.



**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?**

Q1 - What is the average time lag between fund request and fund receipt?

Q2 - What are the issues faced towards fund utilization?

**Was there timely utilization of available funds? If not, what were the reasons?**

Q1 - What are the issues faced by the Districts towards timely submission of reports and returns to the State

Q2 - How do the Districts tackle the issue of FMBAP interventions in light of fund shortage

**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1 - Nature of support extended from the end of State Flood Control Dept., State Technical Advisory Committee and State Nodal Officers towards monitoring of the scheme and devising corrective measures

**How can the scheme design be modified to mitigate the negative factors?**

Q1 - In what ways other stakeholders at District level provide support for Flood prevention and minimizing the flood damages?

**Equity - High loss in canal network**

Q1. In what ways FMBAP, has adequately covered the protection of canals from floods viz., measures to counter the inundation of canals, distillation of canals etc.

Q2. Have the dam-canal networks increased availability of surface irrigation water by arresting the excess flood water?

**Access - Gap in irrigation coverage**

Q1. Extent of damages caused by floods on irrigation canals, distribution channels, sluice gates.

Q2. Funds released to States for repair works of irrigation canals, distribution channels, sluice gates for last 5 years?



## **IMPACT**

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1 - In what way the environment (land & water) and social factors like health, community infrastructures, power, drinking water are taken care of through the interventions of FMBAP?

Q2 - Have the incidences of infections reduced due to improved health interventions?

## **EQUITY**

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1 - In what way FMPs are prepared in a participatory way so that there are representation of all geographical areas?

**EQ2 Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

Q1 - In what ways the District ensures that there is no exclusion of beneficiaries

## **EFFICIENCY**

**EC1 Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1 – What is the loss from damages (e.g. loss to lives, property, crops, etc.) from the flood prior to implementation of FMBAP projects?

Q2 - What is the loss from damages (e.g. loss to lives, property, crops, etc.) from floods after implementation of FMBAP projects? Has there been a reduction in such damages / losses

Q3 - Total Cost incurred for all interventions



**EC2 Can the costs of the scheme be lowered?**

**Are there lower cost alternatives for achieving the scheme outcomes?**

Q1 - Any alternative / innovative measures planned and taken up which lowered the cost of execution

**SUSTAINIBILITY**

**SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1- Demand and receipt of O & M funds for maintenance of functional Structural & non-structural components

**Access - Widening IPC-IPU Gap**

Q1. Comparison of IPC-IPU Gap in flood affected villages and villages which were not affected due to effective flood protection measures.

**SS5 Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1 - In what way following environmental impacts been realized as a result of implementation of FMBAP Measures:

- Catchment run-offs & erosion
- Denudation of lands
- Reduced loss of vegetation
- Reduced salt intrusion of water

Q2 - In what way following social impacts have been realized as a result of implementation of FMBAP measures:

- Improved security & safety
- Sustained income
- Lesser incidences of conflicts
- Lesser displacements

**Overall nature and responsiveness of Water sector planning - Groundwater Level Monitoring**



Q1. To what extent there has been increase of ground water table as a result of flood and increase in net irrigated areas in:

- Rainfed zones
- Hilly areas etc.

Q2. Any policies that has helped in integrating surface water irrigation system with flood control measures?

## **RELEVANCE**

### **RL1: Is the scheme relevant in the present context?**

**Provide details of the relevant sectoral challenge, beneficiary need, national priority, SDG that pertain to the area in which the scheme is operating?**

Q1 - Value of crops and animal resources damaged in the District during last three floods

Q2 - Has the extent of damage reduced after the implementation of projects under FMBAP? If yes, provide details.

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1 - To what extent the approved schemes have successfully reduced the flood risks? Please provide evidence in support of your answer.

Q2 - In what ways the approved schemes have addressed the need of the district in terms of mitigating flood risks

Q3 - Issues faced during execution of the FMBAP activities

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1 - Are there any gaps in the agricultural production, land protection and water quality because of implementation of FMBAP interventions?

### **RL2 Is it appropriate to continue / prioritize this scheme?**

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1 - How many structural measures fully completed requires limited fund for the purpose of O & M?

Q2 - To what extent, the requirement of Structural measures for Flood Protection in the District has been reduced?

Q3 - In what way, the factors like pollution, loss of vegetation, salt intrusion etc., have reduced for completed schemes



**RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

**What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**

Q1 - What are the key components of FMBAP (which includes both FMP & RMBA) that are

- a) proposed
- b) implemented

Q2 - In what way structural and non-structural measures have resulted in:

- a) reduction of erosion
- b) improvement in drainage
- c) improvement in catchment area

**SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Accountability & Transparency- Availability of Data Records and Reports in public domain**

Q1. Which department is the nodal dept. for FMP & RMBA

Q2. Who monitors the progress of the interventions at District level (Designated officials responsible for monitoring)?

**Evaluation Mechanisms**

Q1. Any district specific issues that has been appropriately covered through evaluation of this scheme or through evaluation of specific component of this scheme

**Citizen Accountability**

Q1. Are participatory monitoring techniques used for assessing the progress and quality of works?

Q2. Evidences of such monitoring exercises undertaken with villagers

**Any Best Practices**

Q1. Any best practices pertaining to maintenance of assets, monitoring of works by beneficiaries?

Q2. Are these documented and disseminated to other areas of the district which are fully affected or even partially affected

**Beneficiary involvement**

Q1. In what ways, the villagers residing in flood affected villages participate in flood prevention activities>

Q2. Nature and types of participatory flood prevention activities?



### Community institutions

Q1. Are there community-based organizations formed at District / Sub-Division /Block level for monitoring at local level?

Q2. If no, in what ways local clubs / Mandals etc. function on their own?

### Direct/Indirect Employment Generation- Employment generation

Q1. To what extent non-agricultural employment has increased over the years after flood/ Has it helped in sustaining the livelihood

Q2. How are local manpower / resources identified?

### What is the women participation (%) in the Sector/Program

Q1. To what extent, women are engaged in monitoring of work quality of the structural measures

### Gender mainstreaming- Inclusiveness in scheme design/planning

Q1. To what extent, issues pertaining to safety, security and health of women are considered in FMPs and DPRs

### Gender-friendly infrastructure and policies

Q1. In what ways, the District ensures gender participation in the pre-flood preparedness activities?

### Any Best Practices

Q1. Evidences that women groups (SHGs, Mahila Mandals) are actively involved in community plans for structural and non-structural measures?

### Decision making by women

Q1. To what extent, views of women residing in flood affected villages are taken into consideration while preparing FMPs / DPRs

### Climate change & sustainability including adoption of climate-change resilient practices & diversifications- Climate resilience

Q1. How are the capacities of local people are assessed to gauge people's exposure and effort to resist disasters?

### Awareness and capacity building

Q1. What capacity building measures are taken up with women of the flood affected villages?



Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population- Funds allocated under TSP/ SCSP and other provisions for vulnerable communities

Q1. In what ways the ST & SC population of flood affected regions get substantial support under FMPs?

Use of IT/Technology in driving efficiency- Deployment of IT enabled mechanisms for monitoring of the Schemes

Q1. To what extent, the District units use geotagging for monitoring of the progress of structural measures?

Development, dissemination & adoption of innovative practices, technology & know-how- Fund allocation towards promotion of innovation

Q1. Evidences of innovative practices pertaining to flood protection, disaster risk reduction in the State

Q2. Initiatives to document and disseminate the innovative practices

Contribution of improved practices in increasing outcomes

Q1. Evidences of innovative practices pertaining to flood protection, disaster risk reduction in the State

Q2. Initiatives to document and disseminate the innovative practices

Stakeholder and Beneficiary behavioural change- Fund Allocation

Q1. Apart from the fund received from the State towards awareness generation, additional fund spent for the purpose from the end of the District?

Mechanisms to promote and ensure behaviour change

Q1. What activities are undertaken at District/Block level to promote good practices towards flood prevention?

Challenges faced

Q1. What are the major issues faced in terms of:

- a. Planning
- b. timely execution using local resources?
- c. Monitoring

Cropping pattern



Q1. Does crop planning form an integral part of FMPs / DPRs? If so, what factors are considered while doing the crop planning especially pre and post flood situations?

#### Research & Development- Institutes and departments dedicated for R&D

Q1. In what ways the results of the studies have helped the District in reducing the risks due to flood

#### Any Best Practices

Q1. Any innovative practices at District / Panchayat / ULB / Village level pertaining to flood prevention?

Q2. In case of such evidences, how have the District disseminated the results to other districts?

#### Unlocking Synergies with other Government Program- Convergence (Inter-Ministerial/ Inter-Departmental/Financial/ Human Resource/ Administrative / Institutional/ Schemes)

Q1. Nature of inter-departmental coordination required for construction / repairing works under Structural measures

Q2. Role of other departments in execution of such works

#### What are the challenges hindering effective convergence?

Q1. What are the challenges that are faced by the Nodal Dept. with respect to inter-departmental coordination considering:

- time lag

- resource lag

that affects the project execution

Q2. How the challenges are addressed at District level?

#### Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme- FPOs/SHGs/Cooperative's Participation

Q1. In what ways the SHGs / Local Clubs / other CBOs have participated in pre-flood activities?

Q2. In what ways these organizations have benefitted from the execution of the scheme?

### **SECTION 3: CHALLENGES AND SUGGESTIONS**

1. Broadly, what are the main challenges/ limitations that you see in this scheme from implementation point of view?
2. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?



<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



## 13.2 Discussion Guide for FGD

### 13.2.1 FGD: Group of villagers affected by flood

#### GENERAL GUIDELINES for FGDs:

- The topics and questions below should be used to guide the Focus Group Discussion. Please keep in mind, while conducting the FGDs, do respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- During FGDs, group dynamics are common so it must be ensured that every respondent gets a chance to speak, one person should not be allowed to dominate the discussion. Also, be aware of any power dynamics that may be at play. Please ensure that all respondents speak one by one so that the audio recording is clear.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- **Seek more detail or explanation of a response.** For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- **Explore the reasons** behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- **Seek clarity and check for inconsistencies.** For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the FGD:
- I am ....., working with Ipsos, a global research organization. We regularly carry out research on various social issues. Currently we are implementing a study on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog along with KPMG a consultancy firm.
- The current study is an evaluation of Centrally Sponsored Schemes in the Water Resources sector in various states including yours. We would like to seek your opinion on certain topics related to the scheme **Flood Management and Border Areas Programme (FMBAP)**. One aspect of the evaluation is to meet the beneficiaries of these schemes to understand the benefits received, how



the benefits have impacted different aspects of their life- social, economic, and any other. Your views are beneficial to assess the experiences, challenges if any associated with this project. Discussion with your group as well as others will also help us identify recommendations and suggestions to improve the next phase of implementation of similar projects.

- Inform the respondents of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged that will lead to identification of individual responses that they give during this discussion.
- Explain that there are no right/ wrong answers and obtaining opinion and perception and their individual experience is critical.

- **NOTE TO THE TEAM:**
- AT THE VILLAGE LEVEL, RESEARCHER NEEDS TO FIRST MEET THE SARPANCH OF THE VILLAGE
- NO BENEFICIARIES ARE TO BE MET FOR ANY SCHEME/ PROJECT RELATED INTERVIEW/FGD BEFORE MEETING THE SARPANCH

**RESEARCHER TO NOTE:**

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

**Warm up:**

5. Can you give me some information about the village how many households live here, which is the nearest town, mode of transport etc.
6. What are the different occupations that people are engaged in? What percentage of the households are involved in agriculture/ agriculture related activities?



7. Do you all own your own land, or you work on others' land? How many members of your family are currently involved in agriculture related work? What crops do you grow?
8. What are some of the most common problems that farmers in your village face? Note to RESERACHERS- DO NOT DWELL EXTENSIVELEY ON PROBLEMS HERE, THIS IS JUST TO UNDERSTAND INFRASTRUCTURE, WATER/ IRRIGATION, AND MARKET ACCESS RELATED ISSUES IF THEY ARE ON TOP OF MIND.

#### **Awareness about different schemes and projects implemented in their village**

4. What are the different irrigation and/or agriculture related projects that have been implemented in your village in last five years?
5. Can you please elaborate on these projects in terms of how they have benefitted you/ others in the village and/ or how do they address the common issues that you face?
6. What is the type of works undertaken? According to you, which ones are working well for the village and you? Why do you say so? (Note to researcher: To get a brief understanding here and not get into details at this stage)

#### **SECTION 1: DEEP DIVE INTO FMBAP SCHEME USING REESIE FRAMEWORK:**

#### **We would like to ask you questions specifically about one particular project/ government scheme – Flood Management and Border Areas Programme (FMBAP)**

Q1. Have you heard about this scheme/yojana/ project? What do you know about it? From where did you hear about the scheme/ project? Are you aware of any development under this scheme/ project?

Q2. In your view, what is the purpose of this scheme/ project? When was this created, how much time did it take to complete the project since it was announced?

Q3. When did you start benefitting from this scheme/ project? How is it helping you in agriculture? PROBE TO UNDERSTAND THROUGH EXAMPLES OF WHAT THE BENEFITS EXPERIENCE ARE, WHERE POSSIBLE GET CONCRETE FACTS AND FIGURES.

#### **EFFECTIVENESS**

#### **ET1: Is the scheme design appropriate to address scheme objectives?**

#### **Is there evidence that assumptions have been tested and are valid?**

Q1 - In what way, the village has benefitted through the structural measures (construction of check dams, embankments etc.)

Q2 – Has there been any impact on migration, extent of crop damage and damage to property after the completion of FMBAP works?



**What are the gaps / weakness in the assumptions and / or scheme design? How should the scheme design be modified to make it more effective?**

Q1 - How and to what extent have the following aspects been impacted after flood management interventions:

- Erosion
- sustained crop productivity
- water logging
- reduced water salinity

due to structural measures that has happened

Q2 - How far the villagers have benefited in terms of:

- loss of lives
- migration
- safety
- hygiene
- loss of properties

**ET3 How has the scheme performed against scheme objectives and annual targets?**

**What is the planning process proposed under the scheme? Is the planning process adequately and effectively followed? If not, what improvements are desirable.**

Q1 - To what extent the villagers are involved in the planning prior to interventions like construction of Check Dams, Embankments and other structures for Flood protection

Q2. Local protective measures taken before flood for minimizing erosion of agricultural land at lower end of the cultivable areas?

Q3. Do the WUA get information on flood forecasts and inflow forecasts from dams?

Q4. How and when the forecasts are disseminated to the members and non-members of the village?

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**What are the positive factors that have enhanced scheme performance? Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?**

Q1 - In what way the scheme has performed thereby reducing the flood damages?

Q2 - How well the complaints are addressed by the District & Block authorities?

**How can the scheme design be modified to mitigate the negative factors?**



Q1 - To what extent, the Panchayats, Villagers and CBOs / NGOs are involved in planning the structural and non-structural measures?

## **IMPACT**

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent? If so, in which areas.**

Q1 - In what way the environment (land & water) and social factors like health, community infrastructures, power, drinking water are impacted after interventions under FMBIM1AP

Q2 – What has been the impact on incidences of infectious disease and general health conditions post the interventions under FMBAP.

- a) Has there been any change in cropping pattern due to regular floods
- b) Since when the cropping pattern is changed due to regular floods?
- c) Extent of agricultural land loss due to floods.
- d) Extent of loss of crops due to floods as against perceived.

## **EQUITY**

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

Q1 - In what way the villagers have participated in planning & monitoring of interventions under FMBAP (optional in case there are community participation as reported by State / District)

## **EFFICIENCY**

**EC1 Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1 – Are there any benefits realized due to FMBAP project in respect of:

- loss of crops
- area in the village affected
- value of animal life affected
- Reduced incidences of diseases during and after flood



-- migration from the village

## **SUSTAINIBILITY**

**SS3 Is the scheme financially and institutionally sustainable? How can sustainability be improve**

**Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

Q1 - Existing local mechanisms adopted for maintenance of flood protection structures

**SS5 Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

**Is the scheme environmentally and socially sustainable? How can environmental and social sustainability be improved?**

Q1 - In what way following environmental impacts been realized as a result of implementation of FMBAP

Measures:

- Catchment run-offs & erosion
- Denudation of lands
- Reduced loss of vegetation
- Reduced salt intrusion of water

Q2 - In what way following social impacts have been realized as a result of implementation of FMBAP measures:

- Improved security & safety
- Sustained income
- Lesser incidences of conflicts
- Lesser displacements

### **Sustainability - More focus on water-intensive crop**

Q1. Due to regular flooding, has there been a preference to take up water-intensive crops?

## **RELEVANCE**

**RL1: Is the scheme relevant in the present context?**

**Provide details of the relevant sectoral challenge, beneficiary need, national priority, SDG that pertain to the area in which the scheme is operating?**

Q1 – Can you assess the damages caused by floods prior and after FMBAP project implemented in your village

Q2 - Incidences of drainage congestion and diseases during or after floods?



## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY OF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability & Transparency-Citizen Accountability**

Q1. What are the responsibilities of the villagers in maintenance of the completed works?

Q2. Are there any informal or formal groups formed for overseeing the quality of the works, maintenance of the components, communicating the flood forecasts etc.

### **Beneficiary involvement**

Q1. In what ways the villagers participate in flood prevention interventions supported by the Govt.?

Q2. In what ways the villagers participate in executing local preventive measures with own resources?

### **Community institutions**

Q1. In what way local clubs / Mandals / other groups of the village provide support in flood prevention activities?

Q2. Source and amount of fund received for such activities

### **Direct/Indirect Employment Generation-1. Villagers of flood affected villages**

Q1. To what extent local manpower are employed for construction of structural measures before flood

Q2. Nature of non-farm activities that helps in sustaining livelihood during & after flood

### **Gender Mainstreaming-Inclusiveness in scheme design/planning-**

Q1. In what ways, women are involved in pre-flood planning, viz., hygiene, safety, food security & child care

### **Decision making by women-1. Villagers of flood affected villages**

Q. Role of SHG or Mahila Mandal (if any) members in flood preparedness interventions at village level

### **Climate change & sustainability including adoption of climate-change resilient practices & diversifications-Awareness and capacity building**

Q1. Are the women of the flood affected village are trained towards flood protection measures? If so, are the trainings relevant in building the capacity of women in managing flood situations and flood preparedness in a more effective way?



### Stakeholder and Beneficiary behavioral Change-Cropping pattern

Q1. Detail of crop planning through FGD with villagers especially pre & post flood periods

### Impact on and role of private sector, community/ collectives/ cooperatives (e.g. Farmer cooperatives, FPOs, Water User Associations, etc.) and civil society in the scheme

#### FPOs/SHGs/Cooperative's Participation-1. Villagers of flood affected villages

Q1. In what ways the SHGs / Local Clubs / other CBOs have participated in pre-flood activities?

Q2. In what ways these organizations have benefitted from the execution of the scheme

### SECTION 3: CHALLENGES AND SUGGESTIONS

3. Broadly, what are the main challenges/ limitations that you see in this scheme from an implementation point of view?
4. What are some of the suggestions that you would like to point out in order to improve this scheme so that it can give better results on the ground level?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	



# Annexure 14 Primary Survey Guide – IAS

The primary survey guide for 'Impact Assessment Scheme' is provided below.

## 14.1 Discussion Guide for KII

14.1.1 National level stakeholder – Senior Joint Commissioner, SPR Wing [Department: Water Resource, River Development & Ganga Rejuvenation]

### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the Impact Assessment Studies' scheme. Since you are a key stakeholder in the scheme overseeing planning and implementation



at the national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.

- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

#### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH IMPACT ASSESSMENT STUDIES SCHEME**

##### **RESEARCHER TO NOTE:**

19. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*

20. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

#### **SECTION 1: DEEP DIVE INTO Impact Assessment Studies SCHEME USING REESIE FRAMEWORK: RELEVANCE**

**RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

**What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**

Q1. What are the detailed objectives of the studies? Are there any stated outcomes corresponding to the objectives? (Focus)



## EFFECTIVENESS

### ET1: Is the scheme design appropriate to address scheme objectives?

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1. Comment on the result chain i.e. inputs (budget, human resources, monitoring agencies, etc.), outputs (no. of studies done, frequency and time period of studies, etc.), outcome (assistance in policy design, scheme assessment, course-correction, database, etc.) and impacts (assistance in taking policy level decisions) (Focus)

**Is there evidence that assumptions have been tested and are valid?**

Q1. Are the outcomes of the study helpful for modification in design of the evaluated schemes and in what ways? (Focus)

### ET3 How has the scheme performed against scheme objectives and annual targets?

**What is the year wise scheme targets, if any, for the period 2015-16 onwards?**

Q1. Are there any year-wise targets of no. of studies to be conducted/ no. of AIBP projects to be assessed? (Focus)

Q2. Are there any timeline and frequency for conducting the studies? (Focus)

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. What are the key issues affecting the conduct of studies (like lack of clarity on project scope, awareness, database, etc.)? Are there any mechanisms for selecting the third parties? (Focus)

Q2. How is co-ordination with state departments ensured during data collection and survey stage? (Focus)

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1. Do you suggest any indicators to be added to the scheme to measure the effectiveness of the scheme? (Focus)

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**



**Was there timely utilization of available funds? If not, what were the reasons?**

Q1 - What are the main reasons for low utilization of funds? (Focus)

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1. Are there any scheme guidelines for impact assessment studies? Do you suggest any change to the scheme for better outcomes? (Focus)

**EFFICIENCY**

**EC 1 Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. What are the benefits of the scheme? (Focus)

Q2. How has the scheme been helpful in policy making, project monitoring, impact assessment and other areas? (Focus)

**RELEVANCE**

**RL1: Is the scheme relevant in the present context?**

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1. Is the scope of the study aligned with the outcome of the schemes for which the study has been conducted? Please explain with document. (Focus)

Q2. Do you suggest any modification in selection criteria of projects for which impact assessment studies have been conducted? If yes, please explain. (Focus)

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**

Q1. Are all the outcomes of selected AIBP schemes addressed by the study? If not, what are the modifications required? (Validate)

**RL2 Is it appropriate to continue / prioritize this scheme?**

**What would be the impact if the scheme were to be scaled down or stopped?**

Q1. Do you suggest any roadmap for scaling up/ down or modification of the scheme? (Validate)

**SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

**Accountability & Transparency- Availability of Data Records and Reports in public domain**

**What data records are available for the scheme in public domain?**



Q1. What are the measures undertaken for capturing data related to the scheme performance? (Focus)

Q2. Do you have any dedicated MIS system for recording & updating the database of the scheme? If yes, please provide details. If no, what is the plan for its implementation? (Focus)

### **Monitoring Mechanisms**

#### **Does a robust monitoring mechanism exist and at what level?**

Q1. How robust is the monitoring mechanism? Is there any mechanism to independently verify the progress reported by the supervising entity through audits or other methods? If yes, please provide some information around it. If no, are you planning to bring such mechanism and what is the timeline for that and at what level? (Focus)

### **Use of IT/Technology in driving efficiency- Deployment of IT enabled mechanisms for monitoring of the Scheme**

#### **How is technology being used for on-ground data collection?**

Q1. What is the methodology for collection of project data at field level and how the technology is being used? (Focus)

Q2 - Do you face any challenges in that? If yes, what are the challenges? (Focus)

### **Use of latest technology to improve efficiency and effectiveness of scheme implementation**

#### **What are the technologies being used in project implementation, service delivery?**

Q1 - Which states are leading in terms of technology use and which are lagging behind? (Focus)

### **Development, dissemination & adoption of innovative practices, technology & know-how- Fund allocation towards promotion of innovation**

#### **Fund allocation towards promotion of innovation**

#### **What percent of total allocation is directed towards development, dissemination and adoption of innovative practices and technology? How much of it is utilized?**

Q1 - What percent of total allocation is directed towards development, dissemination and adoption of innovative practices and technology? How much of it is utilized? (Focus)

### **SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?



- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

14.1.2 National level stakeholder - Senior Joint Commissioner (MI) Minor Irrigation Section [Department: Water Resource, River Development & Ganga Rejuvenation]

**GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

**INTRODUCTION: SELF**



Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the Impact Assessment Studies' scheme. Since you are a key stakeholder in the scheme overseeing planning and implementation at the national level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/ beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

#### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH IMPACT ASSESSMENT STUDIES SCHEME**

##### **RESEARCHER TO NOTE:**

- 21. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
- 22. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*



## **SECTION 1: DEEP DIVE INTO Impact Assessment Studies SCHEME USING REESIE FRAMEWORK: RELEVANCE**

### **RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

**What are the scheme objectives? Are the scheme objectives clear? Does each scheme objective have a corresponding outcome parameter that is being tracked?**

Q1. What are the detailed objectives of the studies? Are there any stated outcomes corresponding to the objectives? (Focus)

## **EFFECTIVENESS**

### **ET1: Is the scheme design appropriate to address scheme objectives?**

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1. Comment on the result chain i.e. inputs (budget, human resources, monitoring agencies, etc), outputs (no. of studies done, frequency and time period of studies, etc.), outcome (assistance in policy design, scheme assessment, course-correction, database, etc.) and impacts (assistance in taking policy level decisions) (Focus)

**Is there evidence that assumptions have been tested and are valid?**

Q1. How has the completed studies under this scheme resulted in better decision making and other positive impacts? (Focus)

### **ET3 How has the scheme performed against scheme objectives and annual targets?**

**What is the year wise scheme targets, if any, for the period 2015-16 onwards?**

Q1. Are there any year-wise targets of no. of studies to be conducted/ no. of AIBP projects to be assessed? (Focus)

Q2. Are there any timeline and frequency for conducting the studies? (Focus)

**What are the key bottlenecks, issues & challenges in the implementation of the scheme?**

Q1. What are the key issues affecting the conduct of studies (like lack of clarity on project scope, awareness, database, etc.)? Are there any mechanisms for selecting the third parties? (Focus)

Q2. How is co-ordination with state departments ensured during data collection and survey stage? (Focus)



**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1. What types of assessment parameters like irrigation coverage, land used land coverage (LULC) from remote Sensing data, change in livelihood status of the beneficiaries etc. shall be adopted to measure the effectiveness of the scheme? (Focus)

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**Was there timely utilization of available funds? If not, what were the reasons?**

Q1 - What are the main reasons for low utilization of funds? (Focus)

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1. Do you suggest any change in the scheme guidelines for better implementation? (Focus)

## **EFFICIENCY**

**EC 1 Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**

Q1. What are the benefits of the scheme? (Focus)

Q2. How has the scheme been helpful in policy making, project monitoring, impact assessment and other areas? (Focus)

## **RELEVANCE**

**RL1: Is the scheme relevant in the present context?**

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1. What is the broad scope of the impact assessment studies (like assessment of UIPIPU-IPC gap, socio-economic impact, environmental assessment)? (Focus)

Q2. What are the criteria for selecting projects for which impact assessment studies have been conducted? (Focus)

**What are the areas of interventional gaps (viz. areas that are not addressed by this or other schemes) in respect of the sectoral challenge, beneficiary need, national priority AND SDG?**



Q1. Is there any plan to include the water resources schemes other than AIBP under this study? If yes, which other schemes (under PMKSY) are supposed to be covered under this assessment? Let us know about the plan of bringing other CSS schemes under this assessment. (Focus)

## **RL2 Is it appropriate to continue / prioritize this scheme?**

### **What would be the impact if the scheme were to be scaled down or stopped?**

Q1. What is your opinion on continuation of this scheme? Is there any roadmap for scaling up/ down or modification of the scheme? (Focus)

## **SECTION 2: CROSS SECTIONAL THEMES**

**[RESEARCHER TO NOTE: IF ANY IF THE QUESTIONS BELOW ARE ALREADY ANSWERED IN THE SECTION1, KINDLY SKIP THOSE AND FOCUS ON ONLY UNEXPLORED AREAS]**

### **Accountability & Transparency- Availability of Data Records and Reports in public domain**

#### **What data records are available for the scheme in public domain?**

Q1. What are the measures undertaken for capturing data related to the scheme performance? (Focus)

Q2. Do you have any dedicated MIS system for recording & updating the database of the scheme? If yes, please provide details. If no, what is the plan for its implementation? (Focus)

### **Monitoring Mechanisms**

#### **Does a robust monitoring mechanism exist and at what level?**

Q1. How robust is the monitoring mechanism? Is there any mechanism to independently verify the progress reported by the supervising entity through audits or other methods? If yes, please provide some information around it. If no, are you planning to bring such mechanism and what is the timeline for that and at what level? (Focus)

### **Use of IT/Technology in driving efficiency- Deployment of IT enabled mechanisms for monitoring of the Scheme**

#### **How is technology being used for on-ground data collection?**

Q1. What is the methodology for collection of project data at field level and how the technology is being used? (Focus)

Q2 - Do you face any challenges in that? If yes, what are the challenges? (Focus)

### **Use of latest technology to improve efficiency and effectiveness of scheme implementation**

#### **What are the technologies being used in project implementation, service delivery?**

Q1 - Which states are leading in terms of technology use and which are lagging behind? (Focus)



**Development, dissemination & adoption of innovative practices, technology & know-how- Fund allocation towards promotion of innovation**

**Fund allocation towards promotion of innovation**

**What percent of total allocation is directed towards development, dissemination and adoption of innovative practices and technology? How much of it is utilized?**

Q1 - What percent of total allocation is directed towards development, dissemination and adoption of innovative practices and technology? How much of it is utilized? (Focus)

**SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

**14.1.3 State level stakeholder - Chief Engineer [Water Resource Department]**

**GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?



- What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_ that made you decide to \_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
- Sir/Madam, I am ....., working with Ipsos, a global research organisation in conjunction with consultancy firm, KPMG on behalf of the Development Monitoring and Evaluation Office (DMEO), NITI Aayog. We are currently undertaking evaluation of Centrally Sponsored Schemes in the Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes as they are due for appraisal this year. We would like to seek your opinion on certain topics related to the Impact Assessment Studies' scheme. Since you are a key stakeholder in the scheme overseeing planning and implementation at the state level, your insights would be valuable in understanding of the schemes, key challenges and factors that led to successful implementation of the scheme. We are also meeting other stakeholders from state, district and block level. The study also involves a survey with the HHs/beneficiaries.
- Inform the respondent of the probable duration of the discussion - Approximately 90 minutes
- Introduce note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Could you please mention since when have you been associated with this scheme? What are your current roles and responsibilities?

## **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH IMPACT ASSESSMENT STUDIES SCHEME**



**RESEARCHER TO NOTE:**

23. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.

24. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.

**SECTION 1: DEEP DIVE INTO Impact Assessment Studies SCHEME USING REESIE FRAMEWOREFFECTIVENESS**

**ET1 Is the scheme design appropriate to address scheme objectives?**

**Is the results chain clear (as specified in any key scheme document)? What are the key assumptions underlying the logic of results chain, especially assumptions linking outputs to outcomes and impacts?**

Q1. Has your state conducted any such impact assessment study on completed/ongoing AIBP project? If yes, please provide details/reports and how does the study help in taking policy making decision. If no, what is the plan for that?

**ET3 How has the scheme performed against scheme objectives and annual targets?**

**What should be the appropriate indicators to assess the performance of the scheme on structural (e.g. asset / infrastructure creation) and non-structural (e.g. creation and functioning of WUAs) aspects?**

Q1. What types of assessment parameters like irrigation coverage, land used land coverage (LULC) from remote Sensing data, change in livelihood status of the beneficiaries etc. shall be adopted to measure the effectiveness of the scheme?

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1. Do you suggest any change in the scheme guidelines for better implementation?

**EFFICIENCY**

**EC: 1 Did the benefits of the scheme exceed costs?**

**What are the direct and indirect benefits of the scheme? What is the monetary value of all benefits?**



Q1. What are the benefits of the scheme?

Q2. How has the scheme been helpful in policy making, project monitoring, impact assessment and other areas?

**EC 2 Can the costs of the scheme be lowered?**

**Is there adequate coordination between ministries (or departments as applicable) in the execution of scheme such that resources are used efficiently?**

Q1. Have all the stakeholders like officials from various state dept., regional offices of CWC, WUAs, NGOs, etc., been consulted while fixing the scope of the studies?

Q2. Have there been any coordination issues during data-collection, survey and any other stages?

**RELEVANCE**

**RL1: Is the scheme relevant in the present context?**

**Which areas of the above sectoral challenge, beneficiary need, national priority, SDG is the scheme designed to address? And to what extent?**

Q1. What areas would you like to cover under the impact assessment studies for AIBP projects?

Q2. What should be the basis of selection of projects to be included under the study?

**SECTION 2: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from an implementation point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

<b>SUGGESTIONS AND CORRECTIVE MEASURES</b>	
SHORT TERM	
MEDIUM TERM	
LONG TERM	

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

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## Annexure 15 Primary Survey Guide - NMGI

### 15.1.1 National level stakeholders - Government

National level stakeholders (KII)	
National Governing Council and National Executive Council, GIM	Additional Director & Member Secretary / Mission Director, GIM
National Afforestation and Eco-development Board for NAP	Inspector General of Forests (NAEB)
Forest Protection Division For FPM	Additional Director General of Forest

#### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
 

Sir/Madam, the Development Monitoring and Evaluation Office (DMEO), NITI Aayog is undertaking evaluation of Centrally Sponsored Schemes in the Environment and Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes before the schemes come up for fresh appraisal. NITI



Aayog has engaged consultancy firm KPMG for this evaluation. We are from the Ipsos Research Pvt. Ltd. We are working with KPMG for this evaluation. To have a complete understanding of the schemes, key challenges and success stories, we are meeting the key stakeholders from central, state, and village level. The study also involves a survey with the households. We would like to seek your opinion on certain topics related to the scheme **National Mission for a Green India**. The information we gather will help us evaluate and develop recommendations in respect of the scheme. Every piece of information and opinion that you share would help us a great deal to work on this area and improve it further for more effective implementation of the schemes.

- Inform the respondent of the probable duration of the discussion - Approximately 45 minutes
- Introduce self, note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Good morning/afternoon sir/madam, could you please tell me your name? (NOT TO USE THE RECORDER HERE)
- Since when have you been working here? What are your key roles and responsibilities in this department in general?
- What are your roles and responsibilities in this scheme? Could you please explain?

#### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH THE SCHEME**

##### **MODERATOR TO NOTE:**

*25. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*

*26. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

#### **SECTION 1: DEEP DIVE INTO SCHEME USING REESIE FRAMEWORK:**

##### **RELEVANCE**

**RL1: Is the scheme relevant in the present context?**

**Consideration of SDG goals and targets in scheme design**



- Q1. Were SDG goals considered while formulating the scheme objectives and strategies?  
Q2. If no, what were the reasons for not explicitly connecting the same with SDG goals and targets?

#### **Consideration of national priorities in scheme outcomes and impacts**

- Q1. What are the challenges in explicitly linking the scheme objectives with national priorities like Nationally Determined Contributions for climate Change and National Forest Policy?  
Q2. What are the challenges in making timebound targets?

#### **Consideration of alignment to international treaties/conventions**

- Q1. What are challenges in aligning the scheme objectives with those of Global Forest Goals and Targets outlined in United Nations Strategic Plan for Forests 2030?  
Q2. What are challenges in making the scheme objectives aligned with those of REDD+?  
Q3. What are the challenges in making timebound targets for contribution to the international commitments?

#### **Need assessment of the target population. Assessment of output of the schemes**

- Q1. Was a needs assessment study conducted? Please provide details.  
Q2. Was any assessment study conducted for amendments to the scheme? Please provide details.  
Q3. How were the targets under the scheme determined?

#### **Reduced redundancy in scheme design**

- Q1. Were other schemes, such as NAP, GIM, MGNREGS, CAMPA etc. considered while designing or amending the scheme?  
Q2. If so, in what way were overlaps were avoided?  
Q3. Is the convergence of activities successful on ground?

#### **Inclusive scheme design to prioritise communities/PRI**

- Q1. Was the involvement of communities/ PRI considered during the scheme design?  
Q2. If not, what was the reason for this?  
Q3. If yes, what was the extent of communities/PRI involvement?

### **RL2 Is it appropriate to continue / prioritize this scheme?**

#### **Impact of scaling down**

- Q1. Is there any alternative schemes that can deliver similar outcomes?  
Q2. Are such alternative schemes, if any, more effective than the subject scheme?

### **RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

#### **Outcome tracking**

- Q1. Is there any plan or discussion carried out on developing more comprehensive outcome indicators for the schemes? If yes, please provide details.  
Q2. Do you recommend any specific outcome indicators for the objectives of the scheme?



### **Appropriateness of the scheme design**

- Q1. Are any challenges being faced in the current governance, monitoring, evaluation and review system?
- Q2. Are the indicators for tracking outcome and outputs sufficient in your opinion?
- Q3. Has a mechanism been put in place for regular strategic review to ensure appropriateness / relevance of the scheme? If yes, please provide details.

### **Degradation and fragmentation of existing natural habitats**

- Q1. How does the implementing agency coordinate with other schemes such as National Plan for Conservation of Aquatic Eco-systems (NPCA) for overlapping goals such as restoration of wetlands?

### **Comprehensive census data of species**

- Q1. What efforts are undertaken to evaluate the existing biodiversity and improvement resulting from interventions in the sector?

## **EFFECTIVENESS**

### **ET1: Is the scheme design appropriate to address scheme objectives?**

#### **Unintended positive and negative outcomes of scheme and their mitigation measures**

- Q1. Have there been any incidents which led to an unintended consequence under the scheme (for e.g. villagers were unsatisfied with the conservation plans or alternate livelihood)?
- Q2. Have you observed increase in invasive plant population?
- Q3. How can the scheme design be modified to mitigate the negative factors?

### **ET2: How are scheme targets set and monitored?**

#### **Strengthened monitoring system. Strengthened reporting system. Reduction in inconsistent reporting. Better use of ICT in the monitoring**

- Q1. Are any studies conducted for setting of targets in terms of outputs or outcomes?
- Q2. Is there a mechanism to independently verify the progress reported by the supervising entity through audits or other methods?
- Q3. Are the stakeholders and other parties consulted during the target setting process?

#### **Effective and innovative partnerships. Improved strategies and approaches.**

- Q1. What are the innovative measures/ technology used for implementing the scheme?
- Q2. Have there been consultations with local partnering agencies for exploring and/or adopting innovating programs? Please provide details.

#### **Infrastructure for prevention and control of forest fires**

- Q1. What are the protocols set in place for reporting and investigation of forest fire incidents? How effective are they?

### **ET3 How has the scheme performed against scheme objectives and annual targets?**



### **Performance on the output-outcome framework**

Q1. Is there a results framework/output-outcome framework maintained under the scheme? If yes, please provide the same for last 5 years.

Q2. In case of non-achievement of any targets, please provide the reasons.

### **Basis to define a state performing poorly**

Q1. Which states have performed well in terms of scheme implementation? What were the reasons?

Q2. Which states have performed poorly in terms of scheme implementation? What were the reasons?

### **Key issues, bottlenecks, challenges**

Q1. What are the other bottlenecks, issues & challenges in the implementation of the scheme?

Q2. Has there been any independent evaluation conducted in the past? If yes, what were the observations and recommendations of the evaluation.

Q3. Is sufficient funding available for maintenance of implemented projects?

### **Infrastructure for prevention and control of forest fires**

Q1. What are the protocols set in place for reporting and investigation of forest fire incidents? How effective are they?

### **Additional performance indicators (over and above those currently tracked)**

Q1. Are there any additional performance indicators (over and above those currently tracked) that may be necessary to effectively monitor scheme performance?

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

### **Fund release process and timing**

Q1 - Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the challenges?

### **Utilization of available funds**

Q1. Was there timely utilization of available funds? If not, what were the reasons?

Q2. Do States usually submit requirements for sanction of funds on timely basis?

Q3. Have some states not been provided funding? If yes, please explain with reasons.

### **State performance and supportive factors across states that perform well**

Q1. What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance?

### **How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1. How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?



### **Negative factors affecting scheme performance**

Q1. Is the funding mechanism adequate and conducive to timely application and disbursement of funds?

Q2. What are the negative factors that have reduced scheme performance?

Q3. Have these factors been discussed in stakeholder or review meetings? If yes, please provide the minutes of meeting.

### **How can the scheme design be modified to ensure exclusion or resolution of the negative factors?**

Q1. How can the scheme design be modified to ensure exclusion or resolution of the negative factors?

## **EFFICIENCY**

### **EC1 Did the benefits of the scheme exceed costs?**

#### **Monetary value of scheme benefits, improved cost-benefit ratio**

Q1: Have any studies been conducted to place a monetary value on the direct and indirect scheme benefits? Please provide details.

#### **Allocated budget and utilization trend, efficiency spend**

Q1. Does the budget for the scheme get efficiently utilized annually? If not, what are the major reasons of over / under utilization?

### **EC2 Can the costs of the scheme be lowered?**

#### **Lower cost alternatives**

Q1. Are there lower cost alternatives for achieving the scheme outcomes?

#### **Coordination between ministries (or departments as applicable) in scheme execution**

Q1. Is there adequate coordination between centre and state in the execution of scheme such that technical and financial resources are used efficiently?

#### **Potential of convergence of schemes with other schemes and challenges in accomplishing the same. Convergence with private sector/CSR projects**

Q1. What are the challenges in converging the activities under CAMPA, MGNREGS, NAP and GIM?

Q2. What are the challenges in converging the activities with private sector CSR funds?

Q3. Is there any other scheme that aim to achieve similar outcomes?

Q4. Is there any other scheme that can complement the subject scheme?

Q5. Has there been any variation noticed in procurement costs and benchmark/standard rates?

## **SUSTAINIBILITY**

**SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? To what extent do the scheme design and timely interventions manage the risks?**

**Different risks like - technical, institutional, financial, economic, social, political, and environmental**



Q1. What are the risks (technical, institutional, financial, economic, social, political, and environmental) that can impact scheme performance? Please explain with reasons.

Q2. Is there a risk mitigation plan documented for resolving these risks?

### **Infrastructure for prevention and control of forest fires**

Q1. How do you ensure greater human interventions in forest areas for livelihood do not result in higher forest fire incidents?

### **Impact of climate change on vulnerable sectors**

Q1. Does the scheme ensure management plans are developed taking extreme weather events into consideration that will impact frequency and severity of forest fire incidents?

## **SS2 Is the scheme financially and institutionally sustainable? How can sustainability be improved**

### **Strengthened local governance, empowered communities**

Q1. Does the scheme take into account planning for self-sustenance? If yes, are there any plans or minutes of meetings that discuss the same.

Q2. Which activities have been identified to enhance self-sustenance of the forest area?

### **Improved financial sustainability and over-reliance on the Centre allocation.**

1. What are the trends in revenue generation from NTFPs/forest produce?

2. Have any other models for revenue generation in the forest area been identified?

## **IMPACT**

## **IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

### **Progress on SDG 15 & 7 and their targets**

Q1. How has the quality and quantity of forest cover improved as a result of the scheme?

Q2. Are there other environmental indicators that are tracked vis-à-vis scheme?

Q3. Has this progress been documented or discussed in review meetings? If yes, please provide the suitable documents.

### **Increased community ownership, reduced inequality**

Q1. Has there been improvement in socio-economic conditions of the local communities in last five years due to scheme activities?

Q2. If yes, please describe how the local communities have benefitted from the scheme?

### **Contribution to increased number of SDG goals and targets**

Q1. Is the scheme contributing to fulfilling other SDG goals and targets, such as, reduction of vulnerability and inequality, provision of amenities, promoting sustainable and inclusive employment opportunities and eradication of poverty?

Q2. Is the scheme contributing to fulfilling international targets of carbon sequestration? Please elaborate.



**Number of states implementing GIM, FPM and NAP compared to the total number of states.**

**Number of households benefitted compared to total forest population**

Q1. What are the challenges faced in accessing funds under the scheme?

**Invasive plants. Excessive exploitation of forest products**

Q1. Is there increase/decrease in invasive plants population in the areas under GIM, NAP and FPM?

Q2. Is there a trend of over-exploitation of forest products in the forest areas?

**Availability of finance for undertaking conservation measures**

Q1. Are there more credible approaches to valuating the damage caused by forest fires apart from just the commercial timber value lost?

## **EQUITY**

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Are the guidelines being followed to their full extent?**

Q1. Does the scheme ensure benefits for vulnerable, marginalized, disadvantaged or weaker section of society? If yes, how?

Q2. Does the scheme have any significant impact in reducing inequity?

**EQ2 Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is the scheme structure appropriate to encompass different marginalized and vulnerable groups of the population? Are there social biases or systems in place that prevent the inclusion of these groups?**

Q1. Are there social biases or systems in place that prevent the inclusion of any groups?

## **SECTION 2: CROSS SECTIONAL THEMES**

**Accountability & Transparency**

**Availability of data records and reports in public domain**

Q1. What are the factors limiting the reporting of data in public domain?

Q2. The data set is also present in various different authorized sources like ENVIS and different research journals, does the government control the flow of data through/in these different sources?

Q3. How authentic are such data sets present in different sources?



### **Evaluation mechanisms**

Q1. Is there an evaluation mechanism for the scheme? If yes, please provide details. If no, please explain the challenges.

### **Citizen Accountability**

Q1. Is there a grievance redressal mechanism for addressing concerns regarding scheme implementation?

### **Financial Accountability**

Q1. What funding mechanisms are being used for transfer of funds to beneficiaries?

Q2. What is the frequency for conducting financial audits on scheme implementation?

## **Direct/Indirect Employment Generation**

### **Improvement in income levels**

Q1. What is the approximate improvement in income levels as a result of the scheme?

### **Availability of job opportunities**

Q1. What is the level of employment generation through scheme?

## **Gender mainstreaming**

### **Inclusiveness in scheme design/planning**

Q1. Does the scheme in any manner encourage woman participation in the scheme implementation? Please explain.

## **Climate change & sustainability including adoption of climate-change resilient practices & diversifications**

### **Climate Change & Sustainability**

Q1. While developing the perspective plan and micro plan, are climate factors taken into consideration?

Q2. Is there an appropriate disaster risk reduction plan in place?

### **Awareness, capacity building**

Q1. Are there any training sessions held regularly for reducing pollution, adopting green practices, using local materials etc.?

Q2. Are the end beneficiaries aware of climate risks and possible individual mitigation /adaptation measures?

## **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population**

### **Fund allocation to vulnerable communities**

Q1. What is the fund allocated under TSP & SCSP for each scheme?

Q2. What is the fund allocated under TSP & SCSP for each scheme in different states?

Q3. How much of the fund has been utilized overall and by each state?



Q4. What has been the effect of the TSP & SCSP funds on improving equity?

#### **Inclusion of vulnerable groups in scheme and sector**

Q1. Does the scheme ensure benefits for vulnerable, marginalized, disadvantaged or weaker section of society? If yes, how?

Q2. Are there social biases or systems in place that prevent the inclusion of any groups?

#### **Use of IT/Technology in driving efficiency**

##### **Deployment of IT technology for monitoring**

Q1. Is there an on-line scheme MIS to ensure regular updates of progress and effective supervision? If no, what are the challenges in implementation of MIS portals/Apps?

##### **Use of latest technology to improve efficiency and effectiveness of the scheme?**

Q1. Is there an on-line scheme MIS to ensure regular updates of progress and effective supervision? If no, what are the challenges in implementation of MIS portals/Apps?

#### **Stakeholder and Beneficiary behavioural change**

##### **Fund allocation**

Q1. What percent of total allocations is directed towards awareness generation or sensitization?

Q2. Has any behavioural change in scheme beneficiaries been documented? Please provide details.

#### **Research & Development**

##### **Fund Allocation**

Q1. What percentage of total fund allocation for scheme is available for R&D? How much of that budget is being utilized?

##### **Institutes and departments dedicated to R&D**

Q1. Are there any dedicated institutes or centres or departments dedicated for R&D in the sector?

##### **Private Sector participation in R&D**

Q1. What is the percentage of private sector participation in R&D activities in the sector?

##### **Challenges in undertaking R&D efforts**

Q1. What are the challenges in undertaking R&D projects in the sector?

##### **Any Good Practices**

Q1. Are there any good practices for undertaking R&D projects in the sector?

#### **Unlocking Synergies with other Government Program**

##### **Convergence**

Q1. Were other schemes such as wildlife and forest protection schemes (Project Tiger, CAMPA, MGNREGS etc.) considered while designing or amending these schemes?

Q2. If so, how were the overlaps avoided? (For e.g. meetings conducted for ensuring convergence)



## Reforms, Regulations

### Adoption and challenges

Q1. What are the challenges faced in effective implementation of the relevant acts/rules/regulations? How can these be overcome?

## Impact on and role of private sector, community and civil society in the scheme

### Participation of private sector, public-private partnerships

Q1. What are the challenges faced in attracting private sector participation?

Q2. How can the participation of private sector through CSR be improved?

### Public-Private Partnership

Q1. How can the challenges faced by private sector in participation in the sector be reduced?

## SECTION 3: CHALLENGES AND SUGGESTIONS

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?
  - Short term
  - Medium term
  - Long terms

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

## 15.1.2 National level stakeholders - Subject Matter Experts

National level stakeholders (KII)	
Subject Matter Experts	United Nations Forum on Forests (UNFF) Indian Institute of Forest Management (IIFM), Bhopal Forest Research Institute (FRI), Dehradun Indian Council of Forestry Research and Education (ICFRE) National Environmental Engineering Research Institute

### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.



- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_that made you decide to\_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said\_\_\_\_\_ but it also seems like\_\_\_\_\_. Can you explain?

### **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
 

Sir/Madam, the Development Monitoring and Evaluation Office (DMEO), NITI Aayog is undertaking evaluation of Centrally Sponsored Schemes in the Environment and Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes before the schemes come up for fresh appraisal. NITI Aayog has engaged consultancy firm KPMG for this evaluation. We are from the Ipsos Research Pvt. Ltd. We are working with KPMG for this evaluation. To have a complete understanding of the schemes, key challenges and success stories, we are meeting the key stakeholders from central, state, and village level. The study also involves a survey with the households. We would like to seek your opinion on certain topics related to the scheme **National Mission for a Green India**. The information we gather will help us evaluate and develop recommendations in respect of the scheme. Every piece of information and opinion that you share would help us a great deal to work on this area and improve it further for more effective implementation of the schemes.
- Inform the respondent of the probable duration of the discussion - Approximately 45 minutes
- Introduce self, note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.



## PROFILE OF THE STAKEHOLDER

- Good morning/afternoon sir/madam, could you please tell me your name? (NOT TO USE THE RECORDER HERE)
- Since when have you been working here? What are your key roles and responsibilities in this department in general?
- What are your roles and responsibilities in this scheme? Could you please explain?

## SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH THE SCHEME

### **MODERATOR TO NOTE:**

1. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.
2. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.

## SECTION 1: DEEP DIVE INTO SCHEME USING REESIE FRAMEWORK:

### **RELEVANCE**

#### **RL1: Is the scheme relevant in the present context?**

##### **Consideration of alignment to international treaties/conventions**

Q1. What are challenges in aligning the scheme objectives with those of Global Forest Goals and Targets outlined in United Nations Strategic Plan for Forests 2030?

Q2. What are challenges in making the scheme objectives aligned with those of REDD+?

##### **Reduced redundancy in scheme design**

Q1. Are there any redundancies in the scheme with others, such as NAP, GIM, MGNREGS, CAMPA etc.

Q2. Is the convergence of activities successful on ground?

#### **RL2 Is it appropriate to continue / prioritize this scheme?**

##### **Impact of scaling down**

Q1. Is there any alternative schemes that can deliver similar outcomes?

Q2. Are such alternative schemes, if any, more effective than the subject scheme?

#### **RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

##### **Outcome tracking**

Q1. Do you recommend any specific outcome indicators for the objectives of the scheme?

##### **Appropriateness of the scheme design**



- Q1. Are any challenges being faced in the current governance, monitoring, evaluation and review system?
- Q2. Are the indicators for tracking outcome and outputs sufficient in your opinion?
- Q3. Has a mechanism been put in place for regular strategic review to ensure appropriateness / relevance of the scheme? If yes, please provide details.

#### **Comprehensive census data of species**

- Q1. What efforts are undertaken to evaluate the existing biodiversity and improvement resulting from interventions in the sector?

#### **EFFECTIVENESS**

##### **ET1: Is the scheme design appropriate to address scheme objectives?**

#### **Unintended positive and negative outcomes of scheme and their mitigation measures**

- Q1. Have there been any incidents which led to an unintended consequence under the scheme (for e.g. villagers were unsatisfied with the conservation plans or alternate livelihood)?
- Q2. Have you observed increase in invasive plant population?
- Q3. How can the scheme design be modified to mitigate the negative factors?

##### **ET2: How are scheme targets set and monitored?**

#### **Effective and innovative partnerships. Improved strategies and approaches.**

- Q1. Are you aware of any consultations with local partnering agencies for exploring and/or adopting innovating programs? Please provide details.

##### **ET3 How has the scheme performed against scheme objectives and annual targets?**

#### **Key issues, bottlenecks, challenges**

- Q1. What are the bottlenecks, issues & challenges in the implementation of the scheme?
- Q2. Has there been any independent evaluation conducted in the past? If yes, what were the observations and recommendations of the evaluation.
- Q3. In your opinion, is sufficient funding available for maintenance of implemented projects?

#### **Additional performance indicators (over and above those currently tracked)**

- Q1. Are there any additional performance indicators (over and above those currently tracked) that may be necessary to effectively monitor scheme performance?

##### **ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

#### **State performance and supportive factors across states that perform well**

- Q1. What are the factors that can be potentially undertaken to improve scheme performance?



### **How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1. How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?

### **Negative factors affecting scheme performance**

Q1. What are the negative factors that have reduced scheme performance?

Q3. Have these factors been discussed in stakeholder or review meetings? If yes, please provide the minutes of meeting.

### **How can the scheme design be modified to ensure exclusion or resolution of the negative factors?**

Q1. How can the scheme design be modified to ensure exclusion or resolution of the negative factors?

## **EFFICIENCY**

### **EC1 Did the benefits of the scheme exceed costs?**

#### **Monetary value of scheme benefits, improved cost-benefit ratio**

Q1: Have any studies been conducted to place a monetary value on the direct and indirect scheme benefits? Please provide details.

### **EC2 Can the costs of the scheme be lowered?**

#### **Lower cost alternatives**

Q1. Are there lower cost alternatives for achieving the scheme outcomes?

#### **Potential of convergence of schemes with other schemes and challenges in accomplishing the same. Convergence with private sector/CSR projects**

Q1. What are the challenges in converging the activities under CAMPA, MGNREGS, NAP and GIM?

Q2. What are the challenges in converging the activities with private sector CSR funds?

Q3. Is there any other scheme that aim to achieve similar outcomes?

Q4. Is there any other scheme that can complement the subject scheme?

## **SUSTAINIBILITY**

### **SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? To what extent do the scheme design and timely interventions manage the risks?**

#### **Different risks like - technical, institutional, financial, economic, social, political, and environmental**

Q1. What are the risks (technical, institutional, financial, economic, social, political, and environmental) that can impact scheme performance? Please explain with reasons.

Q2. Is there a risk mitigation plan documented for resolving these risks?

### **SS2 Is the scheme financially and institutionally sustainable? How can sustainability be improved**



### **Strengthened local governance, empowered communities**

Q2. Which activities have been identified to enhance self-sustenance of the forest area?

### **Improved financial sustainability and over-reliance on the Centre allocation.**

1. What are the trends in revenue generation from NTFPs/forest produce?
2. Have any other models for revenue generation in the forest area been identified?

### **IMPACT**

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

### **Progress on SDG 15 & 7 and their targets**

- Q1. How has the quality and quantity of forest cover improved as a result of the scheme?
- Q2. Are there other environmental indicators that are tracked vis-à-vis scheme?

### **Increased community ownership, reduced inequality**

- Q1. Has there been improvement in socio-economic conditions of the local communities in last five years due to scheme activities?
- Q2. If yes, please describe how the local communities have benefitted from the scheme?

### **Contribution to increased number of SDG goals and targets**

- Q1. Is the scheme contributing to fulfilling other SDG goals and targets, such as, reduction of vulnerability and inequality, provision of amenities, promoting sustainable and inclusive employment opportunities and eradication of poverty?
- Q2. Is the scheme contributing to fulfilling international targets of carbon sequestration? Please elaborate.

### **Invasive plants. Excessive exploitation of forest products**

- Q1. Is there increase/decrease in invasive plants population in the areas under GIM, NAP and FPM?
- Q2. Is there a trend of over-exploitation of forest products in the forest areas?

### **Availability of finance for undertaking conservation measures**

- Q1. Are there more credible approaches to valuating the damage caused by forest fires apart from just the commercial timber value lost?

### **EQUITY**

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

### **Are the guidelines being followed to their full extent?**

- Q1. Does the scheme ensure benefits for vulnerable, marginalized, disadvantaged or weaker section of society? If yes, how?



Q2. Does the scheme have any significant impact in reducing inequity?

**EQ2 Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is the scheme structure appropriate to encompass different marginalized and vulnerable groups of the population? Are there social biases or systems in place that prevent the inclusion of these groups?**

Q1. Are there social biases or systems in place that prevent the inclusion of any groups?

## **SECTION 2: CROSS SECTIONAL THEMES**

### **Direct/Indirect Employment Generation**

#### **Improvement in income levels**

Q1. What is the approximate improvement in income levels as a result of the scheme?

#### **Availability of job opportunities**

Q1. What is the level of employment generation through scheme?

### **Gender mainstreaming**

#### **Inclusiveness in scheme design/planning**

Q1. Does the scheme in any manner encourage woman participation in the scheme implementation?  
Please explain.

### **Use of IT/Technology in driving efficiency**

#### **Use of latest technology to improve efficiency and effectiveness of the scheme?**

Q1. Are there any technologies that can improve the efficiency and effectiveness of the scheme? If yes, please elaborate.

### **Stakeholder and Beneficiary behavioural change**

#### **Fund allocation**

Q1. Has any behavioural change in scheme beneficiaries been documented? Please provide details.

### **Research & Development**

#### **Challenges in undertaking R&D efforts**

Q1. What are the challenges in undertaking R&D projects in the sector?

#### **Any Good Practices**

Q1. Are there any good practices for undertaking R&D projects in the sector?



## Reforms, Regulations

### Adoption and challenges

Q1. What are the challenges faced in effective implementation of the relevant acts/rules/regulations? How can these be overcome?

## Impact on and role of private sector, community and civil society in the scheme

### Participation of private sector, public-private partnerships

Q1. What are the challenges faced in attracting private sector participation?

Q2. How can the participation of private sector through CSR be improved?

### Public-Private Partnership

Q1. How can the challenges faced by private sector in participation in the sector be reduced?

## SECTION 3: CHALLENGES AND SUGGESTIONS

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?
  - Short term
  - Medium term
  - Long terms

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

### 15.1.3 State level stakeholders

State level stakeholders (KII)	
State level official for GIM / NAP	State Nodal Officer, GIM / NAP
State level official for FPM	State Nodal Officer

## GENERAL GUIDELINES:



- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_that made you decide to\_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said\_\_\_\_\_ but it also seems like\_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
 

Sir/Madam, the Development Monitoring and Evaluation Office (DMEO), NITI Aayog is undertaking evaluation of Centrally Sponsored Schemes in the Environment and Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes before the schemes come up for fresh appraisal. NITI Aayog has engaged consultancy firm KPMG for this evaluation. We are from the Ipsos Research Pvt. Ltd. We are working with KPMG for this evaluation. To have a complete understanding of the schemes, key challenges and success stories, we are meeting the key stakeholders from central, state, and village level. The study also involves a survey with the households. We would like to seek your opinion on certain topics related to the scheme **National Mission for a Green India**. The information we gather will help us evaluate and develop recommendations in respect of the scheme. Every piece of information and opinion that you share would help us a great deal to work on this area and improve it further for more effective implementation of the schemes.
- Inform the respondent of the probable duration of the discussion - Approximately 45 minutes
- Introduce self, note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.



- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Good morning/afternoon sir/madam, could you please tell me your name? (NOT TO USE THE RECORDER HERE)
- Since when have you been working here? What are your key roles and responsibilities in this department in general?
- What are your roles and responsibilities in this scheme? Could you please explain?

### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH THE SCHEME**

#### ***MODERATOR TO NOTE:***

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

### **SECTION 1: DEEP DIVE INTO NMGI SCHEME USING REESIE FRAMEWORK:**

#### **RELEVANCE**

#### **RL1: Is the scheme relevant in the present context?**

##### **Need assessment of the target population. Assessment of output of the schemes**

Q1. Was a needs assessment study conducted? Please provide details.

Q2. Was any assessment study conducted for amendments to the scheme? Please provide details.

##### **Reduced redundancy in scheme design**

Q1. Have you faced any challenges in geographic areas where multiple schemes are being implemented?

Q2. If so, have you consulted various stakeholders regarding the same?

#### **RL2 Is it appropriate to continue / prioritize this scheme?**

##### **Impact of scaling down**

Q1. Is there any alternative schemes that can deliver similar outcomes?

Q2. Are such alternative schemes, if any, more effective than the subject scheme?

#### **RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

##### **Outcome tracking**



Q1. Is there any plan or discussion carried out on developing more comprehensive outcome indicators for the schemes? If yes, please provide details.

Q2. Do you recommend any specific outcome indicators for the objectives of the scheme?

### **Appropriateness of the scheme design**

Q1. Are any challenges being faced in the current governance, monitoring, evaluation and review system?

Q2. Are the indicators for tracking outcome and outputs sufficient in your opinion?

## **EFFECTIVENESS**

### **ET1: Is the scheme design appropriate to address scheme objectives?**

#### **Awareness of the scheme, assessment of institutional infrastructure w.r.t. implementation, incorporation of recommendation into planning process. Addressing the needs of the beneficiaries**

Q1. What are the challenges you face in implementation of the scheme?

Q2. What are alternative strategies to address these challenges?

Q3. Do you incorporate recommendations of the review meetings in your annual plan?

Q4. Has there been increased awareness of the scheme in its implementation area?

#### **Increased awareness. Better service delivery**

Q1. Have HH covered by the scheme reported diversification in livelihood sources?

Q2. Are you aware of any Access and Benefit sharing agreement between villagers and authorities with regard to NTFP revenue generation?

Q3. Have HH covered by the scheme reported access to cleaner/alternative sources of energy?

Q4. Have HH covered by the scheme reported increase in number of days of employment in primary occupation?

Q5. Have you experienced any resistance from the local communities when implementing the scheme?

#### **Unintended positive and negative outcomes of scheme and their mitigation measures**

Q1. Have there been any incidents which led to an unintended consequence under the scheme (for e.g. villagers were unsatisfied with the conservation plans or alternate livelihood)?

Q2. Have you observed increase in invasive plant population?

Q3. How can the scheme design be modified to mitigate the negative factors?

### **ET2: How are scheme targets set and monitored?**

#### **Strengthened monitoring system. Strengthened reporting system. Reduction in inconsistent reporting. Better use of ICT in the monitoring**

Q1. Are any studies conducted for setting of targets in terms of outputs or outcomes?

Q2. Is there a mechanism to independently verify the progress reported by the supervising entity through audits or other methods?



Q3. Are the stakeholders and other parties consulted during the target setting process?

#### **Effective & Innovative Partnerships. Improved strategies and approaches**

Q1. What are the innovative measures/ technology used for implementing the scheme?

Q2. Have there been consultations with local partnering agencies for exploring and/or adopting innovating programs? Please provide details.

Q3. Is there an evidence of increased usage of new technologies or approaches in strategic plans for improving programme implementation? Please provide details.

### **ET3 How has the scheme performed against scheme objectives and annual targets?**

#### **Performance on the output-outcome framework**

Q1. Is there a results framework/output-outcome framework maintained under the scheme? If yes, please provide the same for last 5 years.

Q2. What are the reasons for non-achievement of targets?

#### **Key issues, bottlenecks, challenges**

Q1. What are the other bottlenecks, issues & challenges in the implementation of the scheme?

Q2. Has there been any independent evaluation conducted in the past? If yes, what were the observations and recommendations of the evaluation.

Q3. Do the stakeholder meetings discuss issues, and suggestions to resolve the same? If yes, please provide the minutes of meetings.

Q4. Is sufficient funding available for maintenance of implemented projects?

#### **Additional performance indicators (over and above those currently tracked)**

Q1. Is there any additional performance indicators (over and above those currently tracked) that may be necessary to effectively monitor scheme performance?

### **ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

#### **Fund release process and timing**

Q1. Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the challenges?

#### **Utilization of available funds**

Q1. Was there timely utilization of available funds? If not, what were the reasons?

#### **State performance and supportive factors across states that perform well**

Q1. What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance?



### **How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1. How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?

#### **Negative factors affecting scheme performance.**

Q1. Is the funding mechanism adequate and conducive to timely application and disbursement of funds?

Q2. What are the negative factors that have reduced scheme performance?

Q3. Have these factors been discussed in stakeholder or review meetings? If yes, please provide the minutes of meeting.

### **How can the scheme design be modified to ensure exclusion or resolution of the negative factors?**

Q1. How can the scheme design be modified to ensure exclusion or resolution of the negative factors?

## **EFFICIENCY**

### **EC1 Did the benefits of the scheme exceed costs?**

#### **Monetary value of scheme benefits, improved cost-benefit ratio**

Q1. Have any studies been conducted to place a monetary value on the direct and indirect scheme benefits? Please provide details.

#### **Allocated budget and utilization trend, efficiency spend**

Q1. Does the budget for the scheme get efficiently utilized annually? If not, what are the major reasons of over / under utilization?

### **EC2 Can the costs of the scheme be lowered?**

#### **Lower cost alternatives**

Q1. Are there lower cost alternatives for achieving the scheme outcomes?

#### **Coordination between ministries (or departments as applicable) in scheme execution**

Q1. Is there adequate coordination between center and state in the execution of scheme such that technical and financial resources are used efficiently?

#### **Potential of convergence of schemes with other schemes and challenges in accomplishing the same.**

Q1. What are the challenges in converging the activities under CAMPA, MGNREGS, NAP and GIM?

Q2. Is there any other scheme that aim to achieve similar outcomes?

Q3. Is there any other scheme that can complement the subject scheme?

## **SUSTAINABILITY**



**SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? To what extent do the scheme design and timely interventions manage the risks?**

**Different risks like - technical, institutional, financial, economic, social, political, and environmental**

Q1. What are the risks (technical, institutional, financial, economic, social, political, and environmental) that can impact scheme performance? Please explain with reasons.

Q2. Is there a risk mitigation plan documented for resolving these risks?

**SS2 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

**Strengthened local governance, empowered communities**

Q1. Does the scheme take into account planning for self-sustenance? If yes, are there any plans or minutes of meetings that discuss the same.

Q2. Which activities have been identified to enhance self-sustenance of the parks?

**Improved financial sustainability and over-reliance on the Centre allocation**

Q1. What are the trends in revenue generation from NTFPs/forest produce?

Q2. Have any other models for revenue generation in the forest area been identified?

Q3. Are there any trainings provided for enhanced revenue generation?

## **IMPACT**

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Progress on SDG 15 & 7 and their targets**

Q1. How has the quality and quantity of forest cover improved as a result of the scheme?

Q2. Are there other environmental indicators that are tracked vis-à-vis scheme?

Q3. Has this progress been documented or discussed in review meetings? If yes, please provide the suitable documents.

**Enhanced awareness of the scheme. Increased commitment and ownership**

Q1. Has there been improvement in communities' participation in forest management activities?

Q2. Is there improvement in partnership with forest fringe communities for forest protection?

Q3. What are the trends in grievance redressal over the years?

**Increased community ownership, reduced inequality**

Q1. Has there been improvement in socio-economic conditions of the local communities in last five years due to scheme activities?

Q2. If yes, please describe how the local communities have benefitted from the scheme?



**Number of states implementing GIM, FPM and NAP compared to the total number of states.**

**Number of households benefitted compared to total forest population**

Q1. What are the challenges faced in accessing funds under the scheme?

**Invasive plants. Excessive exploitation of forest products**

Q1. Is there increase/decrease in invasive plants population in the areas under GIM, NAP and FPM?

Q2. Is there a trend of over-exploitation of forest products in the forest areas?

## **EQUITY**

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Are the guidelines being followed to their full extent?**

Q1. Are the guidelines related to tribal, vulnerable and women population groups being followed?

Q2. Does the scheme ensure benefits for vulnerable, marginalized, disadvantaged or weaker section of society? If yes, how?

Q3. Does the scheme have any significant impact in reducing inequity?

**EQ2 Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is the scheme structure appropriate to encompass different marginalized and vulnerable groups of the population? Are there social biases or systems in place that prevent the inclusion of these groups?**

Q1. Are there social biases or systems in place that prevent the inclusion of any groups?

## **SECTION 2: CROSS SECTIONAL THEMES**

**Accountability & Transparency**

**Availability of data records and reports in public domain**

Q1. What are the factors limiting the reporting of data in public domain?

**Evaluation mechanisms**

Q1. Is there an evaluation mechanism for the scheme implementation at state level? If yes, please provide details. If no, please explain the challenges.

**Monitoring**

Q1. What is the frequency for submission of Utilization Reports to the state and central governments?

Q2. Are there any challenges in submission of Utilization Reports on time?



### **Citizen Accountability**

Q1. Is there a grievance redressal mechanism for addressing concerns regarding scheme implementation?

### **Financial Accountability**

Q1. What funding mechanisms are being used for transfer of funds to beneficiaries?

Q2. What is the frequency for conducting financial audits on scheme implementation?

### **Direct/Indirect Employment Generation**

#### **Improvement in income levels**

Q1. What is the approximate improvement in income levels as a result of the scheme?

#### **Availability of job opportunities**

Q1. What is the level of employment generation through scheme?

### **Gender mainstreaming**

#### **Inclusiveness in scheme design/planning**

Q1. Does the scheme in any manner encourage woman participation in the scheme implementation?

Please explain.

### **Climate change & sustainability including adoption of climate-change resilient practices & diversifications**

#### **Climate Change & Sustainability**

Q1. While developing the perspective plan and micro plan, are climate factors taken into consideration?

Q2. Is there an appropriate disaster risk reduction plan in place?

#### **Awareness, capacity building**

Q1. Are there any training sessions held regularly for reducing pollution, adopting green practices, using local materials etc.?

Q2. Are the end beneficiaries aware of climate risks and possible individual mitigation /adaptation measures?

### **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population**

#### **Inclusion of vulnerable groups in scheme and sector**

Q1. Does the scheme ensure benefits for vulnerable, marginalized, disadvantaged or weaker section of society? If yes, how?

Q2. Are there social biases or systems in place that prevent the inclusion of any groups?

### **Use of IT/Technology in driving efficiency**

#### **Deployment of IT technology for monitoring**



Q1. Is there an on-line scheme MIS to ensure regular updates of progress and effective supervision? If no, what are the challenges in implementation of MIS portals/Apps?

#### **Use of latest technology to improve efficiency and effectiveness of the scheme?**

Q1. Is there an on-line scheme MIS to ensure regular updates of progress and effective supervision? If no, what are the challenges in implementation of MIS portals/Apps?

### **Stakeholder and Beneficiary behavioural change**

#### **Fund allocation**

Q1. What percent of total allocations is directed towards awareness generation or sensitization?

Q2. Has any behavioural change in scheme beneficiaries been documented? Please provide details.

#### **Mechanisms for beneficiary sensitization**

Q1. What are the existing mechanisms at State/District/Reserve to promote beneficiary awareness and sensitization?

Q2. What activities are undertaken at forest level to promote adoption of good practices?

### **Research & Development**

#### **Institutes and departments dedicated to R&D**

Q1. Are there any dedicated institutes or centres or departments dedicated for R&D in the sector?

#### **Private Sector participation in R&D**

Q1. Is there any private sector participation in R&D activities in the sector? Please provide details.

#### **Any Good Practices**

Q1. Are there any good practices for undertaking R&D projects in the sector?

### **Unlocking Synergies with other Government Program**

#### **Convergence**

1. Have you faced any challenges in planning for conservation at various reserves/ wetlands sites where multiple schemes are being implemented?

2. If so, what were the primary challenges and how were they resolved?

### **Reforms, Regulations**

#### **Adoption and challenges**

Q1. What are the challenges faced in effective implementation of the relevant acts/rules/regulations? How can these be overcome?

### **Impact on and role of private sector, community and civil society in the scheme**

#### **Participation of private sector, public-private partnerships**

Q1. What are the challenges faced in attracting private sector participation?



Q2. How can the participation of private sector through CSR be improved?

### Public-Private Partnership

Q1. How can the challenges faced by private sector in participation in the sector be reduced?

## SECTION 3: CHALLENGES AND SUGGESTIONS

1. Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
2. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?
  - Short term
  - Medium term
  - Long terms

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

### 15.1.4 Village level stakeholders

Village level stakeholders (FGD)	
Green India Mission and National Afforestation Programme	Conservator of Forests / Divisional Forest Officer Joint Forest Management Committee / Forest Development Agency
Forest Fire Prevention and Management Scheme	Conservator of Forests / Divisional Forest Officer Joint Forest Management Committee / Forest Development Agency

#### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?



- What was it about \_\_\_\_that made you decide to\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said\_\_\_\_\_ but it also seems like\_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
 

Sir/Madam, the Development Monitoring and Evaluation Office (DMEO), NITI Aayog is undertaking evaluation of Centrally Sponsored Schemes in the Environment and Water Resources sector in keeping with Government of India’s policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes before the schemes come up for fresh appraisal. NITI Aayog has engaged consultancy firm KPMG for this evaluation. We are from the Ipsos Research Pvt. Ltd. We are working with KPMG for this evaluation. To have a complete understanding of the schemes, key challenges and success stories, we are meeting the key stakeholders from central, state, and village level. The study also involves a survey with the households. We would like to seek your opinion on certain topics related to the scheme **National Mission for a Green India**. The information we gather will help us evaluate and develop recommendations in respect of the scheme. Every piece of information and opinion that you share would help us a great deal to work on this area and improve it further for more effective implementation of the schemes.
- Inform the respondent of the probable duration of the discussion - Approximately 45 minutes
- Introduce self, note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can’t write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Good morning/afternoon sir/madam, could you please tell me your name? (NOT TO USE THE RECORDER HERE)
- Since when have you been working here? What are your key roles and responsibilities in this department in general?
- What are your roles and responsibilities in this scheme? Could you please explain?

## **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH THE SCHEME**



## **MODERATOR TO NOTE:**

1. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.
2. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.

## **SECTION 1: DEEP DIVE INTO NMGI SCHEME USING REESIE FRAMEWORK:**

### **RELEVANCE**

#### **RL1: Is the scheme relevant in the present context?**

##### **Need assessment of the target population. Assessment of output of the schemes**

Q1. Were you involved in the need assessments that had taken place at the various stages?

##### **Reduced redundancy in scheme design**

Q1. Does the scheme design avoid overlap in implementation?

Q2. If not, have you taken any measures to avoid overlap in implementation?

#### **RL2: Is it appropriate to continue / prioritize this scheme?**

##### **Impact of scaling down**

Q1. Is there any alternative schemes that can deliver similar outcomes?

Q2. Are such alternative schemes, if any, more effective than the subject scheme?

#### **RL3: Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

##### **Appropriateness of the scheme design**

Q1. Do you think that the scheme design accounts for regional or local context variations for meeting its objectives?

### **EFFECTIVENESS**

#### **ET1: Is the scheme design appropriate to address scheme objectives?**

##### **Awareness of the scheme, assessment of institutional infrastructure w.r.t. implementation, incorporation of recommendation into planning process. Addressing the needs of the beneficiaries**

Q1. What are the challenges you face in implementation of the scheme?

Q2. What are alternative strategies to address these challenges?

Q3. Are the local level governance mechanisms for scheme implementation effective?



Q4. Do you have review meetings with various stakeholders such as PRIs, village dwellers? What is their frequency?

Q5. Are stakeholder concerns and recommendations considered in the planning and implementation process?

Q6. Has there been increased awareness of the scheme in its implementation area?

#### **Ownership and accountability of the scheme**

Q1. Number of training sessions held for ground-level staff and local communities regarding their role in the scheme, such as, planning, conducting scheme activities, monitoring etc.

Q2. Do you have review meetings with various stakeholders such as PRIs, village dwellers? What is their frequency?

#### **Increased awareness. Better service delivery**

Q1. Have HH covered by the scheme reported diversification in livelihood sources?

Q2. Are you aware of any Access and Benefit sharing agreement between villagers and authorities with regard to NTFP revenue generation?

Q3. Have HH covered by the scheme reported access to cleaner/alternative sources of energy?

Q4. Have HH covered by the scheme reported increase in number of days of employment in primary occupation?

Q5. Have you experienced any resistance from the local communities when implementing the scheme?

#### **Unintended positive and negative outcomes of scheme and their mitigation measures**

Q1. Have there been any incidents which led to an unintended consequence under the scheme (for e.g. villagers were unsatisfied with the conservation plans or alternate livelihood)?

Q2. Have you observed increase in invasive plant population?

Q3. How can the scheme design be modified to mitigate the negative factors?

### **ET2: How are scheme targets set and monitored?**

#### **Strengthened monitoring system. Strengthened reporting system. Reduction in inconsistent reporting. Better use of ICT in the monitoring**

Q1. Do you follow any monitoring framework for reporting the progress of scheme activities?

Q2. Is monitoring conducted regularly? If not, what are the challenges?

#### **Effective and innovative partnerships. Improved strategies and approaches.**

Q1. Do you actively try and integrate innovative technology or strategies for scheme implementation?

### **ET3 How has the scheme performed against scheme objectives and annual targets?**

#### **Key issues, bottlenecks, challenges**

Q1. What are the other bottlenecks, issues & challenges faced in the implementation of activities under the scheme?



### **Additional performance indicators (over and above those currently tracked)**

Q1. Are there any additional performance indicators (over and above those currently tracked) that may be necessary to effectively monitor scheme performance?

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

### **Fund release process and timing**

Q1. Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the challenges?

### **Utilization of available funds**

Q1. Was there timely utilization of available funds? If not, what were the reasons?

### **Negative factors affecting scheme performance**

Q1. Is the funding mechanism adequate and conducive to timely application and disbursement of funds?

Q2. What are the negative factors that have reduced scheme performance?

## **EFFICIENCY**

**EC2 Can the costs of the scheme be lowered?**

### **Potential of convergence of schemes with other schemes and challenges in accomplishing the same.**

Q1. What are the challenges in converging the activities under CAMPA, MGNREGS, NAP and GIM?

Q2. What alternative functional modalities do you recommend?

## **SUSTAINIBILITY**

**SS2 Is the scheme financially and institutionally sustainable? How can sustainability be improved**

### **Strengthened local governance, empowered communities**

Q1. Do the workshops / trainings help build knowledge that can be sustained over a significant period of time?

Q2. Are the local governance mechanisms setup under the scheme able to sustain over a significant period of time?

### **Improved financial sustainability and over reliance on the centre allocation**

Q1. What are the trends in revenue generation from NTFPs/forest produce?

Q2. Are there any trainings provided for enhancing revenue generation?



## **IMPACT**

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

### **Progress on SDG 15 & 7 and their targets**

Q1. How has the quality and quantity of forest cover improved as a result of the scheme?

Q2. Are there other environmental benefits from the scheme?

### **Enhanced awareness, increased commitment and ownership**

Q1. Has there been improvement in communities' participation in forest management activities?

Q2. Is there improvement in partnership with forest fringe communities for forest protection?

Q3. What is the trends in grievance redressal over the years?

### **Increased community ownership, reduced inequality**

Q1. Is there improvement in access to clean energy?

Q2. Is there improvement in employment / livelihoods among villagers?

### **Invasive plants. Excessive exploitation of forest products**

Q1. Is there increase/decrease in invasive plants population in the areas under GIM, NAP and FPM?

Q2. Is there a trend of over-exploitation of forest products in the forest areas?

## **EQUITY**

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

### **Are the guidelines being followed properly to the full extent?**

Q1. How will you describe the employment rate and education level vulnerable/weak/marginalized section of local communities in last five years? (Poor, good, bad)

Q2. How will you describe participation rate in training event/workshops of vulnerable/weak/marginalized section of local communities in last five years?

**EQ2 Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is the scheme structure appropriate to encompass different marginalized and vulnerable groups of the population? Are there social biases or systems in place that prevent the inclusion of these groups?**



Q1. Are there instances where any group of people have been constrained from participating in scheme activities/ training events/distribution of benefits?

## **SECTION 2: CROSS SECTIONAL THEMES**

### **Accountability & Transparency**

#### **Monitoring**

Q1. What are the challenges in submission of Utilization Reports on time?

#### **Citizen Accountability**

Q1. Is there a grievance redressal mechanism for addressing concerns regarding scheme implementation?

#### **Financial Accountability**

Q1. Are you aware of any financial discrepancies in scheme implementation?

### **Direct/Indirect Employment Generation**

#### **Improvement in income levels**

Q1. What is the approximate improvement in income levels as a result of the scheme?

#### **Availability of job opportunities**

Q1. What is the level of employment generation through scheme?

#### **Women participation in scheme**

Q1. Are there any scheme activities where women participation can be improved? Please explain.

### **Gender mainstreaming**

#### **Inclusiveness in scheme design/planning**

Q1. Are there any scheme activities where women participation can be improved? Please explain.

### **Climate change & sustainability including adoption of climate-change resilient practices & diversifications**

#### **Awareness, capacity building**

Q1. Are there any training sessions held regularly for reducing pollution, adopting green practices, using local materials etc.?

Q2. Are you aware of climate risks and possible individual mitigation /adaptation measures?

### **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population**

#### **Inclusion of vulnerable groups in scheme and sector**

Q1. Are there instances where any group of people have been constrained from participating in scheme activities/ training events/distribution of benefits?



## Stakeholder and Beneficiary behavioural change

### Challenges for behavioural change

Q1. What are the major challenges in inducing behaviour change? Are there any areas which needs more attention?

## Unlocking Synergies with other Government Program

### Convergence

Q1. Have you faced any challenges in implementing activities under the scheme due to overlap with other schemes?

Q2. If yes, what measures were taken to avoid overlap in implementation?

## Reforms, Regulations

### Adoption and challenges

Q1. What are the challenges faced in effective implementation of the relevant acts/rules/regulations? How can these be overcome?

## Impact on and role of private sector, community and civil society in the scheme

### Participation of private sector, public-private partnerships

Q1. What are the challenges faced in attracting private sector participation?

### Public-Private Partnership

Q1. How can the challenges faced by private sector in participation in the sector be reduced?

## SECTION 3: CHALLENGES AND SUGGESTIONS

Q1. Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?

Q2. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

- Short term
- Medium term
- Long terms

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



# Annexure 16 Primary Survey Guide - IDWH

## 16.1.1 National level stakeholders - Government

National Level stakeholders (KII)	
Project Tiger	Inspector General of Forests
Project Elephant	Inspector General of Forests / Chairman, Project Elephant Steering Committee
IDWH sub-scheme	Inspector General of Forests

### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:

Sir/Madam, the Development Monitoring and Evaluation Office (DMEO), NITI Aayog is undertaking evaluation of Centrally Sponsored Schemes in the Environment and Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes before the schemes come up for fresh appraisal. NITI Aayog has engaged consultancy firm KPMG for this evaluation. We are from the Ipsos Research Pvt. Ltd. We are working with KPMG for this evaluation. To have a complete understanding of the schemes, key challenges and success stories, we are meeting the key stakeholders from central,



state, and village level. The study also involves a survey with the households. We would like to seek your opinion on certain topics related to the scheme **Integrated Development of Wildlife Habitats**. The information we gather will help us evaluate and develop recommendations in respect of the scheme. Every piece of information and opinion that you share would help us a great deal to work on this area and improve it further for more effective implementation of the schemes.

- Inform the respondent of the probable duration of the discussion - Approximately 45 minutes
- Introduce self, note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Good morning/afternoon sir/madam, could you please tell me your name? (NOT TO USE THE RECORDER HERE)
- Since when have you been working here? What are your key roles and responsibilities in this department in general?
- What are your roles and responsibilities in this scheme? Could you please explain?

#### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH THE SCHEME**

##### ***MODERATOR TO NOTE:***

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

#### **SECTION 1: DEEP DIVE INTO CNR SCHEME USING REESIE FRAMEWORK:**

##### **RELEVANCE**

**RL1: Is the scheme relevant in the present context?**

##### **Scheme updation for alignment with SDG goals**

Q1. While the scheme is prima-facie aligned to the SDGs, do you think that scheme guidelines been specifically mapped to India's SDG targets?



### **Identification of linkage between national targets and scheme guidelines**

Q1. Has there been any plan created for aligning scheme guidelines with national policies, targets/goals such as The Wildlife Protection Act and National Wildlife Action Plan?

### **Identification of linkage between international conventions and scheme guidelines**

Q1. Has there been any discussion or plan on the alignment of scheme with CITES, MIKE and St. Petersburg Declaration?

### **Need assessment of the target population. Assessment of output of the schemes**

Q1. Is there a framework for needs assessment of target population in development of conservation action plans?

Q2. What are the focus areas of the needs assessment?

Q3. What was the rationale behind the scheme design and activities?

Q4. Were other schemes considered while designing or amending these schemes?

Q5. If so, how were the overlaps avoided? (For e.g. meetings conducted for ensuring convergence)

### **Consideration of the coexistence of people and animals. Prioritisation of communities/PRI's etc. in the scheme**

Q1. Was the involvement of communities/ PRI's etc. considered while the scheme design was in the process?

Q2. If not, what was the reason for this?

Q3. If yes, what was the extent of communities/PRI involvement?

## **RL2 Is it appropriate to continue / prioritize this scheme?**

### **Impact of scaling down or stopping the scheme**

Q1. Is there any alternative scheme that can deliver similar outcomes? Further, are such alternative schemes, if any, more effective than the scheme?

### **Poaching of wildlife and illegal trading of animal goods**

Q1. With the rise in wildlife population resulting from conservation efforts, how do you ensure the carrying capacity of a reserve is not exceeded?

## **RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

### **Outcome tracking**

Q1. Is there any plan or discussion carried out on developing more comprehensive outcome indicators for the scheme? If yes, please provide details.

Q2. Do you recommend any specific outcome indicators for the objectives of the scheme?

Q3. Are any challenges being faced in the current governance, monitoring, evaluation and review system?

Q4. Are the indicators for tracking outcome and outputs sufficient in your opinion?



Q5. Has a mechanism been put in place for regular strategic review to ensure appropriateness / relevance of the scheme? If yes, please provide details.

#### **Multi-stakeholder partnerships with research and development agencies**

Q1. Does the IDWH Division and State Forest Departments engage with you on a regular basis for conservation and management issues?

### **EFFECTIVENESS**

#### **ET1: Is the scheme design appropriate to address scheme objectives?**

#### **Unintended ecological and socio-economic consequences of the scheme and recommendations to mitigate them**

Q1. Have there been any incidents which led to an unintended consequence under the scheme (for e.g. villagers were unsatisfied with the scheme implementation or alternate livelihood)?

Q2. How can the scheme design be modified to mitigate the negative factors?

#### **ET2: How are scheme targets set and monitored?**

#### **Strengthened monitoring system. Strengthened reporting system. Reduction in inconsistent reporting. Better use of ICT in the monitoring**

Q1. Are any studies conducted for setting of targets in terms of outputs or outcomes?

Q2. Is there mechanism to independently verify the progress reported by the supervising entity through audits or other methods?

#### **Effective and innovative partnerships. Improved strategies and approaches. Utilization of innovative technology and strategy**

Q1. Have any partnerships been entered with international organizations or other agencies for research or implementation of innovative technology?

Q2. What are the innovative measures/ technology used for implementing the schemes?

Q3. Have there been consultations with local partnering agencies for exploring and/or adopting innovating programs?

#### **ET3 How has the scheme performed against scheme objectives and annual targets?**

#### **Performance on the output-outcome framework**

Q1. Has there been a trend of improvement or worsening of the output-outcome framework results?

Q2. What are the reasons for this trend?

#### **Documentation for state wise performance of schemes**

Q1. Is there documentation of state-wise performance of schemes? If yes, please provide the same.

Q2. Which parameter or benchmark can be used to evaluate the performance of states under the schemes?



Q3. Which states have performed well in terms of scheme implementation? What were the reasons?

Q4. Which states have performed poorly in terms of scheme implementation? What were the reasons?

### **Key issues, bottlenecks, challenges**

Q1. Has the progress been reported accurately and regularly?

Q2. Is M&E by third party conducted by states?

Q3. Are there frequent meetings and consultations of the

a. eco-development committee

b. eco-tourism committee

c. relocation and rehabilitation committee

Q4. What are the other bottlenecks, issues and challenges in the implementation of the scheme?

### **Additional performance indicators (over and above those currently tracked)**

Q1. Are there any additional performance indicators (over and above those currently tracked) that may be necessary to effectively monitor scheme performance?

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

### **Availability of finance for undertaking conservation measures**

Q1. Are funds allocated for habitat improvement and waterholes' development sufficient for retaining wildlife within core areas?

### **Fund release process**

Q1. Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?

### **Utilization of available funds**

Q1. Was there timely utilization of available funds? If not, what were the reasons?

### **Positive factors enhancing scheme performance**

Q1. What are the positive factors that have enhanced scheme performance?

Q2. Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?

### **How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1. How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?

### **Negative factors affecting scheme performance.**

Q1. Is the funding mechanism adequate and conducive to the timely application for, and disbursement of, funds?



## How can the scheme design be modified to ensure the exclusion of these negative factors or to address them?

Q1. How can the scheme design be modified to ensure the exclusion of these negative factors or to address them?

### **EFFICIENCY**

#### **EC1 Did the benefits of the scheme exceed costs?**

##### **Monetary value of scheme benefits**

Q1: Have any studies been conducted on increase in wildlife biodiversity over the duration of scheme?

##### **Budget vs actual spending. Efficiency in spending**

Q1. Does the budget for the scheme get efficiently utilized annually? If not, what are the major reasons of over / under utilization?

#### **EC2 Can the costs of the scheme be lowered?**

##### **Resource efficiency. Resource sufficiency**

Q1. How many activities have been implemented according to the workplan without significant variation?

Q2. What has been the percentage of state -wise allocation of funds vs. the budgets requested?

Q3. What has been the average time taken by government agencies to give various approvals

Q4. What is the average amount of time taken at the State level to approve proposals for fund disbursement?

Q5. What is the average time taken by the Centre to approve proposals for fund disbursement?

Q6. Has the release of funds been within the standard timeline after receiving approval?

Q7. How many states submit fund requests on time?

Q8. How many states submit Utilization Certificates on time?

Q9. Are there lower cost alternatives for achieving the scheme outcomes?

##### **Coordination between ministries (or departments as applicable) in scheme execution**

Q1. Is there adequate coordination between center and state in the execution of scheme such that technical and financial resources are used efficiently?

##### **Convergence of this scheme with other schemes. Convergence with private sector/CSR projects**

Q1. Is there any other scheme that aims to achieve similar objectives or outcomes?

Q2. Has there been any convergence with other scheme for achieving common objectives?

Q3. Has there been any variation noticed in procurement costs and benchmark/standard rates?

### **SUSTAINABILITY**

#### **SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes?**

**To what extent do the scheme design and timely interventions manage the risks?**



### **Different risks like - technical, institutional, financial, economic, social, political, and environmental**

Q1. What are the risks (technical, institutional, financial, economic, social, political, and environmental) that can impact scheme performance? Please explain with reasons.

Q2. Is there a risk mitigation plan documented for resolving these risks?

Q3. Is there any conflict reporting and redressal mechanisms in place for conflicts with beneficiaries?

### **Impact of climate change on vulnerable sectors**

Q1. Does the scheme ensure conservation plans are developed taking extreme weather events into consideration that will impact wildlife as well as surrounding communities?

## **SS2 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

### **Empowered local management structure. Empowered communities. Increased ownership of results**

Q1. Does the scheme take into account planning for self-sustenance? If yes, are there any plans or minutes of meetings that discuss the same.

Q2. Which activities have been identified to enhance self-sustenance of the parks?

### **Improved financial sustainability and over-reliance on the Centre allocation. Proportion of funds currently disbursed vs. recovered via the schemes**

Q1. Is eco-tourism encouraged in the scheme implementation?

Q2. Are funds allocated to conduct eco-tourism activities?

Q3. Have any other models for revenue generation in the reserve been identified?

## **IMPACT**

## **IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

### **Progress on SDG goals. Improved performance on environmental impact indicators**

Q1. Has the conservation and protection of wildlife improved biodiversity in last five years?

Q2. Has there been a reduction in human-wildlife conflict in last five years?

Q3. Have there been any other environmental impacts that have emerged as a result of the scheme?

Q4. Has there been a reduction in the anthropogenic activities around the core zones?

Q5. Has there been improvement in socio-economic conditions of the local communities in last five years due to scheme activities?

Q6. If yes, please describe how the local communities have benefitted from the scheme?

Q7. What has been the trend in fatality rates due to man-animal conflicts?

Q8. Has there been an improvement in the work rate/ livelihoods among local communities overall and esp. women and tribal communities?



### **Degradation and fragmentation of existing natural habitats**

Q1. Have the measures for habitat improvement and waterholes development within reserves been successful in retaining wildlife within core areas?

### **Contribution to an enhanced number of SDG targets. Performance w.r.t. other international commitments. Performance w.r.t. NWAP actionable points?**

Q1. Have the schemes improved terrestrial biodiversity of the reserves covered under the scheme?

Q2. Have the schemes contributed to improving livelihoods and reducing poverty of local communities?

Q3. Has the scheme contributed to achieving any other national goals? Please explain.

Q4. How many wildlife reserves are currently pending notification?

Q5. What are the challenges faced in notifying reserves under the Wildlife Protection Act?

Q6. Were there instances of adverse impact on co-existing species after the conservation programme was implemented?

Q7. Have there been other unintended outcomes?

### **EQUITY**

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

### **Are the guidelines being followed to their full extent?**

Q1. Are the guidelines related to rehabilitation and relocation being followed without any bias?

Q2. Does the scheme provide for any other targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society?

Q3. Does the scheme have any significant impact in reducing inequity?

### **Comprehensive census data of wildlife species**

Q1. Given that Tiger and Elephant conservation have received significant focus in the past years, are there plans for increasing conservation efforts for other wildlife species like Asiatic lion, Snow leopard, vultures etc.?

**EQ2 Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is the scheme structure appropriate to encompass the marginalized and vulnerable groups of the population? Are there pre-existing social systems or biases in place that prevent the inclusion of these groups?**

1. Are there social biases or systems in place that prevent the inclusion of any groups?



## SECTION 2: CROSS SECTIONAL THEMES

### Accountability & Transparency

#### Availability of data records and reports in public domain

Q1. What are the factors limiting the reporting of data in public domain?

Q2. The data set is also present in various different authorized sources like ENVIS and different research journals, does the government control the flow of data through/in these different sources?

Q3. How authentic are such data sets present in different sources?

#### Evaluation mechanisms

Q1. Is there an evaluation mechanism for the scheme? If yes, please provide details. If no, please explain the challenges.

#### Monitoring

Q1. How does the centre ensure implementation of the activities for which the budget is provided? Please provide details of the mechanism.

#### Citizen Accountability

Q1. Is there a grievance redressal mechanism for addressing concerns regarding scheme implementation?

#### Financial Accountability

Q1. What funding mechanisms are being used for transfer of funds to beneficiaries?

Q2. What is the frequency for conducting financial audits on scheme implementation?

### Direct/Indirect Employment Generation

#### Improvement in income levels

Q1. What is the approximate improvement in income levels as a result of the scheme?

#### Availability of job opportunities

Q1. What is the level of employment generation through scheme?

### Gender mainstreaming

#### Inclusiveness in scheme design/planning

Q1. Does the scheme in any manner encourage woman participation in the scheme implementation? Please explain.

### Climate change & sustainability including adoption of climate-change resilient practices & diversifications

#### Climate Change & Sustainability

Q1. While developing a restoration / conservation plan is climate factors taken into consideration?

Q2. Is there an appropriate disaster risk reduction plan in place?

#### Awareness, capacity building



Q1. Are there any training sessions held regularly for reducing pollution, adopting green practices, using local materials etc.?

Q2. Are the end beneficiaries aware of climate risks and possible individual mitigation /adaptation measures?

### **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population**

#### **Fund allocation to vulnerable communities**

Q1. What is the fund allocated under TSP & SCSP for each scheme?

Q2. What is the fund allocated under TSP & SCSP for each scheme in different states?

Q3. How much of the fund has been utilized overall and by each state?

Q4. What has been the effect of the TSP & SCSP funds on improving equity?

#### **Inclusion of vulnerable groups in scheme and sector**

Q1. Does the scheme ensure benefits for vulnerable, marginalized, disadvantaged or weaker section of society? If yes, how?

Q2. Are there social biases or systems in place that prevent the inclusion of any groups?

### **Use of IT/Technology in driving efficiency**

#### **Deployment of IT technology for monitoring**

Q1. Is there an on-line scheme MIS to ensure regular updates of progress and effective supervision? If no, what are the challenges in implementation of MIS portals/Apps?

#### **Use of latest technology to improve efficiency and effectiveness of the scheme?**

Q1. Is there an on-line scheme MIS to ensure regular updates of progress and effective supervision? If no, what are the challenges in implementation of MIS portals/Apps?

### **Stakeholder and Beneficiary behavioural change**

#### **Fund allocation**

Q1. What percent of total allocations is directed towards awareness generation or sensitization?

Q2. Has any behavioural change in scheme beneficiaries been documented? Please provide details.

### **Research & Development**

#### **Fund Allocation**

Q1. What percentage of total fund allocation for scheme is available for R&D? How much of that budget is being utilized?

#### **Institutes and departments dedicated to R&D**

Q1. Are there any dedicated institutes or centres or departments dedicated for R&D in the sector?

#### **Private Sector participation in R&D**



Q1. What is the percentage of private sector participation in R&D activities in the sector?

### **Challenges in undertaking R&D efforts**

Q1. What are the challenges in undertaking R&D projects in the sector?

### **Any Good Practices**

Q1. Are there any good practices for undertaking R&D projects in the sector?

## **Unlocking Synergies with other Government Program**

### **Convergence**

1. Were other schemes such as wildlife and forest protection schemes (PT, PE, BR etc.) considered while designing or amending these schemes?

2. If so, how were the overlaps avoided? (For e.g. meetings conducted for ensuring convergence)

## **Reforms, Regulations**

### **Adoption and challenges**

Q1. What are the challenges faced in effective implementation of the relevant acts/rules/regulations? How can these be overcome?

## **Impact on and role of private sector, community and civil society in the scheme**

### **Participation of private sector, public-private partnerships**

Q1. What are the challenges faced in attracting private sector participation?

Q2. How can the participation of private sector through CSR be improved?

### **Public-Private Partnership**

Q1. How can the challenges faced by private sector in participation in the sector be reduced?

## **SECTION 3: CHALLENGES AND SUGGESTIONS**

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?
  - Short term
  - Medium term
  - Long terms

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



16.1.2 National level stakeholders - Subject Matter Experts

National Level stakeholders (KII)	
Subject Matter Experts	National Environmental Engineering Research Institute Wildlife Institute of India Wildlife Trust of India

**GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

**INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
 

Sir/Madam, the Development Monitoring and Evaluation Office (DMEO), NITI Aayog is undertaking evaluation of Centrally Sponsored Schemes in the Environment and Water Resources sector in keeping with Government of India’s policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes before the schemes come up for fresh appraisal. NITI Aayog has engaged consultancy firm KPMG for this evaluation. We are from the Ipsos Research Pvt. Ltd. We are working with KPMG for this evaluation. To have a complete understanding of the schemes, key challenges and success stories, we are meeting the key stakeholders from central, state, and village level. The study also involves a survey with the households. We would like to seek your opinion on certain topics related to the scheme **Integrated Development of Wildlife Habitats**. The information we gather will help us evaluate and develop recommendations in



respect of the scheme. Every piece of information and opinion that you share would help us a great deal to work on this area and improve it further for more effective implementation of the schemes.

- Inform the respondent of the probable duration of the discussion - Approximately 45 minutes
- Introduce self, note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Good morning/afternoon sir/madam, could you please tell me your name? (NOT TO USE THE RECORDER HERE)
- Since when have you been working here? What are your key roles and responsibilities in this department in general?
- What are your roles and responsibilities in this scheme? Could you please explain?

### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH THE SCHEME**

#### ***MODERATOR TO NOTE:***

- 3. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
- 4. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

### **SECTION 1: DEEP DIVE INTO CNR SCHEME USING REESIE FRAMEWORK:**

#### **RELEVANCE**

**RL1: Is the scheme relevant in the present context?**

#### **Scheme updation for alignment with SDG goals**

Q1. While the scheme is prima-facie aligned to the SDGs, do you think that scheme guidelines been specifically mapped to India's SDG targets?

#### **Identification of linkage between international conventions and scheme guidelines**

Q1. Has there been any discussion or plan on the alignment of scheme with CITES, MIKE and St. Petersburg Declaration?



**RL2 Is it appropriate to continue / prioritize this scheme?**

**Impact of scaling down or stopping the scheme**

Q1. Is there any alternative scheme that can deliver similar outcomes? Further, are such alternative schemes, if any, more effective than the scheme?

**RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

**Outcome tracking**

Q1. Do you recommend any specific outcome indicators for the objectives of the scheme?

Q2. Are any challenges being faced in the current governance, monitoring, evaluation and review system?

Q3. Are the indicators for tracking outcome and outputs sufficient in your opinion?

**Multi-stakeholder partnerships with research and development agencies**

Q1. Does the IDWH Division and State Forest Departments engage with you on a regular basis for conservation and management issues?

**EFFECTIVENESS**

**ET1: Is the scheme design appropriate to address scheme objectives?**

**Unintended ecological and socio-economic consequences of the scheme and recommendations to mitigate them**

Q1. Have there been any incidents which led to an unintended consequence under the scheme (for e.g. villagers were unsatisfied with the scheme implementation or alternate livelihood)?

Q2. How can the scheme design be modified to mitigate the negative factors?

**ET2: How are scheme targets set and monitored?**

**Effective and innovative partnerships. Improved strategies and approaches. Utilization of innovative technology and strategy**

Q1. Have any partnerships been entered with international organizations or other agencies for research or implementation of innovative technology?

Q2. What are the innovative measures/ technology used for implementing the schemes?

Q3. Have there been consultations with local partnering agencies for exploring and/or adopting innovating programs?

**ET3 How has the scheme performed against scheme objectives and annual targets?**

**Performance on the output-outcome framework**

Q1. Has there been a trend of improvement or worsening of the output-outcome framework results?

Q2. What are the reasons for this trend?

Q3. What are the other bottlenecks, issues and challenges in the implementation of the scheme?



### **Additional performance indicators (over and above those currently tracked)**

Q1. Are there any additional performance indicators (over and above those currently tracked) that may be necessary to effectively monitor scheme performance?

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

### **Availability of finance for undertaking conservation measures**

Q1. In your opinion, are funds allocated for habitat improvement and waterholes' development sufficient for retaining wildlife within core areas?

### **Positive factors enhancing scheme performance**

Q1. What are the positive factors that have enhanced scheme performance?

Q2. Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?

### **How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1. How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?

### **Negative factors affecting scheme performance.**

Q1. Is the funding mechanism adequate and conducive to the timely application for, and disbursement of, funds?

### **How can the scheme design be modified to ensure the exclusion of these negative factors or to address them?**

Q1. How can the scheme design be modified to ensure the exclusion of these negative factors or to address them?

### **EFFICIENCY**

**EC1 Did the benefits of the scheme exceed costs?**

### **Monetary value of scheme benefits**

Q1: Have any studies been conducted on increase in wildlife biodiversity over the duration of scheme?

**EC2 Can the costs of the scheme be lowered?**

### **Convergence of this scheme with other schemes. Convergence with private sector/CSR projects**

Q1. Is there any other scheme that aims to achieve similar objectives or outcomes?

Q2. Has there been any convergence with other scheme for achieving common objectives?

### **SUSTAINIBILITY**



**SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? To what extent do the scheme design and timely interventions manage the risks?**

**Different risks like - technical, institutional, financial, economic, social, political, and environmental**

- Q1. What are the risks (technical, institutional, financial, economic, social, political, and environmental) that can impact scheme performance? Please explain with reasons.
- Q2. Is there a risk mitigation plan documented for resolving these risks?
- Q3. Is there any conflict reporting and redressal mechanisms in place for conflicts with beneficiaries?

**SS2 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

**Empowered local management structure. Empowered communities. Increased ownership of results**

- Q1. Does the scheme take into account planning for self-sustenance? If yes, are there any plans or minutes of meetings that discuss the same.
- Q2. Which activities have been identified to enhance self-sustenance of the parks?

**Improved financial sustainability and over-reliance on the Centre allocation. Proportion of funds currently disbursed vs. recovered via the schemes**

- Q1. Is eco-tourism encouraged in the scheme implementation?
- Q2. Are funds allocated to conduct eco-tourism activities?
- Q3. Have any other models for revenue generation in the reserve been identified?

### **IMPACT**

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Progress on SDG goals. Improved performance on environmental impact indicators**

- Q1. Has the conservation and protection of wildlife improved biodiversity in last five years?
- Q2. Has there been a reduction in human-wildlife conflict in last five years?
- Q3. Have there been any other environmental impacts that have emerged as a result of the scheme?
- Q4. Has there been a reduction in the anthropogenic activities around the core zones?
- Q5. Has there been improvement in socio-economic conditions of the local communities in last five years due to scheme activities?
- Q6. If yes, please describe how the local communities have benefitted from the scheme?
- Q7. What has been the trend in fatality rates due to man-animal conflicts?
- Q8. Has there been an improvement in the work rate/ livelihoods among local communities overall and esp. women and tribal communities?



### **Degradation and fragmentation of existing natural habitats**

Q1. Have the measures for habitat improvement and waterholes development within reserves been successful in retaining wildlife within core areas?

### **Contribution to an enhanced number of SDG targets. Performance w.r.t. other international commitments. Performance w.r.t. NWAP actionable points?**

Q1. Have the schemes improved terrestrial biodiversity of the reserves covered under the scheme?

Q2. Have the schemes contributed to improving livelihoods and reducing poverty of local communities?

Q3. Has the scheme contributed to achieving any other national goals? Please explain.

Q4. How many wildlife reserves are currently pending notification?

Q5. What are the challenges faced in notifying reserves under the Wildlife Protection Act?

Q6. Were there instances of adverse impact on co-existing species after the conservation programme was implemented?

Q7. Have there been other unintended outcomes?

### **EQUITY**

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

#### **Are the guidelines being followed to their full extent?**

Q1. Does the scheme have any significant impact in reducing inequity?

**EQ2 Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is the scheme structure appropriate to encompass the marginalized and vulnerable groups of the population? Are there pre-existing social systems or biases in place that prevent the inclusion of these groups?**

1. Are there social biases or systems in place that prevent the inclusion of any groups?

## **SECTION 2: CROSS SECTIONAL THEMES**

### **Direct/Indirect Employment Generation**

#### **Improvement in income levels**

Q1. What is the approximate improvement in income levels as a result of the scheme?

#### **Availability of job opportunities**

Q1. What is the level of employment generation through scheme?



## **Gender mainstreaming**

### **Inclusiveness in scheme design/planning**

Q1. Does the scheme in any manner encourage woman participation in the scheme implementation?  
Please explain.

## **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population**

### **Inclusion of vulnerable groups in scheme and sector**

Q1. Does the scheme ensure benefits for vulnerable, marginalized, disadvantaged or weaker section of society? If yes, how?

Q2. Are there social biases or systems in place that prevent the inclusion of any groups?

## **Use of IT/Technology in driving efficiency**

### **Use of latest technology to improve efficiency and effectiveness of the scheme?**

Q1. Are there any technologies that could help improve efficiency and effectiveness of the scheme?

## **Stakeholder and Beneficiary behavioural change**

### **Fund allocation**

Q1. Has any behavioural change in scheme beneficiaries been documented? Please provide details.

## **Research & Development**

### **Institutes and departments dedicated to R&D**

Q1. Are there any dedicated institutes or centres or departments dedicated for R&D in the sector?

### **Private Sector participation in R&D**

Q1. What is the percentage of private sector participation in R&D activities in the sector?

### **Challenges in undertaking R&D efforts**

Q1. What are the challenges in undertaking R&D projects in the sector?

### **Any Good Practices**

Q1. Are there any good practices for undertaking R&D projects in the sector?

## **Reforms, Regulations**

### **Adoption and challenges**

Q1. What are the challenges faced in effective implementation of the relevant acts/rules/regulations? How can these be overcome?

## **Impact on and role of private sector, community and civil society in the scheme**



## Participation of private sector, public-private partnerships

Q1. What are the challenges faced in attracting private sector participation?

Q2. How can the participation of private sector through CSR be improved?

## Public-Private Partnership

Q1. How can the challenges faced by private sector in participation in the sector be reduced?

### SECTION 3: CHALLENGES AND SUGGESTIONS

- Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
- What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?
  - Short term
  - Medium term
  - Long terms
- Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?

### 16.1.3 State level stakeholders

State level stakeholders (KII)	
Project Tiger Project Elephant IDWH sub-scheme	Chief Wildlife Warden / Principle Chief Conservator of Forests

### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:



- Can you explain what you mean by....?
- Earlier you said\_\_\_\_\_ but it also seems like\_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:

Sir/Madam, the Development Monitoring and Evaluation Office (DMEO), NITI Aayog is undertaking evaluation of Centrally Sponsored Schemes in the Environment and Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes before the schemes come up for fresh appraisal. NITI Aayog has engaged consultancy firm KPMG for this evaluation. We are from the Ipsos Research Pvt. Ltd. We are working with KPMG for this evaluation. To have a complete understanding of the schemes, key challenges and success stories, we are meeting the key stakeholders from central, state, and village level. The study also involves a survey with the households. We would like to seek your opinion on certain topics related to the scheme **Integrated Development of Wildlife Habitats**. The information we gather will help us evaluate and develop recommendations in respect of the scheme. Every piece of information and opinion that you share would help us a great deal to work on this area and improve it further for more effective implementation of the schemes.

- Inform the respondent of the probable duration of the discussion - Approximately 45 minutes
- Introduce self, note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Good morning/afternoon sir/madam, could you please tell me your name? (NOT TO USE THE RECORDER HERE)
- Since when have you been working here? What are your key roles and responsibilities in this department in general?
- What are your roles and responsibilities in this scheme? Could you please explain?

## **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH THE SCHEME**

### ***MODERATOR TO NOTE:***



1. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.
2. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.

## **SECTION 1: DEEP DIVE INTO SCHEME USING REESIE FRAMEWORK:**

### **RELEVANCE**

#### **RL1: Is the scheme relevant in the present context?**

##### **Need assessment of the target population. Assessment of output of the schemes**

- Q1. Is there a framework for needs assessment of target population in development of conservation action plans?
- Q2. What are the focus areas of the needs assessment?
- Q3. How frequently is a needs assessment conducted?
- Q4. Have you faced any challenges in geographic areas where multiple schemes are being implemented?
- Q5. If so, have you consulted various stakeholders regarding the same?

#### **RL2 Is it appropriate to continue / prioritize this scheme?**

##### **Impact of scaling down**

- Q1 - Is there any alternative scheme that can deliver similar outcomes? Further, are such alternative schemes, if any, more effective than the scheme?

#### **RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

##### **Outcome tracking**

- Q1. Is there any plan or discussion carried out on developing more comprehensive outcome indicators for the scheme? If yes, please provide details.
- Q2. Do you recommend any specific outcome indicators for the objectives of the scheme?
- Q3. Are any challenges being faced in the current governance, monitoring, evaluation and review system?
- Q4. Are the indicators for tracking outcome and outputs sufficient in your opinion?

### **EFFECTIVENESS**

#### **ET1: Is the scheme design appropriate to address scheme objectives?**

##### **Increase in awareness of scheme provisions. Incorporation of recommendations into planning process. Challenges and alternatives in implementation**



Q1. Have you faced any challenges in developing action plans or scheme implementation? If yes, please explain with reasons.

Q2. Has there been an increase in awareness with regards to

a. relocation policies

b. alternative livelihood opportunities

Q3. Do you observe that the recommendations and findings from MEE reports are incorporated into the annual planning process?

Q4. Is there an inclusion of recommendations and action plans from the meetings of relocation committees, eco development committees?

### **Quality of service delivery. Size of affected population vs. benefitted population**

Q1. Have households in areas covered by the schemes reported an increased income or higher standard of living vis-a-vis previous traditional livelihoods?

Q2. How many of the affected households have been provided compensation in cases of Human-Wildlife Conflict?

Q3. Are you aware of any Access and Benefit Sharing agreements between villagers and authorities, w.r.t ecotourism revenue, ecocodevelopment revenue, etc.

Q4. Have amenities been provided to households of frontline staff as per the guidelines of Project Tiger to facilitate basic education for their children? If not, what are the challenges that prevent this?

Q5. Have there been reports of conflicts between local communities and authorities regarding the implementation of the scheme?

Q6. How many training sessions or workshops have been held to increase awareness or skills w.r.t. alternate livelihood options for local communities?

Q7. What is the percentage of people skilled in alternate livelihood sources through the scheme?

### **Unintended ecological and socio-economic consequences of the scheme and recommendations to mitigate them**

Q1. Have there been any incidents which led to an unintended consequence under the scheme (for e.g. villagers were unsatisfied with the scheme implementation or alternate livelihood)?

Q2. How can the scheme design be modified to mitigate the negative factors?

## **ET2: How are scheme targets set and monitored?**

### **Strengthened monitoring system. Strengthened reporting system. Reduction in inconsistent reporting. Better use of ICT in the monitoring**

Q1. Are any studies conducted for setting of targets in terms of outputs or outcomes?

Q2. Is there mechanism to independently verify the progress reported by the supervising entity through audits or other methods?

Q3. What are the challenges that prevent the timely submissions of Tiger Conservation Plans?



### **Effective and innovative partnerships. Improved strategies and approaches. Utilization of innovative technology and strategy**

Q1. What is the amount that has been spent on using technology and research projects in conservation initiatives

Q2. Is there systematic documentation on procurement of technical expertise and equipment? If yes, could you provide us with the same?

Q3. Has there been an increase in usage of new technology or approaches in strategic plans for improving programme implementation?

Q4. Have any partnerships been entered into with local agencies for research or implementation of innovative technology?

### **ET3 How has the scheme performed against scheme objectives and annual targets?**

#### **Performance on the output-outcome framework**

Q1. Has there been a trend of improvement or worsening of the output-outcome framework results?

Q2. What are the reasons for this trend?

#### **Documentation for state wise performance of schemes**

Q1. Is there documentation of state-wise performance of schemes? If yes, please provide the same.

#### **Key issues, bottlenecks, challenges**

Q1. Are there frequent meetings and consultations of the

a. eco-development committee

b. eco-tourism committee

c. relocation and rehabilitation committee

Q2. What are the other bottlenecks, issues and challenges in the implementation of the scheme?

#### **Additional performance indicators (over and above those currently tracked)**

Q1. Are there any additional performance indicators (over and above those currently tracked) that may be necessary to effectively monitor scheme performance?

### **ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

#### **Fund release process**

Q1. Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?

#### **Utilization of available funds**

Q1. Was there timely utilization of available funds? If not, what were the reasons?

#### **Positive factors enhancing scheme performance**



Q1. What are the positive factors that have enhanced scheme performance?

Q2. Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1. How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?

**Negative factors affecting scheme performance.**

Q1. Is the funding mechanism adequate and conducive to the timely application for, and disbursement of, funds?

**EFFICIENCY**

**EC1 Did the benefits of the scheme exceed costs?**

**Monetary value of scheme benefits**

Q1: Have any studies been conducted on increase in wildlife biodiversity over the duration of scheme?

**Budget vs actual spending. Efficiency in spending**

Q1. Does the budget for the scheme get efficiently utilized annually? If not, what are the major reasons of over / under utilization?

**EC2 Can the costs of the scheme be lowered?**

**Resource efficiency. Resource sufficiency**

1. How many activities have been implemented according to the workplan without significant variation?
2. What has been the average time taken by government agencies to give various approvals
3. What is the average amount of time taken at the State level to approve proposals for fund disbursement?
4. What is the average time taken by the Centre to approve proposals for fund disbursement?
5. Has the release of funds been within the standard timeline after receiving approval?
6. Are there lower cost alternatives for achieving the scheme outcomes?

**Coordination between ministries (or departments as applicable) in scheme execution**

Q1. Is there adequate coordination between centre and state in the execution of scheme such that technical and financial resources are used efficiently?

**Convergence of this scheme with other schemes. Convergence with private sector/CSR projects**

Q1. Is there any other scheme that aims to achieve similar objectives or outcomes?

Q2. Has there been any convergence with other scheme for achieving common objectives?

Q3. Has the private sector participated in supporting objectives of schemes through CSR projects? If yes, please explain with examples.



Q4. Has there been any variation noticed in procurement costs and benchmark/standard rates?

## **SUSTAINIBILITY**

**SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? To what extent do the scheme design and timely interventions manage the risks?**

### **Different risks like - technical, institutional, financial, economic, social, political, and environmental**

Q1. What are the risks (technical, institutional, financial, economic, social, political, and environmental) that can impact scheme performance? Please explain with reasons.

Q2. Is there a risk mitigation plan documented for resolving these risks?

Q3. Are there any conflict reporting and redressal mechanisms in place for conflicts with beneficiaries?

**SS2 Is the scheme financially and institutionally sustainable? How can sustainability be improved**

### **Empowered local management structure. Empowered communities. Increased ownership of results**

Q1. Does the scheme take into account planning for self-sustenance? If yes, are there any plans or minutes of meetings that discuss the same.

Q2. Which activities have been identified to enhance self-sustenance of the parks?

### **Improved financial sustainability and over-reliance on the Centre allocation. Proportion of funds currently disbursed vs. recovered via the schemes**

Q1. Is eco-tourism encouraged in the scheme implementation?

Q2. Has eco-tourism helped cost recovery for parks?

Q3. Have any other models for revenue generation in the reserve been identified?

Q4. Are there any trainings provided for eco-tourism activities?

## **IMPACT**

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

### **Progress on SDG goals. Improved performance on environmental impact indicators**

Q1. Has the conservation and protection of wildlife improved biodiversity in last five years?

Q2. Has there been a reduction in human-wildlife conflict in last five years?

Q3. Have there been any other environmental impacts that have emerged as a result of the scheme?

Q4. Has there been a reduction in the anthropogenic activities around the core zones?

### **Enhanced awareness of the scheme. Increased commitment and ownership**



- Q1. How has the scheme performed in terms of training ground officials and local communities?
- Q2. What type of workshops have been conducted? How frequently have they been conducted?
- Q3. What are the challenges faced in conducting workshops/training events? (for e.g. participation rate)
- Q4. Has there been improvement in socio-economic conditions of the local communities in last five years due to scheme activities?
- Q5. If yes, please describe how the local communities have benefitted from the scheme?
- Q6. What has been the trend in fatality rates due to man-animal conflicts?
- Q7. Has there been an improvement in the work rate/ livelihoods among local communities overall and esp. women and tribal communities?
- Q8. How many wildlife reserves are currently pending notification?
- Q9. What are the challenges faced in notifying reserves under the Wildlife Protection Act?
- Q10. Were there instances of adverse impact on co-existing species after the conservation programme was implemented?
- Q11. Have there been other unintended outcomes?

## **EQUITY**

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

### **Are the guidelines being followed to their full extent?**

- Q1. Are the guidelines related to rehabilitation and relocation being followed without any bias?
- Q2. Does the scheme provide for any other targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society?
- Q3. Does the scheme have any significant impact in reducing inequity?

**EQ2 Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

### **Is the scheme structure appropriate to encompass the marginalized and vulnerable groups of the population? Are there pre-existing social systems or biases in place that prevent the inclusion of these groups?**

- Q1. Are there social biases or systems in place that prevent the inclusion of any groups?

## **SECTION 2: CROSS SECTIONAL THEMES**

### **Accountability & Transparency**



### **Availability of data records and reports in public domain**

Q1. What are the factors limiting the reporting of data in public domain?

### **Evaluation mechanisms**

Q1. Is there an evaluation mechanism for the scheme implementation at state level? If yes, please provide details. If no, please explain the challenges.

### **Monitoring**

Q1. What is the frequency for submission of Utilization Reports to the state and central governments?

Q2. Are there any challenges in submission of Utilization Reports on time?

### **Citizen Accountability**

Q1. Is there a grievance redressal mechanism for addressing concerns regarding scheme implementation?

### **Financial Accountability**

Q1. What funding mechanisms are being used for transfer of funds to beneficiaries?

Q2. What is the frequency for conducting financial audits on scheme implementation?

## **Direct/Indirect Employment Generation**

### **Improvement in income levels**

Q1. What is the approximate improvement in income levels as a result of the scheme?

### **Availability of job opportunities**

Q1. What is the level of employment generation through scheme?

## **Gender mainstreaming**

### **Inclusiveness in scheme design/planning**

Q1. Does the scheme in any manner encourage woman participation in the scheme implementation?  
Please explain.

## **Climate change & sustainability including adoption of climate-change resilient practices & diversifications**

### **Climate Change & Sustainability**

Q1. While developing the conservation plan, are climate factors taken into consideration?

Q2. Is there an appropriate disaster risk reduction plan in place?

### **Awareness, capacity building**

Q1. Are there any training sessions held regularly for reducing pollution, adopting green practices, using local materials etc.?

Q2. Are the end beneficiaries aware of climate risks and possible individual mitigation /adaptation measures?



## **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population**

### **Inclusion of vulnerable groups in scheme and sector**

Q1. Does the scheme ensure benefits for vulnerable, marginalized, disadvantaged or weaker section of society? If yes, how?

Q2. Are there social biases or systems in place that prevent the inclusion of any groups?

## **Use of IT/Technology in driving efficiency**

### **Deployment of IT technology for monitoring**

Q1. Is there an on-line scheme MIS to ensure regular updates of progress and effective supervision? If no, what are the challenges in implementation of MIS portals/Apps?

### **Use of latest technology to improve efficiency and effectiveness of the scheme?**

Q1. Is there an on-line scheme MIS to ensure regular updates of progress and effective supervision? If no, what are the challenges in implementation of MIS portals/Apps?

## **Stakeholder and Beneficiary behavioural change**

### **Fund allocation**

Q1. What percent of total allocations is directed towards awareness generation or sensitization?

Q2. What is the utilization rate? And how much impact has it been able to generate in terms of behaviour change?

### **Mechanisms for beneficiary sensitization**

Q1. What are the existing mechanisms at State/District/Reserve to promote beneficiary awareness and sensitization?

Q2. What activities are undertaken at forest level to promote adoption of good practices?

## **Research & Development**

### **Institutes and departments dedicated to R&D**

Q1. Are there any dedicated institutes or centres or departments dedicated for R&D in the sector?

### **Private Sector participation in R&D**

Q1. Is there any private sector participation in R&D activities in the sector? Please provide details.

### **Any Good Practices**

Q1. Are there any good practices for undertaking R&D projects in the sector?

## **Unlocking Synergies with other Government Program**

### **Convergence**



1. Have you faced any challenges in planning for conservation at various reserves/ wetlands sites where multiple schemes are being implemented?
2. If so, what were the primary challenges and how were they resolved?

### Reforms, Regulations

#### Adoption and challenges

Q1. What are the challenges faced in effective implementation of the relevant acts/rules/regulations? How can these be overcome?

### Impact on and role of private sector, community and civil society in the scheme

#### Participation of private sector, public-private partnerships

Q1. What are the challenges faced in attracting private sector participation?

Q2. How can the participation of private sector through CSR be improved?

#### Public-Private Partnership

Q1. How can the challenges faced by private sector in participation in the sector be reduced?

### SECTION 3: CHALLENGES AND SUGGESTIONS

1. Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
2. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?
  - Short term
  - Medium term
  - Long terms

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

#### 16.1.4 Village level stakeholders

Village level stakeholders (FGD)	
Project Tiger Project Elephant IDWH sub-scheme	Field Director / Field Officers / Conservator of Forests
	Ecodevelopment committee

#### GENERAL GUIDELINES:



- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_that made you decide to\_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said\_\_\_\_\_ but it also seems like\_\_\_\_\_. Can you explain?

#### **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
 

Sir/Madam, the Development Monitoring and Evaluation Office (DMEO), NITI Aayog is undertaking evaluation of Centrally Sponsored Schemes in the Environment and Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes before the schemes come up for fresh appraisal. NITI Aayog has engaged consultancy firm KPMG for this evaluation. We are from the Ipsos Research Pvt. Ltd. We are working with KPMG for this evaluation. To have a complete understanding of the schemes, key challenges and success stories, we are meeting the key stakeholders from central, state, and village level. The study also involves a survey with the households. We would like to seek your opinion on certain topics related to the scheme **Integrated Development of Wildlife Habitats**. The information we gather will help us evaluate and develop recommendations in respect of the scheme. Every piece of information and opinion that you share would help us a great deal to work on this area and improve it further for more effective implementation of the schemes.
- Inform the respondent of the probable duration of the discussion - Approximately 45 minutes
- Introduce self, note taker and any other team members (if present) and explain what each one would be doing.



- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

### **PROFILE OF THE STAKEHOLDER**

- Good morning/afternoon sir/madam, could you please tell me your name? (NOT TO USE THE RECORDER HERE)
- Since when have you been working here? What are your key roles and responsibilities in this department in general?
- What are your roles and responsibilities in this scheme? Could you please explain?

### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH THE SCHEME**

#### ***MODERATOR TO NOTE:***

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

### **SECTION 1: DEEP DIVE INTO SCHEME USING REESIE FRAMEWORK:**

#### **RELEVANCE**

**RL1: Is the scheme relevant in the present context?**

#### **Need assessment of the target population. Assessment of output of the schemes**

- Q1. Were you involved in the needs assessments that have taken place at the various stages?
- Q2. Does the scheme design avoid overlap in implementation?
- Q3. If yes, what measures were taken to avoid overlap in implementation?

#### **Consideration of the coexistence of people and animals. Prioritization of communities/PRIs etc. in the scheme**

- Q1. Have you faced resistance from the communities/PRIs etc. when implementing the scheme?
- Q2. If so, what methods do you use to minimise this?
- Q3. Do you have any suggestions to be incorporated in the scheme guidelines to ease this challenge?

#### **EFFECTIVENESS**

**ET1: Is the scheme design appropriate to address scheme objectives?**



### **Increase in awareness of scheme provisions. Incorporation of recommendations into planning process. Challenges and alternatives in implementation**

Q1. Have you faced any challenges in developing action plans or scheme implementation? If yes, please explain with reasons.

Q2. Has there been an increase in awareness with regards to

- a. relocation policies
- b. alternative livelihood opportunities

Q3. Do you include recommendations and findings from MEE reports into your annual planning process?

Q4. Is there an inclusion of recommendations and action plans from the meetings of relocation committees, eco development committee?

### **Ownership and accountability for the scheme and programme. Addressing the needs of beneficiaries**

Q1. How many training sessions have been held for ground level staff with regards to their role and benefits from the scheme, such as participating in poaching monitoring, ecodevelopment activities, ecotourism activities etc.?

Q2. Percentage of attendees belonging to tribal and other socially and economically vulnerable groups?

Q3. How many review meetings are held with the various stakeholders such as PRIs, village dwellers, tribal etc.? And how often?

Q4. Are their concerns and recommendations considered in the planning and implementation process?

### **Quality of service delivery. Size of affected population vs. benefitted population**

Q1. Have households in areas covered by the schemes reported an increased income or higher standard of living vis-a-vis previous traditional livelihoods?

Q2. How many of the affected households have been provided compensation in cases of Human-Wildlife Conflict?

Q3. Are there any Access and Benefit Sharing agreements between with local communities, w.r.t ecotourism revenue, ecodevelopment revenue, etc.

Q4. Have amenities been provided to households of frontline staff as per the guidelines of Project Tiger to facilitate basic education for their children?

Q5. Have you faced resistance from the local communities when implementing the scheme?

Q6. How many training sessions or workshops have been held to increase awareness or skills w.r.t. alternate livelihood options for local communities?

Q7. What is the percentage of people skilled in alternate livelihood sources through the scheme?

### **Unintended ecological and socio-economic consequences of the scheme and recommendations to mitigate them**

Q1. Have there been any incidents which led to an unintended consequence under the scheme (for e.g. villagers were unsatisfied with the scheme implementation or alternate livelihood)?



Q2. How can the scheme design be modified to mitigate the negative factors?

### **ET2: How are scheme targets set and monitored?**

**Strengthened monitoring system. Strengthened reporting system. Reduction in inconsistent reporting. Better use of ICT in the monitoring**

Q1. Do you follow any monitoring framework for reporting the progress of scheme implementation?

Q2. Is monitoring conducted regularly? If not, what are the challenges?

**Effective and innovative partnerships. Improved strategies and approaches. Utilization of innovative technology and strategy**

Q1. Do you actively try and integrate innovative technology or strategies into reserve level planning?

Q2. Have trainings been conducted for innovative measures/new technology adopted for conservation activities?

### **ET3 How has the scheme performed against scheme objectives and annual targets?**

**Key issues, bottlenecks, challenges**

Q1. What are the other bottlenecks, issues & challenges in the implementation of the scheme?

**Additional performance indicators (over and above those currently tracked)**

Q1. Do you think there is an important aspect of the scheme that is currently not tracked?

### **ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**Fund release process**

Q1. Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?

**Utilization of available funds**

Q1. Was there timely utilization of available funds? If not, what were the reasons?

**Positive factors enhancing scheme performance**

Q1. What are the positive factors that have enhanced scheme performance?

Q2. Categorize the positive factors into universal (across states, across years) and specific (particular state or time period) and mention the relative impact of each factor on performance?

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1. How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?

**Negative factors affecting scheme performance**



Q1. Is the funding mechanism adequate and conducive to the timely application for, and disbursement of, funds?

**How can the scheme design be modified to ensure the exclusion of these negative factors or to address them?**

Q1. How can the scheme design be modified to ensure the exclusion of these negative factors or to address them?

## **EFFICIENCY**

**EC1 Did the benefits of the scheme exceed costs?**

**Monetary value of scheme benefits**

Q1. What has been the trend of wildlife species count?

**EC2 Can the costs of the scheme be lowered?**

**Resource efficiency. Resource sufficiency**

Q1. In general, do activities get implemented according to the workplan without significant variation?

Q2. Has the release of funds been within the standard timeline after receiving approval?

**Convergence of this scheme with other schemes. Convergence with private sector/CSR projects**

Q1. Has the private sector participated in supporting objectives of schemes through CSR projects? If yes, please explain with examples.

## **SUSTAINIBILITY**

**SS2 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

**Empowered local management structure. Empowered communities. Increased ownership of results**

Q1. Do the workshops / trainings help build knowledge that can be sustained over a significant period of time?

Q2. Are the local governance mechanisms setup under the scheme able to sustain over a significant period of time?

**Improved financial sustainability and over-reliance on the Centre allocation. Proportion of funds currently disbursed vs. recovered via the schemes**

Q1. Do the workshops / trainings help generate additional revenue through activities such as eco-tourism? Please specify the activities (for e.g. tour guides)

## **IMPACT**



**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

**Progress on SDG goals. Improved performance on environmental impact indicators**

- Q1. Has the conservation and protection of wildlife improved biodiversity in last five years?
- Q2. Has there been a reduction of anthropogenic activities around the core zone?
- Q3. Has there been a reduction in human-wildlife conflict in last five years?
- Q4. Have there been any other impacts on the environment?

**Enhanced awareness of the scheme. Increased commitment and ownership**

- Q1. Has there been an improvement in the health of ecosystem services?
- Q2. Has there been an enhancement of awareness among local communities?
- Q3. What has been the impact of capacity building and awareness creation activities on the local communities?
- Q4. What has been the trend in fatality rates due to man-animal conflicts?
- Q5. Has there been an improvement in the work rate/ livelihoods among local communities overall and esp. women and tribal communities?
- Q6. Were there instances of adverse impact on co-existing species after the conservation programme was implemented?
- Q7. Have there been other unintended outcomes?

**EQUITY**

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Are the guidelines being followed to their full extent?**

- Q1. How will you describe participation of vulnerable/weak/marginalised section of local communities in scheme implementation in the last five years?
- Q2. Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society?

**EQ2 Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Is the scheme structure appropriate to encompass the marginalized and vulnerable groups of the population? Are there pre-existing social systems or biases in place that prevent the inclusion of these groups?**



Q1. Are there instances where any group of people have been constrained from participating in scheme activities/ training events/distribution of benefits?

## **SECTION 2: CROSS SECTIONAL THEMES**

### **Accountability & Transparency**

#### **Monitoring**

Q1. What are the challenges in submission of Utilization Reports on time?

#### **Citizen Accountability**

Q1. Is there a grievance redressal mechanism for addressing concerns regarding scheme implementation?

#### **Financial Accountability**

Q1. Are you aware of any financial discrepancies in scheme implementation?

### **Direct/Indirect Employment Generation**

#### **Improvement in income levels**

Q1. What is the approximate improvement in income levels as a result of the scheme?

#### **Availability of job opportunities**

Q1. What is the level of employment generation through scheme?

### **Gender mainstreaming**

#### **Inclusiveness in scheme design/planning**

Q1. Are there any scheme activities where women participation can be improved? Please explain.

### **Climate change & sustainability including adoption of climate-change resilient practices & diversifications**

#### **Awareness, capacity building**

Q1. Are there any training sessions held regularly for reducing pollution, adopting green practices, using local materials etc.?

Q2. Are you aware of climate risks and possible individual mitigation /adaptation measures?

### **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population**

#### **Inclusion of vulnerable groups in scheme and sector**

Q1. Are there instances where any group of people have been constrained from participating in scheme activities/ training events/distribution of benefits?

### **Use of IT/Technology in driving efficiency**



### **Use of latest technology to improve efficiency and effectiveness of the scheme?**

Q1. What are the other new technologies available in the scheme / sector? What are the challenges in their adoption?

### **Stakeholder and Beneficiary behavioral change**

#### **Challenges for behavioral change**

Q1. What are the major challenges in inducing behavior change? Are there any areas which needs more attention?

### **Unlocking Synergies with other Government Program**

#### **Convergence**

Q1. Have you faced any challenges in implementing activities under the scheme due to overlap with other schemes?

Q2. If yes, what measures were taken to avoid overlap in implementation?

### **Reforms, Regulations**

#### **Adoption and challenges**

Q1. What are the challenges faced in effective implementation of the relevant acts/rules/regulations? How can these be overcome?

### **Impact on and role of private sector, community and civil society in the scheme**

#### **Participation of private sector, public-private partnerships**

Q1. What are the challenges faced in attracting private sector participation?

#### **Public-Private Partnership**

Q1. How can the challenges faced by private sector in participation in the sector be reduced?

### **SECTION 3: CHALLENGES AND SUGGESTIONS**

Q1. Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?

Q2. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?

- Short term
- Medium term
- Long terms

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*



**THANK AND END**



# Annexure 17 Primary Survey Guide - CNRE

## 17.1.1 National level stakeholders - Government

National Level stakeholders (KII)	
Man and Biosphere National Committee	Additional Director & Member Secretary / Advisor & Member
National Biodiversity Authority, MoEFCC	Secretary
Subject Matter Experts	National Environmental Engineering Research Institute

### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:

Sir/Madam, the Development Monitoring and Evaluation Office (DMEO), NITI Aayog is undertaking evaluation of Centrally Sponsored Schemes in the Environment and Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes before the schemes come up for fresh appraisal. NITI Aayog has engaged consultancy firm KPMG for this evaluation. We are from the Ipsos Research Pvt. Ltd. We are working with KPMG for this evaluation. To have a complete understanding of the schemes, key challenges and success stories, we are meeting the key stakeholders from central,



state, and village level. The study also involves a survey with the households. We would like to seek your opinion on certain topics related to the scheme **Conservation of Natural Resources and Ecosystems**. The information we gather will help us evaluate and develop recommendations in respect of the scheme. Every piece of information and opinion that you share would help us a great deal to work on this area and improve it further for more effective implementation of the schemes.

- Inform the respondent of the probable duration of the discussion - Approximately 45 minutes
- Introduce self, note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Good morning/afternoon sir/madam, could you please tell me your name? (NOT TO USE THE RECORDER HERE)
- Since when have you been working here? What are your key roles and responsibilities in this department in general?
- What are your roles and responsibilities in this scheme? Could you please explain?

#### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH THE SCHEME**

##### ***MODERATOR TO NOTE:***

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

#### **SECTION 1: DEEP DIVE INTO SCHEME USING REESIE FRAMEWORK:**

##### **RELEVANCE**

**RL1: Is the scheme relevant in the present context?**

##### **Biosphere Reserve Scheme updating for alignment with SDG goals**

Q1. While the Biosphere Reserves scheme is prima-facie aligned to the SDGs, have the scheme guidelines been specifically mapped to India's SDG targets?



### **Identification of linkage between national targets and schemes for action plans prepared under Biosphere Reserve guidelines**

Q1. Has there been any plan created for aligning Management Action Plans (MAP) prepared under Biosphere Reserves scheme with national policies, targets/goals?

### **Biosphere Resource scheme coverage for fair and equitable sharing benefits. NPCA and Biosphere Reserves scheme coverage for National Biodiversity Targets**

Q1. How do the activities under Biosphere Reserve scheme cover fair and equitable sharing benefits such as Access and Benefit Sharing agreements?

Q2. Has there been any discussion or plan on the alignment of Biosphere reserve scheme with the national biodiversity targets of India under CBD?

### **Needs assessment of the target population. Updating and revision of needs assessment**

Q1. Is there a framework for needs assessment of target population in development of management/integrated action plans?

Q2. What are the focus areas of the need assessment?

### **Overlap with other schemes. Development of convergence framework to save resources**

Q1. Were other schemes such as wildlife and forest protection schemes (Project Tiger, NAP, schemes under Ministry of Water Resources etc.) considered while designing or amending these schemes?

Q2. If so, how were the overlaps avoided? (For e.g. meetings conducted for ensuring convergence)

### **Prioritisation of communities/PRI etc. in the scheme**

Q1. Was the involvement of communities/ PRI etc. considered while the scheme design was in the process?

Q2. If not, what was the reason for this?

Q3. If yes, what was the extent of communities/PRI involvement?

## **RL2 Is it appropriate to continue / prioritize this scheme?**

### **Impact of scaling down**

Q1. Are there any alternative schemes that can deliver similar outcomes? Further, are such alternative schemes, if any, more effective than the subject scheme?

## **RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

### **Outcome tracking**

Q1. Is there any plan or discussion carried out on developing more comprehensive outcome indicators for the schemes? If yes, please provide details.

Q2. Do you recommend any specific outcome indicators for the objectives of the scheme?

### **Functionality of M&E framework, governance mechanism, results framework. Mechanism for regular strategic review to ensure appropriateness / relevance of the scheme**



- Q1. Are any challenges being faced in the current governance, monitoring, evaluation and review system?
- Q2. Are the indicators for tracking outcome and outputs sufficient in your opinion?
- Q3. Has a mechanism been put in place for regular strategic review to ensure appropriateness / relevance of the scheme? If yes, please provide details.

#### **Comprehensive census data of species**

- Q1. What efforts are undertaken to evaluate the existing biodiversity and improvement resulting from interventions in the sector?

### **EFFECTIVENESS**

#### **ET1: Is the scheme design appropriate to address scheme objectives?**

##### **Any prior unintended consequences identified. How can the scheme design be modified to mitigate the negative factors?**

- Q1. Have there been any incidents which led to an unintended consequence under the scheme (for e.g. villagers were unsatisfied with the conservation plans or alternate livelihood)?
- Q2. How can the scheme design be modified to mitigate the negative factors?

##### **Change in quantity of forest cover**

- Q1. **NPCA National Division:** How does the scheme implementing agency work with other schemes like GIM and NAP for afforestation activities in catchment areas?

##### **Rise of pollution in lakes and wetlands**

- Q1. **NPCA National Division:** Given the rise in pollution in water bodies, how do the scheme activities work towards pollution abatement?

#### **ET2: How are scheme targets set and monitored?**

##### **Scheme targets setting methodology. Dept. responsible for setting scheme targets. Audit/monitoring mechanism**

- Q1. Are any studies conducted for setting of targets in terms of outputs or outcomes?
- Q2. Is there mechanism to independently verify the progress reported by the supervising entity through audits or other methods?

##### **Incorporation of innovative measures/solutions under scheme implementation**

- Q1. What are the innovative measures/ technology used for implementing the action plans under BR/NPCA schemes?
- Q2. Have there been consultations with local partnering agencies for exploring and/or adopting innovating programs?

#### **ET3 How has the scheme performed against scheme objectives and annual targets?**



### **Performance on the output-outcome framework**

Q1. Is there a results framework/output-outcome framework maintained under the BR/NPCA schemes? If yes, please provide the same for last 5 years.

Q2. What are the reasons for non-achievement of targets?

Q3. What have been the challenges in undertaking conservation works in lakes?

### **Documentation for state wise performance of schemes**

Q1. Is there documentation of state-wise performance of schemes? If yes, please provide the same.

Q2. Which parameter or benchmark can be used to evaluate the performance of states under the schemes?

### **Basis to define a state performing well**

Q1. Which states have performed well in terms of scheme implementation? What were the reasons?

### **Basis to define a state performing poorly**

Q1. Which states have performed poorly in terms of scheme implementation? What were the reasons?

### **Key issues, bottlenecks, challenges**

Q1. What are the other bottlenecks, issues & challenges in the implementation of the scheme?

Q2. Has there been any independent evaluation conducted in the past? If yes, what were the observations and recommendations of the evaluation.

Q3. Is sufficient funding available for O&M of implemented projects?

### **Additional performance indicators (over and above those currently tracked)**

Q1. Is there any additional performance indicators (over and above those currently tracked) that may be necessary to effectively monitor scheme performance?

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

### **Fund release process**

Q1. Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?

### **Utilization of available funds**

Q1. Was there timely utilization of available funds? If not, what were the reasons?

Q2. Do States usually submit requirements for sanction of funds on timely basis?

Q3. Have some states not been provided funding? If yes, please explain with reasons.

### **Policies to improve scheme performance**

Q1 - What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance?



### **How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1 - In your opinion, how can the scheme design be further revised to recognize/replicate positive factors and enhance performance?

### **Negative factors affecting scheme performance. Areas of improvement for enhancing scheme effectiveness**

Q1. What are the negative factors that have reduced scheme performance?

Q2. Have these factors been discussed in stakeholder or review meetings? If yes, please provide the minutes of meeting.

### **Increase in developmental activities leading to encroachment on natural habitats**

Q1. **NPCA National Division:** How do the conservation and management plans of wetlands incorporate challenges of water and land use within the catchment areas?

## **EFFICIENCY**

### **EC1 Did the benefits of the scheme exceed costs?**

#### **Trend analysis of increase in flora and fauna/ decrease in water pollution/ improvement in aquatic diversity, water quality of wetlands**

Q1 - Have any studies been conducted on increase in flora and fauna in the Biosphere reserves/ improvement in aquatic diversity, water quality of wetlands over the duration of scheme?

#### **Over/under utilization of budget. Variations between actual and budgets allocations**

Q1. Does the budget for the scheme get efficiently utilized annually? If not, what are the major reasons of over / under utilization?

#### **Availability of finance for undertaking conservation measures**

Q1. **NPCA National Division:** How does the prioritization for conservation of wetlands take place and are existing budget allocations sufficient for the magnitude of the challenge?

### **EC2 Can the costs of the scheme be lowered?**

#### **Lower cost alternatives**

Q1. How many activities have been implemented according to the workplan without significant variation?

Q2. What has been the percentage of state -wise allocation of funds vs. the budgets requested?

Q3. What has been the average time taken by government agencies to give various approvals

Q4. What is the average amount of time taken at the State level to approve proposals for fund disbursement?

Q5. What is the average time taken by the Centre to approve proposals for fund disbursement?

Q6. Has the release of funds been within the standard timeline after receiving approval?



- Q7. How many states submit fund requests on time?
- Q8. How many states submit Utilization Certificates on time?
- Q9. Are there lower cost alternatives for achieving the scheme outcomes?

**Coordination between ministries (or departments as applicable) in scheme execution**

Q1. Is there adequate coordination between center and state in the execution of scheme such that technical and financial resources are used efficiently?

**Convergence of this scheme with other schemes. Convergence with private sector/CSR projects**

- Q1. Is there any other scheme that aims to achieve similar objectives or outcomes?
- Q2. Has there been any convergence with other scheme for achieving common objectives?

**Adequacy of procurement costs**

Q1. Has there been any variation noticed in procurement costs and benchmark/standard rates?

**SUSTAINIBILITY**

**SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? To what extent do the scheme design and timely interventions manage the risks?**

**Documentation of mitigation of institutional, financial, economic, social, political, and environmental risks under the schemes**

- Q1. What are the risks (technical, institutional, financial, economic, social, political, and environmental) that can impact scheme performance? Please explain with reasons.
- Q2. Is there a risk mitigation plan documented for resolving these risks?

**Rise of pollution in lakes and wetlands**

Q1: **NPCA National Division:** How does the scheme implementing agency work with other agencies to avoid pollution of lakes and wetlands?

**Impact of climate change on vulnerable sectors**

Q1. **NPCA National Division:** Does the scheme ensure conservation plans for coastal wetlands take sea level rise into consideration? Does the scheme ensure conservation plans take variation in precipitation patters into consideration for management?

**Insufficient waste management and processing infrastructure**

Q1. **NPCA National Division:** How does the scheme implementing agency work with other agencies to ensure treatment of waste discharged in to the lakes and wetlands?

**SS2 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

**Support provided to state/local governance structures to independently sustain the scheme objectives**



Q1. Does the scheme take into account planning for self-sustenance? If yes, are there any plans or minutes of meetings that discuss the same.

Q2. Which activities have been identified to enhance self-sustenance of the reserves/wetland sites?

### **Prevalence of eco-tourism or any other revenue generating model**

Q1. Is eco-tourism encouraged in the scheme implementation?

Q2. Are funds allocated to conduct eco-tourism activities?

Q3. Have any other models for revenue generation in the reserves/wetland sites been identified?

## **IMPACT**

**IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

### **Improvement in water quality, nutrient level of wetlands, lakes; biodiversity of flora and fauna,**

Q1. Has the conservation and protection of biosphere reserves improved the floral and faunal diversity in last five years?

Q2. Has the conservation and protection of wetlands improved water quality, nutrient level of water, reduce water pollution, improve aquatic biodiversity in last five years?

Q3. Has this progress been documented or discussed in review meetings? If yes, please provide the suitable documents.

### **Socio-economic outcomes of the schemes**

Q1. Has there been improvement in socio-economic conditions of the local communities in last five years due to scheme activities?

Q2. If yes, please describe how the local communities have benefitted from the scheme?

### **Support in achieving national objectives/priorities**

Q1. Have the schemes improved land and aquatic biodiversity of the reserves / wetlands covered under the scheme?

Q2. Have the schemes contributed to improving livelihoods and reducing poverty of local communities?

Q3. Has the scheme contributed to achieving any other national goals? Please explain.

### **Information on reserves/wetlands pending notification**

Q1. How many reserves/wetlands are pending notification?

Q2. What are the challenges faced in notifying reserves/wetlands under the BR scheme/NPCA/Wetland Rules,2017?

### **Any instances of adverse impact on co-existing species (flora and fauna)**

Q1. Have there been any instances of adverse impacts of the schemes? (for eg. impact on co-existing species)



## **EQUITY**

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Policies defined for vulnerable/tribal section of local population. Demographics of local communities' subject to development benefits. State-wise/district -wise distribution of ecological resources and local communities**

Q1. Does the scheme ensure benefits for vulnerable, marginalized, disadvantaged or weaker section of society? If yes, how?

**EQ2 Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Social biases leading to exclusion of groups from scheme activities at reserve/wetland sites.**

Q1. Are there social biases or systems in place that prevent the inclusion of any groups?

## **SECTION 2: CROSS SECTIONAL THEMES**

### **Accountability & Transparency**

#### **Availability of data records and reports in public domain**

Q1. What are the factors limiting the reporting of data in public domain?

Q2. The data set is also present in various different authorized sources like UNESCO, ENVIS and different research journals, does the government control the flow of data through/in these different sources?

Q3. How authentic are such data sets present in different sources?

#### **Evaluation mechanisms**

Q1. Is there an evaluation mechanism for the scheme? If yes, please provide details. If no, please explain the challenges.

#### **Citizen Accountability**

Q1. Is there a grievance redressal mechanism for addressing concerns regarding scheme implementation?

#### **Financial Accountability**

Q1. What funding mechanisms are being used for transfer of funds to beneficiaries?

Q2. What is the frequency for conducting financial audits on scheme implementation?

### **Direct/Indirect Employment Generation**

#### **Improvement in income levels**

Q1. What is the approximate improvement in income levels as a result of the scheme?



### **Availability of job opportunities**

Q1. What is the level of employment generation through scheme?

### **Women participation in scheme**

Q1. Does the scheme in any manner encourage woman participation in the scheme implementation?  
Please explain.

## **Gender mainstreaming**

### **Inclusiveness in scheme design/planning**

Q1. Does the scheme in any manner encourage woman participation in the scheme implementation?  
Please explain.

## **Climate change & sustainability including adoption of climate-change resilient practices & diversifications**

### **Climate Change & Sustainability**

Q1. While developing a restoration / conservation plan is climate factors taken into consideration?

Q2. Is there an appropriate disaster risk reduction plan in place?

### **Awareness, capacity building**

Q1. Are there any training sessions held regularly for reducing pollution, adopting green practices, using local materials etc.?

Q2. Are the end beneficiaries aware of climate risks and possible individual mitigation /adaptation measures?

## **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population**

### **Fund allocation to vulnerable communities**

Q1. What is the fund allocated under TSP & SCSP for each scheme?

Q2. What is the fund allocated under TSP & SCSP for each scheme in different states?

Q3. How much of the fund has been utilized overall and by each state?

Q4. What has been the effect of the TSP & SCSP funds on improving equity?

### **Inclusion of vulnerable groups in scheme and sector**

Q1. Does the scheme ensure benefits for vulnerable, marginalized, disadvantaged or weaker section of society? If yes, how?

Q2. Are there social biases or systems in place that prevent the inclusion of any groups?

## **Use of IT/Technology in driving efficiency**

### **Deployment of IT technology for monitoring**



Q1. Is there an on-line scheme MIS to ensure regular updates of progress and effective supervision? If no, what are the challenges in implementation of MIS portals/Apps?

#### **Use of latest technology to improve efficiency and effectiveness of the scheme?**

Q1. Is there an on-line scheme MIS to ensure regular updates of progress and effective supervision? If no, what are the challenges in implementation of MIS portals/Apps?

### **Stakeholder and Beneficiary behavioural change**

#### **Fund allocation**

Q1. What percent of total allocations is directed towards awareness generation or sensitization?

Q2. What is the utilization rate? And how much impact has it been able to generate in terms of behaviour change?

### **Research & Development**

#### **Fund Allocation**

Q1. What percentage of total fund allocation for scheme is available for R&D? How much of that budget is being utilized?

#### **Institutes and departments dedicated to R&D**

Q1. Are there any dedicated institutes or centres or departments dedicated for R&D in the sector?

#### **Private Sector participation in R&D**

Q1. What is the percentage of private sector participation in R&D activities in the sector?

#### **Challenges in undertaking R&D efforts**

Q1. What are the challenges in undertaking R&D projects in the sector?

#### **Any Good Practices**

Q1. Are there any good practices for undertaking R&D projects in the sector?

### **Unlocking Synergies with other Government Program**

#### **Convergence**

1. Were other schemes such as wildlife and forest protection schemes (Project Tiger, NAP, schemes under Ministry of Water Resources etc) considered while designing or amending these schemes?

2. If so, how were the overlaps avoided? (For e.g. meetings conducted for ensuring convergence)

### **Reforms, Regulations**

#### **Adoption and challenges**

Q1. What are the challenges faced in effective implementation of the relevant acts/rules/regulations? How can these be overcome?

### **Impact on and role of private sector, community and civil society in the scheme**



## Participation of private sector, public-private partnerships

Q1. What are the challenges faced in attracting private sector participation?

### Public-Private Partnership

Q1. How can the challenges faced by private sector in participation in the sector be reduced?

### SECTION 3: CHALLENGES AND SUGGESTIONS

1. Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
2. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?
  - Short term
  - Medium term
  - Long terms

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

## 17.1.2 National level stakeholders - Subject Matter Experts

National Level stakeholders (KII)	
Subject Matter Experts	National Environmental Engineering Research Institute

### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_that made you decide to\_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?



- Earlier you said\_\_\_\_\_ but it also seems like\_\_\_\_\_. Can you explain?

## **INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:

Sir/Madam, the Development Monitoring and Evaluation Office (DMEO), NITI Aayog is undertaking evaluation of Centrally Sponsored Schemes in the Environment and Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes before the schemes come up for fresh appraisal. NITI Aayog has engaged consultancy firm KPMG for this evaluation. We are from the Ipsos Research Pvt. Ltd. We are working with KPMG for this evaluation. To have a complete understanding of the schemes, key challenges and success stories, we are meeting the key stakeholders from central, state, and village level. The study also involves a survey with the households. We would like to seek your opinion on certain topics related to the scheme **Conservation of Natural Resources and Ecosystems**. The information we gather will help us evaluate and develop recommendations in respect of the scheme. Every piece of information and opinion that you share would help us a great deal to work on this area and improve it further for more effective implementation of the schemes.

- Inform the respondent of the probable duration of the discussion - Approximately 45 minutes
- Introduce self, note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

## **PROFILE OF THE STAKEHOLDER**

- Good morning/afternoon sir/madam, could you please tell me your name? (NOT TO USE THE RECORDER HERE)
- Since when have you been working here? What are your key roles and responsibilities in this department in general?
- What are your roles and responsibilities in this scheme? Could you please explain?

## **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH THE SCHEME**

### ***MODERATOR TO NOTE:***



3. All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.
4. The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.

## **SECTION 1: DEEP DIVE INTO SCHEME USING REESIE FRAMEWORK:**

### **RELEVANCE**

#### **RL1: Is the scheme relevant in the present context?**

##### **Biosphere Reserve Scheme updating for alignment with SDG goals**

Q1. While the Biosphere Reserves scheme is prima-facie aligned to the SDGs, have the scheme guidelines been specifically mapped to India's SDG targets?

##### **Biosphere Resource scheme coverage for fair and equitable sharing benefits. NPCA and Biosphere Reserves scheme coverage for National Biodiversity Targets**

Q1. How do the activities under Biosphere Reserve scheme cover fair and equitable sharing benefits such as Access and Benefit Sharing agreements?

Q2. Has there been any discussion or plan on the alignment of Biosphere reserve scheme with the national biodiversity targets of India under CBD?

#### **RL2 Is it appropriate to continue / prioritize this scheme?**

##### **Impact of scaling down**

Q1. Are there any alternative schemes that can deliver similar outcomes? Further, are such alternative schemes, if any, more effective than the subject scheme?

#### **RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

##### **Outcome tracking**

Q1. Is there any plan or discussion carried out on developing more comprehensive outcome indicators for the schemes? If yes, please provide details.

Q2. Do you recommend any specific outcome indicators for the objectives of the scheme?

##### **Functionality of M&E framework, governance mechanism, results framework. Mechanism for regular strategic review to ensure appropriateness / relevance of the scheme**

Q1. Are the indicators for tracking outcome and outputs sufficient in your opinion?

### **EFFECTIVENESS**

#### **ET1: Is the scheme design appropriate to address scheme objectives?**



**Any prior unintended consequences identified. How can the scheme design be modified to mitigate the negative factors?**

Q1. Have there been any incidents which led to an unintended consequence under the scheme (for e.g. villagers were unsatisfied with the conservation plans or alternate livelihood)?

Q2. How can the scheme design be modified to mitigate the negative factors?

**ET2: How are scheme targets set and monitored?**

**Incorporation of innovative measures/solutions under scheme implementation**

Q1. What are the innovative measures/ technology used for implementing the action plans under BR/NPCA schemes?

Q2. Have there been consultations with local partnering agencies for exploring and/or adopting innovating programs?

**ET3 How has the scheme performed against scheme objectives and annual targets?**

**Key issues, bottlenecks, challenges**

Q1. What are the other bottlenecks, issues & challenges in the implementation of the scheme?

Q2. Has there been any independent evaluation conducted in the past? If yes, what were the observations and recommendations of the evaluation.

Q3. Is sufficient funding available for O&M of implemented projects?

**Additional performance indicators (over and above those currently tracked)**

Q1. Is there any additional performance indicators (over and above those currently tracked) that may be necessary to effectively monitor scheme performance?

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

**Policies to improve scheme performance**

Q1. What are the other initiatives that can be potentially undertaken to improve scheme performance?

**How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1. In your opinion, how can the scheme design be further revised to recognize/replicate positive factors and enhance performance?

**Negative factors affecting scheme performance. Areas of improvement for enhancing scheme effectiveness**

Q1. What are the negative factors that have reduced scheme performance?



Q2. Have these factors been discussed in stakeholder or review meetings? If yes, please provide the minutes of meeting.

### **Increase in developmental activities leading to encroachment on natural habitats**

Q1. How do the conservation and management plans of wetlands incorporate challenges of water and land use within the catchment areas?

## **EFFICIENCY**

### **EC1 Did the benefits of the scheme exceed costs?**

#### **Trend analysis of increase in flora and fauna/ decrease in water pollution/ improvement in aquatic diversity, water quality of wetlands**

Q1 - Have any studies been conducted on increase in flora and fauna in the Biosphere reserves/ improvement in aquatic diversity, water quality of wetlands over the duration of scheme?

#### **Availability of finance for undertaking conservation measures**

Q1. Are existing budget allocations sufficient for the magnitude of the challenge?

### **EC2 Can the costs of the scheme be lowered?**

#### **Lower cost alternatives**

Q1. Are there lower cost alternatives for achieving the scheme outcomes?

#### **Convergence of this scheme with other schemes. Convergence with private sector/CSR projects**

Q1. Is there any other scheme that aims to achieve similar objectives or outcomes?

Q2. Has there been any convergence with other scheme for achieving common objectives?

## **SUSTAINIBILITY**

### **SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? To what extent do the scheme design and timely interventions manage the risks?**

#### **Documentation of mitigation of institutional, financial, economic, social, political, and environmental risks under the schemes**

Q1. What are the risks (technical, institutional, financial, economic, social, political, and environmental) that can impact scheme performance? Please explain with reasons.

Q2. Is there a risk mitigation plan documented for resolving these risks?

#### **Impact of climate change on vulnerable sectors**



Q1. Does the scheme ensure conservation plans for coastal wetlands take sea level rise into consideration?  
Does the scheme ensure conservation plans take variation in precipitation patterns into consideration for management?

#### **Insufficient waste management and processing infrastructure**

Q1. How does the scheme implementing agency work with other agencies to ensure treatment of waste discharged in to the lakes and wetlands?

### **SS2 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

#### **Support provided to state/local governance structures to independently sustain the scheme objectives**

Q1. Does the scheme take into account planning for self-sustenance? If yes, are there any plans or minutes of meetings that discuss the same.

Q2. Which activities have been identified to enhance self-sustenance of the reserves/wetland sites?

#### **Prevalence of eco-tourism or any other revenue generating model**

Q1. Are there any other models for revenue generation in the reserves/wetland sites?

### **IMPACT**

### **IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

#### **Improvement in water quality, nutrient level of wetlands, lakes; biodiversity of flora and fauna,**

Q1. Has the conservation and protection of biosphere reserves improved the floral and faunal diversity in last five years?

Q2. Has the conservation and protection of wetlands improved water quality, nutrient level of water, reduce water pollution, improve aquatic biodiversity in last five years?

Q3. Has this progress been documented or discussed in review meetings? If yes, please provide the suitable documents.

#### **Socio-economic outcomes of the schemes**

Q1. Has there been improvement in socio-economic conditions of the local communities in last five years due to scheme activities?

Q2. If yes, please describe how the local communities have benefitted from the scheme?

#### **Support in achieving national objectives/priorities**

Q1. Have the schemes improved land and aquatic biodiversity of the reserves / wetlands covered under the scheme?

Q2. Have the schemes contributed to improving livelihoods and reducing poverty of local communities?

Q3. Has the scheme contributed to achieving any other national goals? Please explain.



### Information on reserves/wetlands pending notification

Q1. How many reserves/wetlands are pending notification?

Q2. What are the challenges faced in notifying reserves/wetlands under the BR scheme/NPCA/Wetland Rules,2017?

### Any instances of adverse impact on co-existing species (flora and fauna)

Q1. Have there been any instances of adverse impacts of the schemes? (for eg. impact on co-existing species)

## EQUITY

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Policies defined for vulnerable/tribal section of local population. Demographics of local communities' subject to development benefits. State-wise/district -wise distribution of ecological resources and local communities**

Q1. Does the scheme ensure benefits for vulnerable, marginalized, disadvantaged or weaker section of society? If yes, how?

**EQ2 Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Social biases leading to exclusion of groups from scheme activities at reserve/wetland sites.**

Q1. Are there social biases or systems in place that prevent the inclusion of any groups?

## **SECTION 2: CROSS SECTIONAL THEMES**

### **Direct/Indirect Employment Generation**

#### **Improvement in income levels**

Q1. What is the approximate improvement in income levels as a result of the scheme?

#### **Availability of job opportunities**

Q1. What is the level of employment generation through scheme?

#### **Women participation in scheme**

Q1. Does the scheme in any manner encourage woman participation in the scheme implementation?  
Please explain.

### **Gender mainstreaming**



### **Inclusiveness in scheme design/planning**

Q1. Does the scheme in any manner encourage woman participation in the scheme implementation?  
Please explain.

### **Use of IT/Technology in driving efficiency**

#### **Use of latest technology to improve efficiency and effectiveness of the scheme?**

Q1. Are there any latest technologies that can be deployed to improve efficiency and effectiveness of the scheme?

### **Research & Development**

#### **Institutes and departments dedicated to R&D**

Q1. Are there any dedicated institutes or centres or departments dedicated for R&D in the sector?

#### **Private Sector participation in R&D**

Q1. What is the percentage of private sector participation in R&D activities in the sector?

#### **Challenges in undertaking R&D efforts**

Q1. What are the challenges in undertaking R&D projects in the sector?

#### **Any Good Practices**

Q1. Are there any good practices for undertaking R&D projects in the sector?

### **Reforms, Regulations**

#### **Adoption and challenges**

Q1. What are the challenges faced in effective implementation of the relevant acts/rules/regulations? How can these be overcome?

### **Impact on and role of private sector, community and civil society in the scheme**

#### **Participation of private sector, public-private partnerships**

Q1. What are the challenges faced in attracting private sector participation?

#### **Public-Private Partnership**

Q1. How can the challenges faced by private sector in participation in the sector be reduced?

### **SECTION 3: CHALLENGES AND SUGGESTIONS**

3. Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
4. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?
  - Short term
  - Medium term



- Long terms

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

### 17.1.3 State level stakeholders

State Level stakeholders (KII)	
State level officials for Biosphere Reserve	Principal Chief and Conservator of Forests/ Chief Wildlife Warden
State Wetlands Authority	Secretary / Principal Chief and Conservator of Forests

#### GENERAL GUIDELINES:

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

#### INTRODUCTION: SELF

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
 

Sir/Madam, the Development Monitoring and Evaluation Office (DMEO), NITI Aayog is undertaking evaluation of Centrally Sponsored Schemes in the Environment and Water Resources sector in keeping with Government of India's policy to mandatorily evaluate all Centrally Sponsored Schemes (CSS) and Central Sector Schemes before the schemes come up for fresh appraisal. NITI Aayog has engaged consultancy firm KPMG for this evaluation. We are from the Ipsos Research Pvt. Ltd. We are working with KPMG for this evaluation. To have a complete understanding of the



schemes, key challenges and success stories, we are meeting the key stakeholders from central, state, and village level. The study also involves a survey with the households. We would like to seek your opinion on certain topics related to the scheme **Conservation of Natural Resources and Ecosystems**. The information we gather will help us evaluate and develop recommendations in respect of the scheme. Every piece of information and opinion that you share would help us a great deal to work on this area and improve it further for more effective implementation of the schemes.

- Inform the respondent of the probable duration of the discussion - Approximately 45 minutes
- Introduce self, note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Good morning/afternoon sir/madam, could you please tell me your name? (NOT TO USE THE RECORDER HERE)
- Since when have you been working here? What are your key roles and responsibilities in this department in general?
- What are your roles and responsibilities in this scheme? Could you please explain?

#### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH CNR SCHEME**

##### ***MODERATOR TO NOTE:***

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

#### **SECTION 1: DEEP DIVE INTO SCHEME USING REESIE FRAMEWORK:**

##### **RELEVANCE**

**RL1: Is the scheme relevant in the present context?**

##### **Needs assessment of the target population. Updating and revision of needs assessment**

Q1. Was any framework followed for needs assessment to develop management / integrated action plans?



Q2. How frequently is a needs assessment conducted? Was there any action taken post these assessments?

#### **Overlap with other schemes. Development of convergence framework to save resources**

Q1. Have you faced any challenges in planning for conservation at various reserves/ wetlands sites where multiple schemes are being implemented?

Q2. If so, what were the primary challenges and how were they resolved?

#### **RL2 Is it appropriate to continue / prioritize this scheme?**

##### **Impact of scaling down**

Q1. Is there any alternative schemes that can deliver similar outcomes? Further, are such alternative schemes, if any, more effective than the subject scheme?

#### **RL3 Are scheme objectives clear and are stated in terms of outcomes (and not outputs)?**

##### **Outcome tracking**

Q1. Is there any plan or discussion carried out on developing more comprehensive outcome indicators for the BR /NPCA schemes? If yes, please provide details.

Q2. Do you recommend any specific outcome indicators for the objectives of the scheme?

##### **Functionality of M&E framework, governance mechanism, results framework. Mechanism for regular strategic review to ensure appropriateness / relevance of the scheme**

Q1. Are any challenges being faced in the current governance, monitoring, evaluation and review system?

Q2. Are the indicators for tracking outcome and outputs sufficient in your opinion?

#### **EFFECTIVENESS**

#### **ET1: Is the scheme design appropriate to address scheme objectives?**

##### **Formation of local committees. Stakeholder/consultation meetings. Follow-up and review mechanism**

Q1. Have you faced any challenges in developing action plans? If yes, please explain with reasons.

Q2. Have there been local committees established in Biosphere Reserves? Has this improved management of reserves?

Q3. Have workshops been conducted for local officials and communities? Has this been beneficial for conservation management?

Q4. Is there a follow up or review mechanism established for improving or revising conservation plans through stakeholder/consultation meetings?

##### **Evidence of people participation in implementing through workshops**

Q1. Is the involvement of communities a significant activity in the scheme? If not, please explain with reasons.



- Q2. Are the local communities involved in implementing and monitoring conservation activities?
- Q3. How often are the trainings/workshops conducted for this purpose?
- Q4. Are stakeholder meetings conducted to review and enhance participation of local communities?

**Any prior unintended consequences identified. How can the scheme design be modified to mitigate the negative factors?**

- Q1. Have there been any incidents which led to an unintended consequence under the scheme (for eg. villagers were unsatisfied with the conservation plans or alternate livelihood)?
- Q2. How can the scheme design be modified to mitigate the negative factors?

**ET2: How are scheme targets set and monitored?**

**Scheme targets setting methodology. Dept. responsible for setting scheme targets. Audit/monitoring mechanism**

- Q1. Are any studies conducted for setting of targets in terms of outputs or outcomes?
- Q2. Is there mechanism to independently verify the progress reported by the supervising entity through audits or other methods?

**Incorporation of innovative measures/solutions under scheme implementation**

- Q1. What are the innovative measures/ technology used for implementing the action plans under BR/ NPCA schemes?
- Q2. How much fund is spent in using technology and research projects in conservation initiatives?
- Q3. Have there been any stakeholder consultations or strategic plans created for using new technologies?

**ET3 How has the scheme performed against scheme objectives and annual targets?**

**Performance on the output-outcome framework**

- Q1. Is there a results framework/output-outcome framework maintained under the BR/NPCA schemes? If yes, please provide the same for last 5 years.
- Q2. What are the reasons for non-achievement of targets?
- Q3. What have been the challenges in undertaking conservation works in lakes?

**Key issues, bottlenecks, challenges**

- Q1. What are the other bottlenecks, issues & challenges in the implementation of the scheme?
- Q2. Has there been any independent evaluation conducted in the past? If yes, what were the observations and recommendations of the evaluation.
- Q3. Do the stakeholder meetings discuss issues, and suggestions to resolve the same? If yes, please provide the minutes of meetings.
- Q4. Is sufficient funding available for O&M of implemented projects?

**Additional performance indicators (over and above those currently tracked)**



Q1. Is there any additional performance indicators (over and above those currently tracked) that may be necessary to effectively monitor scheme performance?

**ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

#### **Fund release process**

Q1. Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?

#### **Utilization of available funds**

Q1. Was there timely utilization of available funds? If not, what were the reasons?

#### **Policies to improve scheme performance**

Q1. What are the other things (in addition to above factors) that can be potentially undertaken to improve scheme performance?

#### **How can the scheme design be modified to recognize / replicate the positive factors and enhance performance?**

Q1. In your opinion, how can the scheme design be further revised to recognize/replicate positive factors and enhance performance?

#### **Negative factors affecting scheme performance. Areas of improvement for enhancing scheme effectiveness**

Q1. What are the negative factors that have reduced scheme performance?

Q2. Have these factors been discussed in stakeholder or review meetings? If yes, please provide the minutes of meeting.

#### **EFFICIENCY**

**EC1 Did the benefits of the scheme exceed costs?**

#### **Trend analysis of increase in flora and fauna/ decrease in water pollution/ improvement in aquatic diversity, water quality of wetlands**

Q1. Have any studies been conducted on increase in flora and fauna in the Biosphere reserves/ improvement in aquatic diversity, water quality of wetlands over the duration of scheme?

#### **Over/under utilization of budget. Variations between actual and budgets allocations**

Q1. Does the budget for the scheme get efficiently utilized annually? If not, what are the major reasons of over / under utilization?

**EC2 Can the costs of the scheme be lowered?**

#### **Lower cost alternatives**



- Q1. How many activities have been implemented according to the workplan without significant variation?
- Q2. What has been the average time taken by government agencies to give various approvals
- Q3. What is the average amount of time taken at the State level to approve proposals for fund disbursement?
- Q4. What is the average time taken by the Centre to approve proposals for fund disbursement?
- Q5. Has the release of funds been within the standard timeline after receiving approval?
- Q6. Are there lower cost alternatives for achieving the scheme outcomes?

**Coordination between ministries (or departments as applicable) in scheme execution**

- Q1. Is there adequate coordination between center and state in the execution of scheme such that technical and financial resources are used efficiently?

**Convergence of this scheme with other schemes. Convergence with private sector/CSR projects**

- Q1. Is there any other scheme that aims to achieve similar objectives or outcomes?
- Q2. Has there been any convergence with other scheme for achieving common objectives?
- Q3. Has the private sector participated in supporting objectives of BR/NPCA schemes through CSR projects? If yes, please explain with examples.

**Adequacy of procurement costs**

- Q1. Has there been any variation noticed in procurement costs and benchmark/standard rates?

**SUSTAINIBILITY**

**SS1 What are the risks (technical, institutional, financial, economic, social, political, and environmental) that are detrimental to the continued realization of scheme benefits / outcomes? To what extent do the scheme design and timely interventions manage the risks?**

**Documentation of mitigation of institutional, financial, economic, social, political, and environmental risks under the schemes**

- Q1. What are the risks (technical, institutional, financial, economic, social, political, and environmental) that can impact scheme performance? Can you please explain.
- Q2. Is there a risk mitigation plan documented for resolving these risks?

**SS2 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

**Support provided to state/local governance structures to independently sustain the scheme objectives**

- Q1. Does the scheme take into account planning for self-sustenance? If yes, are there any plans or minutes of meetings that discuss the same.
- Q2. Which activities have been identified to enhance self-sustenance of the reserves/wetland sites?

**Prevalence of eco-tourism or any other revenue generating model**



- Q1. Is eco-tourism encouraged in the scheme implementation?
- Q2. Has eco-tourism helped cost recovery for reserves/wetland sites?
- Q3. Have any other models for revenue generation in the reserves/wetland sites been identified/implemented?
- Q4. Are there any trainings provided for eco-tourism activities?

## **IMPACT**

### **IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

#### **Improvement in water quality, nutrient level of wetlands, lakes; biodiversity of flora and fauna,**

- Q1. Has the conservation and protection of biosphere reserves improved the floral and faunal diversity in last five years?
- Q2. Has the conservation and protection of wetlands improved water quality, nutrient level of water, reduce water pollution, improve aquatic biodiversity in last five years?
- Q3. Has this progress been documented or discussed in review meetings? If yes, please provide the suitable documents.

#### **Outcome of capacity building and awareness programmes**

- Q1. How has the scheme performed in terms of training ground officials and local communities?
- Q2. What type of workshops have been conducted? How frequently have they been conducted?
- Q3. What are the challenges faced in conducting workshops/training events? (for e.g. participation rate)

#### **Socio-economic outcomes of the schemes**

- Q1. Has there been improvement in socio-economic conditions of the local communities in last five years due to scheme activities?
- Q2. If yes, please describe how the local communities have benefitted from the scheme?

#### **Information on reserves/wetlands pending notification**

- Q1. How many reserves/wetlands are pending notification?
- Q2. What are the challenges faced in notifying reserves/wetlands under the BR scheme/NPCA/Wetland Rules, 2017?

#### **Any instances of adverse impact on co-existing species (flora and fauna)**

- Q1. Have there been any instances of adverse impacts of the schemes? (for e.g. impact on co-existing species)

## **EQUITY**

### **EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**



**Policies defined for vulnerable/tribal section of local population. Demographics of local communities' subject to development benefits. State-wise/district -wise distribution of ecological resources and local communities**

Q1. Does the scheme ensure benefits for vulnerable, marginalized, disadvantaged or weaker section of society? If yes, how?

**EQ2 Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Social biases leading to exclusion of groups from scheme activities at reserve/wetland sites.**

Q1. Are there social biases or systems in place that prevent the inclusion of any groups?

**SECTION 2: CROSS SECTIONAL THEMES**

**Accountability & Transparency**

**Availability of data records and reports in public domain**

Q1. What are the factors limiting the reporting of data in public domain?

**Evaluation mechanisms**

Q1. Is there an evaluation mechanism for the scheme implementation at state level? If yes, please provide details. If no, please explain the challenges.

**Monitoring**

Q1. What is the frequency for submission of Utilization Reports to the state and central governments?

Q2. Are there any challenges in submission of Utilization Reports on time?

**Citizen Accountability**

Q1. Is there a grievance redressal mechanism for addressing concerns regarding scheme implementation?

**Financial Accountability**

Q1. What funding mechanisms are being used for transfer of funds to beneficiaries?

Q2. What is the frequency for conducting financial audits on scheme implementation?

**Direct/Indirect Employment Generation**

**Improvement in income levels**

Q1. What is the approximate improvement in income levels as a result of the scheme?

**Availability of job opportunities**

Q1. What is the level of employment generation through scheme?

**Women participation in scheme**



Q1. Does the scheme in any manner encourage woman participation in the scheme implementation?  
Please explain.

### **Gender mainstreaming**

#### **Inclusiveness in scheme design/planning**

Q1. Does the scheme in any manner encourage woman participation in the scheme implementation?  
Please explain.

### **Climate change & sustainability including adoption of climate-change resilient practices & diversifications**

#### **Climate Change & Sustainability**

Q1. While developing a restoration / conservation plan is climate factors taken into consideration?

Q2. Is there an appropriate disaster risk reduction plan in place?

#### **Awareness, capacity building**

Q1. Are there any training sessions held regularly for reducing pollution, adopting green practices, using local materials etc.?

Q2. Are the end beneficiaries aware of climate risks and possible individual mitigation /adaptation measures?

### **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population**

#### **Inclusion of vulnerable groups in scheme and sector**

Q1. Does the scheme ensure benefits for vulnerable, marginalized, disadvantaged or weaker section of society? If yes, how?

Q2. Are there social biases or systems in place that prevent the inclusion of any groups?

### **Use of IT/Technology in driving efficiency**

#### **Deployment of IT technology for monitoring**

Q1. Is there an on-line scheme MIS to ensure regular updates of progress and effective supervision? If no, what are the challenges in implementation of MIS portals/Apps?

#### **Use of latest technology to improve efficiency and effectiveness of the scheme?**

Q1. Is there an on-line scheme MIS to ensure regular updates of progress and effective supervision? If no, what are the challenges in implementation of MIS portals/Apps?

### **Stakeholder and Beneficiary behavioural change**

#### **Fund allocation**

Q1. What percent of total allocations is directed towards awareness generation or sensitization?



Q2. What is the utilization rate? And how much impact has it been able to generate in terms of behaviour change?

#### **Mechanisms for beneficiary sensitization**

Q1. What are the existing mechanisms at State/District/Reserve to promote beneficiary awareness and sensitization?

Q2. What activities are undertaken at Reserve level to promote adoption of good practices?

### **Research & Development**

#### **Institutes and departments dedicated to R&D**

Q1. Are there any dedicated institutes or centres or departments dedicated for R&D in the sector?

#### **Private Sector participation in R&D**

Q1. Is there any private sector participation in R&D activities in the sector? Please provide details.

#### **Any Good Practices**

Q1. Are there any good practices for undertaking R&D projects in the sector?

### **Unlocking Synergies with other Government Program**

#### **Convergence**

1. Have you faced any challenges in planning for conservation at various reserves/ wetlands sites where multiple schemes are being implemented?

2. If so, what were the primary challenges and how were they resolved?

### **Reforms, Regulations**

#### **Adoption and challenges**

Q1. What are the challenges faced in effective implementation of the relevant acts/rules/regulations? How can these be overcome?

### **Impact on and role of private sector, community and civil society in the scheme**

#### **Participation of private sector, public-private partnerships**

Q1. What are the challenges faced in attracting private sector participation?

#### **Public-Private Partnership**

Q1. How can the challenges faced by private sector in participation in the sector be reduced?

## **SECTION 3: CHALLENGES AND SUGGESTIONS**

1. Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
2. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?



- Short term
- Medium term
- Long terms

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**

**17.1.4 Village level stakeholders**

<b>Village Level stakeholders (FGD)</b>	
Reserve level officials	Chief Conservator of Forests / Deputy Conservator of Forest / Conservator of Forest
Committee	Biodiversity Management Committee

**GENERAL GUIDELINES:**

- The topics and questions below should be used to guide the interview. Keep in mind, while conducting the interviews, respond to answers provided by the respondents by asking additional questions or probing with more appropriate questions.
- In particular, there are 3 main approaches to eliciting more information from the respondents:
- Seek more detail or explanation of a response. For example:
  - Tell me more about \_\_\_\_\_
  - Can you give an example of \_\_\_\_\_?
  - What happened next?
- Explore the reasons behind a response. For example:
  - What makes you say that?
  - What was it about \_\_\_\_\_ that made you decide to \_\_\_\_\_?
- Seek clarity and check for inconsistencies. For example:
  - Can you explain what you mean by....?
  - Earlier you said \_\_\_\_\_ but it also seems like \_\_\_\_\_. Can you explain?

**INTRODUCTION: SELF**

Thank you for giving us your valuable time.

- Explain the purpose of the interview:
 

Sir/Madam, the Development Monitoring and Evaluation Office (DMEO), NITI Aayog is undertaking evaluation of Centrally Sponsored Schemes in the Environment and Water Resources sector in keeping with Government of India’s policy to mandatorily evaluate all Centrally Sponsored



Schemes (CSS) and Central Sector Schemes before the schemes come up for fresh appraisal. NITI Aayog has engaged consultancy firm KPMG for this evaluation. We are from the Ipsos Research Pvt. Ltd. We are working with KPMG for this evaluation. To have a complete understanding of the schemes, key challenges and success stories, we are meeting the key stakeholders from central, state, and village level. The study also involves a survey with the households. We would like to seek your opinion on certain topics related to the scheme **Conservation of Natural Resources and Ecosystems**. The information we gather will help us evaluate and develop recommendations in respect of the scheme. Every piece of information and opinion that you share would help us a great deal to work on this area and improve it further for more effective implementation of the schemes.

- Inform the respondent of the probable duration of the discussion - Approximately 45 minutes
- Introduce self, note taker and any other team members (if present) and explain what each one would be doing.
- Explain that a tape recorder would be used since the note taker can't write down everything.
- Assure that the discussion will be kept completely confidential and no names or particulars would be divulged.
- Explain that there are no right/ wrong answers and obtaining opinion and perception is critical.

#### **PROFILE OF THE STAKEHOLDER**

- Good morning/afternoon sir/madam, could you please tell me your name? (NOT TO USE THE RECORDER HERE)
- Since when have you been working here? What are your key roles and responsibilities in this department in general?
- What are your roles and responsibilities in this scheme? Could you please explain?

#### **SPECIFIC QUESTIONS FOR OFFICIALS WHO ARE ASSOCIATED WITH THE SCHEME**

##### ***MODERATOR TO NOTE:***

1. *All the questions inside boxes used in this document are not to be asked directly to the respondents. This is just for reference of the researcher to gauge if the larger question has been answered. The questions that follow should be asked.*
2. *The questions in blue are not direct questions to be asked to the stakeholders. However, the questions below them should help answer those in blue. If they don't, moderator should add additional probes to help answer those questions.*

#### **SECTION 1: DEEP DIVE INTO SCHEME USING REESIE FRAMEWORK:**

##### **RELEVANCE**



## **RL1: Is the scheme relevant in the present context?**

### **Needs assessment of the target population. Updating and revision of needs assessment**

Q1. Have you been involved in the needs assessments that have taken place at the various stages? If yes, what was your role?

### **Overlap with other schemes. Development of convergence framework to save resources**

Q1. Have you faced any challenges in implementing activities under the BR/NPCA scheme? If yes, why? (PROBE: Is it due to overlap with other schemes?)

Q2. If yes, what measures were taken to avoid overlap in implementation?

### **Prioritisation of communities/PRIs etc. in the scheme**

Q1. Have you faced resistance from the communities/PRIs etc. when implementing the scheme?

Q2. If so, what methods do you use to minimise this?

Q3. Do you have any suggestions to be incorporated in the scheme guidelines to ease this challenge?

## **EFFECTIVENESS**

## **ET1: Is the scheme design appropriate to address scheme objectives?**

### **Formation of local committees. Stakeholder/consultation meetings. Follow-up and review mechanism**

Q1. Was there any workshop conducted for your training? Were those being beneficial for training and awareness?

Q2. How often are these workshops conducted?

Q3. Are there any activities that require training/workshops for implementing activities of action plans that have not been addressed previously?

### **Evidence of people participation in implementing through workshops**

Q1. Are the local communities involved in implementing and monitoring conservation activities?

Q2. How often are the trainings/workshops conducted for this purpose?

Q3. How would you describe the participation rate? (poor, good or bad)

Q4. Has the participation of local people increased over the years (since 2014) in your opinion?

Q5. Are the village heads/representatives involved in developing conservation plans?

### **Evidence of improvement in livelihoods of local communities. Information on current quality of water, nutrient levels etc. of wetlands and lakes which impacts the surrounding local communities**

Q1. Has the Biosphere Reserve conservation scheme helped in providing basic facilities such as shelter, schools, small-scale industries?

Q2. How effective is the mechanism for fair and equitable sharing of benefits in Biosphere Reserves?

Q3. Has the implementation of conservation of wetlands improved water quality for the nearby villages?

### **Any prior unintended consequences identified. How can the scheme design be modified to mitigate the negative factors?**



Q1. Have there been any incidents which led to an unintended consequence under the scheme (for e.g. villagers were unsatisfied with the conservation plans or alternate livelihood)?

Q2. How can the scheme design be modified to mitigate the negative factors?

#### **ET2: How are scheme targets set and monitored?**

**Scheme targets setting methodology. Dept. responsible for setting scheme targets.**

#### **Audit/monitoring mechanism**

Q1. Do you follow any monitoring framework for reporting the progress of conservation project?

Q2. Is monitoring conducted regularly? If not, what are the challenges?

#### **Incorporation of innovative measures/solutions under scheme implementation**

Q1. Have trainings been conducted for innovative measures/new technology adopted for conservation activities?

#### **ET3 How has the scheme performed against scheme objectives and annual targets?**

#### **Key issues, bottlenecks, challenges**

Q1. Are there any bottlenecks, issues & challenges faced in the implementation of activities under the conservation action plans? How you managed those challenges?

#### **Additional performance indicators (over and above those currently tracked)**

Q1. Are there any additional performance indicators (over and above those currently tracked) that may be necessary to effectively monitor scheme performance?

#### **ET4 Are there positive and / or negative factors that have impacted scheme performance? If so, which are these factors and how should the scheme be modified to leverage / mitigate such factors with a view to improve performance?**

#### **Fund release process**

Q1. Is the fund flow at each level (of the scheme execution org) adequate and released in the timely manner? If not, what were the reasons?

#### **Utilization of available funds**

Q1. Was there timely utilization of available funds? If not, what were the reasons?

#### **Negative factors affecting scheme performance. Areas of improvement for enhancing scheme effectiveness**

Q1. Are there any negative factors that have reduced scheme performance? If yes, what are those?

Q2. Is there are redressal or feedback mechanism established for ground level officials?

#### **EFFICIENCY**

#### **EC2 Can the costs of the scheme be lowered?**

**Convergence of this scheme with other schemes. Convergence with private sector/CSR projects**



Q1. Has the private sector participated in supporting objectives of BR/NPCA schemes through CSR projects? If yes, please explain with examples.

## **SUSTAINIBILITY**

### **SS2 Is the scheme financially and institutionally sustainable? How can sustainability be improved?**

#### **Support provided to state/local governance structures to independently sustain the scheme objectives**

Q1. Do the workshops / trainings help build knowledge that can be sustained over a significant period of time?

Q2. Are the local governance mechanisms setup under the scheme able to sustain over a significant period of time?

#### **Prevalence of eco-tourism or any other revenue generating model**

Q1. Do the workshops / trainings help generate additional revenue through activities such as eco-tourism? Please specify the activities (for e.g. tour guides)

## **IMPACT**

### **IM1 Has the scheme contributed to addressing any major sectoral challenge, national priority, SDG and to what extent?**

#### **Improvement in water quality, nutrient level of wetlands, lakes; biodiversity of flora and fauna,**

Q1. Has the conservation and protection of biosphere reserves improved the floral and faunal diversity in last five years?

Q2. Has the conservation and protection of wetlands improved water quality, nutrient level of water, reduce water pollution, improve aquatic biodiversity in last five years?

#### **Outcome of capacity building and awareness programmes**

Q1. Have you participated in workshops/training events? If yes, what type of workshops/trainings have you attended?

Q2. How will you describe the participation rate of villagers? (Poor, good, bad)

Q3. Have these workshops helped increase awareness on conservation of reserves/wetlands?

Q4. Have these workshops helped in improving livelihoods of local communities?

#### **Socio-economic outcomes of the schemes**

Q1. How will you describe employment rate and education level of the village in the last five years? (Poor, good, bad)

Q2. Is there improvement in overall livelihood of local communities in the last five years?

#### **Any instances of adverse impact on co-existing species (flora and fauna)**

Q1. Have there been any instances of adverse impacts of the schemes? (for e.g. impact on co-existing species)



## **EQUITY**

**EQ1 Does the scheme provide for any targeted action for the benefit of vulnerable, marginalized, disadvantaged or weaker section of society? Does it have any significant impact in reducing inequity?**

**Policies defined for vulnerable/tribal section of local population. Demographics of local communities' subject to development benefits. State-wise/district -wise distribution of ecological resources and local communities**

Q1. How will you describe the employment rate and education level vulnerable/weak/marginalized section of local communities in last five years? (Poor, good, bad)

Q2. How will you describe participation rate in training event/workshops of vulnerable/weak/marginalized section of local communities in last five years?

**EQ2 Is any weaker section of society excluded / accorded lower priority (whether intentionally or unintentionally) compared to the rest of the population from enjoying scheme benefits? If so, what modifications are necessary to scheme design or implementation?**

**Social biases leading to exclusion of groups from scheme activities at reserve/wetland sites.**

Q1. Are there instances where any group of people have been constrained from participating in scheme activities/ training events/distribution of benefits?

## **SECTION 2: CROSS SECTIONAL THEMES**

### **Accountability & Transparency**

#### **Monitoring**

Q1. What are the challenges in submission of Utilization Reports on time?

#### **Citizen Accountability**

Q1. Is there a grievance redressal mechanism for addressing concerns regarding scheme implementation?

#### **Financial Accountability**

Q1. Are you aware of any financial discrepancies in scheme implementation?

### **Direct/Indirect Employment Generation**

#### **Improvement in income levels**

Q1. What is the approximate improvement in income levels as a result of the scheme?

#### **Availability of job opportunities**

Q1. What is the level of employment generation through scheme?

#### **Women participation in scheme**

Q1. Are there any scheme activities where women participation can be improved? Please explain.



## **Gender mainstreaming**

### **Inclusiveness in scheme design/planning**

Q1. Are there any scheme activities where women participation can be improved? Please explain.

## **Climate change & sustainability including adoption of climate-change resilient practices & diversifications**

### **Awareness, capacity building**

Q1. Are there any training sessions held regularly for reducing pollution, adopting green practices, using local materials etc.?

Q2. Are you aware of climate risks and possible individual mitigation /adaptation measures?

## **Role of Tribal Sub-Plan (TSP) and Scheduled Caste Sub-Plan component of the scheme in mainstreaming of Tribal and Scheduled Caste population**

### **Inclusion of vulnerable groups in scheme and sector**

Q1. Are there instances where any group of people have been constrained from participating in scheme activities/ training events/distribution of benefits?

## **Stakeholder and Beneficiary behavioural change**

### **Challenges for behavioural change**

Q1. What are the major challenges? Are there any areas which needs more attention in terms of bringing behaviour change?

Q2. What could be the possible measures/actions could be taken against challenges faced?

## **Unlocking Synergies with other Government Program**

### **Convergence**

1. Have you faced any challenges in implementing activities under the BR/NPCA scheme due to overlap with other schemes?

2. If yes, what measures were taken to avoid overlap in implementation?

## **Reforms, Regulations**

### **Adoption and challenges**

Q1. What are the challenges faced in effective implementation of the relevant acts/rules/regulations? How can these be overcome?

## **Impact on and role of private sector, community and civil society in the scheme**

### **Participation of private sector, public-private partnerships**



Q1. What are the challenges faced in attracting private sector participation?

### **Public-Private Partnership**

Q1. How can the challenges faced by private sector in participation in the sector be reduced?

### **SECTION 3: CHALLENGES AND SUGGESTIONS**

1. Broadly, what are the main challenges/ limitations that you see in this scheme from a design point of view?
2. What are some of the suggestions and corrective measures that you would like to point out in order to improve this scheme so that it can meet its objectives in a more effective manner?
  - Short term
  - Medium term
  - Long terms

*Thank you for your time and valuable insights. Is there anything else that you would like to add or point out to, in addition to the questions we have asked?*

**THANK AND END**



# Annexure 18 Household Survey Questionnaires

## Accelerated Irrigation Benefit Programme

### Screening and consent:

My Name is .....from Ipsos Public Affairs, a research company. We regularly do research to understand people’s perception and attitudes that can shape development programmes and policies. Currently we are conducting a study on behalf of NITI Aayog on different programmes and schemes. We are talking to different people across India to understand their life at home and work/occupation, and their community at large.

If you choose to participate, we assure that we will handle information provided by you carefully. The complete data base including your name and phone number will be shared with NITI Aayog. There is limited risk in this survey. You will also not get any direct benefit by participating in this survey, however, your participation will be useful for the research study.

Further participating in this survey will be your voluntary choice. You may decline from answering any question and may also ask question.

We also want to mention that your participation is important for us and your responses will be valuable for us.

A1. Do you have any questions?

1. Yes
2. No

A2. Do you consent to participate?

1. Yes
2. No- [If No, Thanks and Terminate](#)

A3. For quality check purpose, we would like to record this interview with your permission? Do you consent to record the interview?

1. Yes
2. No

### IDENTIFICATION:

No.	Question	Response
I1	Name of the state	<a href="#">Dropdown will be provided</a>
I1A	Name of the Project	<a href="#">Dropdown linked to state will be provided</a>
I1B	Name of the scheme	<a href="#">Drop down of schemes mapped with selection of state</a>
I2	Name of the District	<a href="#">Dropdown linked to state will be provided</a>
I3	Name of Panchayat	<a href="#">Dropdown linked District will be provided</a>
I4	Name of the Village	<a href="#">Dropdown linked to Panchayat will be provided</a>
I5	Landmark and address of the household	
I6	Name of the respondent	



**Module: A Household member details**

1. Enter gender by observation

- Male 1
- Female 2

2. Can you please tell me your age?

Response.....

3. How many family members are currently staying in this household?

[Number of members staying and eating in this household continuously for last 6 months]

- Number of household members below 5 years [Specify]
- Number of household members above 5 years [Specify]

[

4. What is the caste/ tribe of the HH?

- Caste 1
- Tribe 2
- No Caste/ Tribe 3
- Don't know 4

5. Is this a scheduled caste, a scheduled tribe, other backward class or none of them? *If Q4=1/2*

- Scheduled Tribes 1
- Scheduled Castes 2
- Other Backward Classes 3
- None of them 4
- Don't know 9

6. I would like to know about the details of household members. Let us start from the eldest member of the household in descending order. I will ask about their personal, educational and occupation details?

	<b>D1</b>	<b>D2</b>	<b>D3</b>	<b>D4</b>	<b>D5</b>	<b>D6</b>	<b>D7</b>	<b>D8</b>	<b>D9</b>
--	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------



Index No.	Name of household members (WRITE SHORT NAME)	Residential status Resident... 1 Non-resident...2	Gender Male..... 1 Female....2	Age in completed years  (CODE "00" IF LESS THAN 12 MONTHS)	Marital status <b>Do not ask if age below 15 years</b> Currently Married.1 Widow / Widower.2 Divorced..... .....3 Separated..... .... 4 Never married....5 Not Stated.....6 [If applicable]	Education attainment <b>(Do not ask if age below 5 years)</b>  1. Illiterate 2. Primary 3. Upper primary (6/7 standard) 4. Secondary (9/10 standard) 5. Senior secondary (11 <sup>th</sup> and 12 <sup>th</sup> Standard/diploma/ITI) 6. Graduation and above	If children between 3 to 6 years whether going to Anganwadi <b>(Ask if age of the member is between 3 to 6)</b>  If children between 6 to 15 years whether going to school <b>(Ask if age of the member is between 6 to 15)</b>	Main occupation  (On the basis of time spent)  (Refer codes)	Is there any disability?  (Options: Physical/mental/No)
01									
02									

**Codes for Occupation (D8)**

Agriculture	1		Manufacturing, industrial (owner)	11
Collection of forest products	2		Unpaid family worker	12
Wage labour	3		Retired and earning pension	13
Contractual worker	4		Homemaker.	14
Rickshaw puller/auto driver/driver	5		Student .	15
Salaried employee in government or PSU	6		Social work	16
Salaried employee in private	7		Unemployed	17
Self-employed professional	8		Child below 6 years	18
Self-employed worker (home based worker)	9		None	19
Retail / wholesale business	10		Other (specify	99

7. If anyone between 6 to 15 years not going to school, ask why the child is not going to school? IF D4= 6 to 15 and D7 =NO

Could not afford education expenses	1
Required for work in household activities/family business	2



Further education not considered necessary	3
Required for outside work	4
Not interested in studies / Repeated failures	5
Child got ill	6
School is too far away	7
Got married	8
Discrimination with child in the school by students / teachers	9
There is no separate toilet facility for girls	10
No toilet facility in the school	11
Never Enrolled	12
Other (specify)	99

8. Can you please let us know the ownership of household?

Owns the dwelling	1
Rents the dwelling	2
Uses without paying rent	3
No dwelling	4

9. Can you please tell me what is the primary source of fuel for cooking in last 30 days for your household?

Firewood	1
Cow dung cake/Crop Residue	2
Coal/Lignite/Charcoal	3
Kerosene	4
LPG/PNG	5
Electricity	6
Bio-gas	7
Solar	8
Any other	Specify
No Cooking	0

10. Usually on any day how many hours do you usually go without electricity?

No cuts	1
Less than one hour	2
1-4 hours	3
4-8 hours	4
8-12 hours	5
More than 12 hours	6
No Access	7

11. Do you have own mobile phone?

Yes	1
No	2

12. Do you have access to internet?

Yes, by telephone or mobile device	1
Yes, Broadband Wi-Fi at home	2
Yes, at a location just outside my home	3
Yes, other connection at home	4
No access to internet	5



13. Could you please let us know whether you have access to following financial services? [Multiple response]

Bank Account	1
Loans from Bank/Financial Institutions	2
Savings/deposit	3
Digital payment (Debit Card, Credit, UPI, Net banking)	4
Health insurance	5
Life insurance	6
Agricultural insurance	7
None of the above	8
Other	[specify]

14. Has anybody in your household migrated out of this village to other city in last 3 years?

Responses	Male	Female	Age	Reasons for migration
Yes				Drop down list of reasons- [Select most appropriate]
				1. Livelihood/income
				2. Education
				3. Conflict
				4. Marriage
				5. Others
No				

15. What kind of toilet facility do members of your household usually use?

Flush to piped sewer system	1
Flush to septic tank	2
Flush to pit latrine	3
Flush to somewhere else	4
Flush, don't know where	5
Ventilated improved	6
Pit (vip)/biogas latrine	7
Pit latrine with slab	8
Pit latrine without slab/	9
Open pit	10
Twin pit/composting toilet	11
Dry toilet	12
No facility/uses open space or field	13
Other	[Specify]

16. What type of drainage system connected to your household?

Open Kutcha	1
Open Pucca	2
Covered Pucca	3
Underground	4
No drainage	5



17. What is the **main source** of drinking water for members of your household? [SINGLE CODE]

- Piped water into Dwelling 1
- Piped water to yard/compound 2
- Public tap/stand pipe 3
- Tube well/Bore well 4
- Protected Dug well 5
- Unprotected Dug well 6
- Protected Spring 7
- Unprotected Spring 8
- Rain water 9
- Tanker truck 10
- Cart with Small Tank 11
- Surface Water 12
- (River/Dam/Lake/pond/Canal/Irrigation)
- Bottled water 13
- Community RO plant 14
- Other [Specify]

S1. Can you please tell me the reason for using the drinking water from [source in Q17]? [Capture spontaneously then probe] [Multiple options possible]

- |                   | Spontaneous [Do not read options] | Probe [Read options] |
|-------------------|-----------------------------------|----------------------|
| Easily available  | 1                                 | 1                    |
| Water is clean    | 2                                 | 2                    |
| Water tastes good | 3                                 | 3                    |
| Other             | [specify]                         |                      |
| None of the above | 4                                 | 4                    |

S2. Is the water collected from the [Main source in Q17] sufficient for daily needs?

- Yes, always sufficient 3
- Sometimes not sufficient 2
- Insufficient 1
- Don't know 98

S3. In the last month, for how many days was drinking water from [Main source] unavailable when needed?

- Number of days [ALLOW 0 to 30]
- Don't know

S4. Where is the [MAIN WATER SOURCE (IN Q17)] located? [IF MAINWATER SOURCE IS PIPE WATER INTO DWELLING ALLOW ONLY Option 1 AND IF PIPE WATER INTO YARD/COMPOUND ALLOW ONLY Option 2]

- In this dwelling 1
- In own Yard/plot 2
- Delivered to dwelling 3
- About 100 meters 4
- More than 100 meters, less than 300 meters 5
- More than 300 meters, less than 500 meters 6
- More than 500 meters 7
- Don't know 98

18. Who usually goes to the [main source in Q17] to fetch water for your household?



Adult woman	1
Adult man	2
Female Child (Under 15 years)	3
Male Child (Under 15 years)	4
Other	[Specify]
I don't know who goes to fetch water in my house	5

19. How long does it take to go to the [Main water Source in Q17], get water and come back in one trip?  
Time taken in Minutes

Delivered to Dwelling	00
On the premises	97
Don't know	98

### Health:

#### Now we would like to discuss about the health of family members

S18. Did you or anyone above 5 years in your household suffer from the following in last 1 year? [IF CHILDREN BELOW 5 YEARS IN HOUSE Check QD4] [Multiple option 1 to 5]

	In last 1 year
Diarrhoea	1
Jaundice	2
Cholera	3
Typhoid	4
Malaria	5
Don't remember	98

S19. Did any child below 5 years in your household suffer from the following in last 1 year? [IF CHILDREN BELOW 5 YEARS IN HOUSE Check Qd4] [Multiple response 1 to 5 ]

	In last 1 year
Diarrhoea	1
Jaundice	2
Cholera	3
Typhoid	4
Malaria	5
Don't remember	98

20. What is the birth location of [youngest child (Check QD4)] in your household? [Readout options]

At marital or maternal home alone/with family	1
At home with Skilled Birth Attendant	2
At the nearest PHC	3
At the CHC/District hospital	4
At a private hospital	5
Other	[Specify]



21. Can you please tell me approximate amount spent on health including medicines, tests and treatment for household members in last one year?

Amount in Rupees	[Allow entry]
No-one fell ill	1
Don't know	98

22. [IF Provided the amount spent IN Q21] Could you please tell me the source of money? [Read options]

[Multiple option possible]

Own saving	1
Relatives/friends	2
Loan from money lender	3
Loan from Bank	4
Insurance	5
Other	[Specify]

[

**Module B: Agricultural Practices**

23. Do you own any agricultural land?

Own land	1
Taken on lease	2
Working on other's land	3

24. What is the size of total agricultural land that you own? [If 23=1/2] [Allow Decimal]

..... Acre

25. What is the total area of agricultural land that you use for cultivation in last three crop cycle? [Should be less than or equal to Q24] [If 23=1/2] [Allow Decimal]

..... Acre

S5. Usually what is your system of farming in your existing land holding?

Mono cropping	1
Multiple cropping	2
Integrated/diversified farming system (Combination of crop, livestock, and fish production)	3

S8. [If S5=1] are you willing to change the cropping pattern?

Yes	1
No	2

[



S9. [If S8=2] can you please tell me reason for not willing to change cropping pattern?

Reasons	Spontaneous [Do not read options]	Probe [Read options]
This is profitable	1	1
Water is not available throughout year	2	2
Lack knowledge about other cropping patter	3	3
Lack input/resources for crop rotation	4	4
Other	[Specify]	
None of the above	5	

26. Usually in one annual cycle, for how many months are you engaged in agriculture/ farm related activities?

Through-out the year	12
Number of months (if not whole year)	.....

27. Prior to AIBP project, how many months in a year, were you involved in agricultural activities?

Throughout the years (all 12 months)	
If not throughout the year, mention number of year	[Allow Numeric 1 to 11]

28. I will readout different activities undertaken in the farm. Can you please tell me which are the activities undertaken by male and which all activities by female?

Activities	Predominantly by Male	Predominately by Female	Both participate equally
Ploughing	1	1	1
Sowing	2	2	2
Irrigating	3	3	3
Transplanting	4	4	4
Weeding	5	5	5

### Module C: Work/activities undertaken under AIBP

29. Has your farm land been acquired for project under Accelerated Irrigation Benefits Programme?

Yes	1
No	2

30. [Is yes (if Q29=1)] have you received compensation for your land?

Yes	1
No	2

31. [If yes(IF q30=1)] Was the compensation received adequate?

Yes	1
No	2

32. [If yes (if Q30=1)] Have you received the compensation on time?

Yes, received immediately	1
Yes, received with-in few months (less than 6 months)	2
Received within 6 months to 1 year	3
Delayed beyond a year	4

[



33. Can you please tell me how satisfied are you with the following facilities available in the rehabilitation and resettlement villages?

	Not available	Satisfied	Available	
			Not so satisfied	Not at all satisfied
Drinking water	1	2	3	4
Road	1	2	3	4
Health care facility	1	2	3	4
Sanitation	1	2	3	4

34. Are you using any micro irrigation infrastructure?

Drips	1
Sprinklers	2
None	3

35. Are you receiving water for agriculture from the project under AIBP?

Yes	1
No	2

36. If no (If Q35=2), can you tell me what is the current source of water for agriculture?

Surface water [River/stream]	1
Surface water [Farm Pond]	2
Ground water	3
Rain water	4
Other	[Specify]

37. If yes (If Q35=1), are you using any alternate source of water for agriculture in addition to water from project?

Surface water [River/stream]	1
Surface water [Farm Pond]	2
Ground water	3
Rain water	4
Other	[Specify]
Not using any alternative water source	5

S10. Can you please tell me the reason for using the water for irrigation from [source(in Q36/37)]? **DO NOT ASK IF Q37= NONE OF THE ABOVE** [Capture spontaneously then probe] [Multiple options possible]

	Spontaneous [Do not read options]	Probe [Read options]
Easily available	1	1
Available throughout the year	2	2
AIBP Water source is not reliable		
Other	[specify]	
None of the above	3	

S11. Are you currently using or have you ever used treated or untreated waste water for irrigation?

Yes	1
No	2

S12. If government makes it mandatory to use treated waste water, will you be willing to use the same?

Yes	1
No	2



S13. [If no(If S11=1 and S12=2),] Have you faced any challenges while using the same?

Water smells	1
Fear of losing crops	2
Hampering crop production	3
Difficult to manage	4
Other	[Specify]

38. Are you using the irrigated water for any of the following purpose?

For livestock	1
Domestic purpose (washing/cleaning)	2
Sanitation purpose (bathing/handwashing)	3
Drinking	4
None of the above	5

39. Are you involved or your HH member(s) involved in construction work in the project under AIBP? (If Q35=1),?

Yes	1
No	2

40. Was any women member of your HH involved in construction work in the project under AIBP? (If Q39=1)

Yes	1
No	2

41. If women participated in construction,(If Q40=1) [For self (Q1=2)]: Have you received equal pay for work as men? [If male responded that female working (Q1=2)]: Do female receive equal payment as men?

Yes	1
No	2

## Module D: Water Users Association

### मॉड्यूल D: जल उपयोगकर्ता संघ

42. Is there any registered Water User Association (WUA) in your command area?

Yes	1
No	2
Don't know	98

43. Are you a member of the registered WUA in your command area(If Q42=1),?

Yes	1
No	2

44. Are there women members in WUA group? [Ask to male farmers(If QA1=1),]

Yes	1
No	2

45. Can you please tell me what are the activities in which women participate actively? (IfQ42=1 and Q44=1)

Spontaneous

Probe



Participation in meeting	1	1
Participation in training	2	2
Operation and maintenance	3	3
Collection of water fees	4	4
Water distribution management	5	5
Conflict resolution	6	6

### Module E: Fees for water

46. Do you pay any water taxes for agriculture?

Yes	1
No	2

47. If yes (If Q46=1), how frequently do you pay? Do you pay [read options]

Monthly	1
Quarterly	2
Bi yearly	3
Yearly	4

48. How much do you pay [take from previous question Q47]?

In Rupees [Numeric]

49. Is the current tax amount fair? Q46=1

Yes, fair	1
No, more	2

50. Will you be willing to pay additional fees for better and reliable water supply for agriculture?

Yes  
No

**S14.** Are you paying currently for drinking water?

Yes	1
No	2

S15. If yes (If S14=1), how frequently are you paying?

Monthly	1
Quarterly	2
Bi yearly	3
Yearly	4

S16. How much are you paying [take response from previous question S15]

In Rupees

S17. If there is increase in fees, under what condition will you be ready to pay more for drinking water?

[Multiple option]

If water will be available through-out the year	1
If there is improvement in quantity of water	2
If there is improvement in quality of water	3
If water is easily accessible with piped water supply near the house	4



If water is easily accessible with household tap connection	5
Other	[Specify]
Do want to pay at all	10

### Module G: Efficiency and Impact of AIBP scheme

51. Has there been any change in access to water due to project under AIBP?

Yes, Increased	1
Remain same	2
Decreased	3
Don't know	98

52. What are the benefits in agriculture as a result of AIBP? [Capture spontaneously than probe]

Benefit	Spontaneous [Do not read option]	Probe [Read option]
Increase in irrigated land	1	1
Able to do multiple crops [Do not appear if S5=1]	2	2
Increase in crop yield	3	3
Increase in number of crops (improved crop intensity)	4	4
Covering more areas with same quantity of water (Improved water intensity)	5	5
Improved land productivity	6	6
Other	[Specify]	[Specify]
None	7	

53. [If increase in irrigated land (If Q52=1),] Can you please tell me the land covered under irrigation in your farm before and after the project under AIBP scheme (in acres)?

Before (in acres)	Now (in acres)
-------------------	----------------

54. [If increase in crop intensity (If Q52=4),] Can you please tell me the average number of crops cultivated annually on your land before the project under AIBP scheme and now?

Before	Now
--------	-----

Number of crops in a year

S6. What are the different crops you harvested from your land in last one year? What are the primary crops / secondary crops you grow?

Crop	Primary Crop First code primary crop	Secondary Crop For this, only those not mentioned in primary crops should appear	New crop added in last 3 years Show all list
Vegetables	1	1	1



Paddy	2	2	2
Maize	3	3	3
Bajra	4	4	4
Ragi	5	5	5
Soya bean	6	6	6
Groundnut	7	7	7
Cotton	8	8	8
Wheat	9	9	9
Mustard	10	10	10
Grams (Red gram, black gram, green gram, Channah etc)	11	11	11
Lentil	12	12	12
Fruits	13	13	13
Flowers	14	14	14
Sugarcane	15	15	15
Soya	16	16	16
Other	[Specify]	[Specify]	[Specify]

S7. [Farmers growing water intensive crops like paddy, cotton, sugar cane, soya, wheat in S6 as primary or secondary crop] Can you please tell me the reason for growing [crops]?

Reasons	Spontaneous	Probe
Profitable	1	1
Demand is more	2	2
There is no scarcity of water	3	3
Lack knowledge to grow other crops	4	4
This is a traditional practice	5	5
Other	[Specify]	[Specify]

55. Has there been any changes in ground water due to AIBP activities?

Yes, Increased	1
Remain same	2
Decreased	3
Don't know	98

56. Has there been any changes in your involvement in agricultural activities due to AIBP activities?

Engagement increased	1
Engagement Decreased	2
No change	3
Don't know	98

57. I will read out the options, please let us know if there is any increase, decrease or no change in your household due to project under AIBP scheme?

	Increase	No change/remain same	Decrease	Don't know
Income				
Education				
Expenditure in agriculture				
New employment opportunities in the village				



Credit facility  
Instances of migration for  
work/livelihood  
Incidence of water-borne diseases

**MOBILE: Can you please tell me your mobile number?**

Mobile number of the respondent

Refused

\*\*\*Thank you for your time\*\*\*

**Questionnaire: Command Area Development - Har Khet Ko Pani**

**Screening and consent:**

My Name is .....from Ipsos Public Affairs, a research company. We regularly do research to understand people’s perception and attitudes that can shape development programmes and policies. Currently we are conducting a study on behalf of NITI Aayog on different programmes and schemes. We are talking to different people across India to understand their life at home and work/occupation, and their community at large.

If you choose to participate, we assure that we will handle information provided by you carefully. The complete data base including your name and phone number will be shared with NITI Aayog. There is limited risk in this survey. You will also not get any direct benefit by participating in this survey, however, your participation will be useful for the research study.

Further participating in this survey will be your voluntary choice. You may decline from answering any question and may also ask question.



We also want to mention that your participation is important for us and your responses will be valuable for us.

A1. Do you have any questions?

- 3. Yes
- 4. No

A2. Do you consent to participate?

- 3. Yes
- 4. No- [If No, Thanks and Terminate](#)

A3. For quality check purpose, we would like to record this interview with your permission? Do you consent to record the interview?

- 3. Yes
- 4. No

**IDENTIFICATION:**

No.	Question	Response
I1	Name of the state	<a href="#">Dropdown will be provided</a>
I1A	Name of the Project	<a href="#">Dropdown linked to state will be provided</a>
I1B	Name of the scheme	<a href="#">Drop down of schemes mapped with selection of state</a>
I2	Name of the District	<a href="#">Dropdown linked to state will be provided</a>
I3	Name of Panchayat	<a href="#">Dropdown linked District will be provided</a>
I4	Name of the Village	<a href="#">Dropdown linked to Panchayat will be provided</a>
I5	Landmark and address of the household	
I6	Name of the respondent	

**Module: A Household member details**

1. Enter gender by observation

- Male 1
- Female 2

2. Can you please tell me your age?

Response.....

3. How many family members are currently staying in this household?

[Number of members staying and eating in this household continuously for last 6 months]

Number of household members below 5 years [Specify]



Number of household members above 5 years [Specify]

4. What is the caste/ tribe of the HH?

- Caste 1
- Tribe 2
- No Caste/ Tribe 3
- Don't know 4

5. Is this a scheduled caste, a scheduled tribe, other backward class or none of them? *If Q4=1/2*

- Scheduled Tribes 1
- Scheduled Castes 2
- Other Backward Classes 3
- None of them 4
- Don't know 9

6. I would like to know about the details of household members. Let us start from the eldest member of the household in descending order. I will ask about their personal, educational and occupation details?

	D1	D2	D3	D4	D5	D6	D7	D8	D9
<b>Index No.</b>	<b>Name of household members (WRITE SHORT NAME)</b>	<b>Residential status</b> Resident... 1 Non-resident...2	<b>Gender</b> Male..... 1 Female....2	<b>Age in completed years</b>  (CODE "00" IF LESS THAN 12 MONTHS)	<b>Marital status</b> <b>Do not ask if age below 15 years</b> Currently Married.1 Widow / Widower.2 Divorced..... 3 Separated..... 4 Never married....5 Not Stated.....6 [If applicable]	<b>Education attainment</b> <b>(Do not ask if age below 5 years)</b> 7. Illiterate 8. Primary 9. Upper primary (6/7 standard 10. Secondary (9/10 standard) 11. Senior secondary (11 <sup>th</sup> and 12 <sup>th</sup> Standard/diploma/ITI)	<b>If children between 3 to 6 years whether going to Anganwadi</b> <b>(Ask if age of the member is between 3 to 6)</b> <b>If children between 6 to 15 years whether going to school</b> <b>(Ask if age of the member is</b>	<b>Main occupation</b>  (On the basis of time spent)  (Refer codes	<b>Is there any disability?</b>  (Options: Physical/mental/None)



						12. Graduation and above	between 6 to 15)		
01									
02									
<b>Codes for Occupation (D8)</b>									
Agriculture		1		Manufacturing, industrial (owner				11	
Collection of forest products		2		Unpaid family worker				12	
Wage labour		3		Retired and earning pension				13	
Contractual worker		4		Homemaker.				14	
Rickshaw puller/auto driver/driver		5		Student .				15	
Salaried employee in government or PSU		6		Social work				16	
Salaried employee in private		7		Unemployed				17	
Self-employed professional		8		Child below 6 years				18	
Self-employed worker (home based worker		9		None				19	
Retail / wholesale business		10		Other (specify				99	

7. If anyone between 6 to 15 years not going to school, ask why the child is not going to school? IF D4= 6 to 15 and D7 =NO

Could not afford education expenses	1
Required for work in household activities/family business	2
Further education not considered necessary	3
Required for outside work	4
Not interested in studies / Repeated failures	5
Child got ill	6
School is too far away	7
Got married	8
Discrimination with child in the school by students / teachers	9
There is no separate toilet facility for girls	10
No toilet facility in the school	11
Never Enrolled	12
Other (specify)	99

8. Can you please let us know the ownership of household?

Owns the dwelling	1
Rents the dwelling	2
Uses without paying rent	3
No dwelling	4

9. Can you please tell me what is the primary source of fuel for cooking in last 30 days for your household?

Firewood	1
Cow dung cake/Crop Residue	2



Coal/Lignite/Charcoal	3
Kerosene	4
LPG/PNG	5
Electricity	6
Bio-gas	7
Solar	8
Any other	Specify
No Cooking	0

10. Usually on any day how many hours do you usually go without electricity?

No cuts	1
Less than one hour	2
1-4 hours	3
4-8 hours	4
8-12 hours	5
More than 12 hours	6
No Access	7

11. Do you have own mobile phone?

Yes	1
No	2

12. Do you have access to internet?

Yes, by telephone or mobile device	1
Yes, Broadband Wi-Fi at home	2
Yes, at a location just outside my home	3
Yes, other connection at home	4
No access to internet	5

13. Could you please let us know whether you have access to following financial services? [Multiple response]

Bank Account	1
Loans from Bank/Financial Institutions	2
Savings/deposit	3
Digital payment (Debit Card, Credit, UPI, Net banking)	4
Health insurance	5
Life insurance	6
Agricultural insurance	7
None of the above	8
Other	[specify]

14. Has anybody in your household migrated out of this village to other city in last 3 years?

Responses	Male	Female	Age	Reasons for migration
Yes				Drop down list of reasons- [Select most appropriate]
				6. Livelihood/income
				7. Education
				8. Conflict
				9. Marriage
				10. Others



No

15. What kind of toilet facility do members of your household usually use?

Flush to piped sewer system	1
Flush to septic tank	2
Flush to pit latrine	3
Flush to somewhere else	4
Flush, don't know where	5
Ventilated improved	6
Pit (vip)/biogas latrine	7
Pit latrine with slab	8
Pit latrine without slab/	9
Open pit	10
Twin pit/composting toilet	11
Dry toilet	12
No facility/uses open space or field	13
Other	[Specify]

16. What type of drainage system connected to your household?

Open Kutcha	1
Open Pucca	2
Covered Pucca	3
Underground	4
No drainage	5

17. What is the **main source** of drinking water for members of your household? [SINGLE CODE]

Piped water into Dwelling	1
Piped water to yard/compound	2
Public tap/stand pipe	3
Tube well/Bore well	4
Protected Dug well	5
Unprotected Dug well	6
Protected Spring	7
Unprotected Spring	8
Rain water	9
Tanker truck	10
Cart with Small Tank	11
Surface Water (River/Dam/Lake/pond/Canal/Irrigation)	12
Bottled water	13
Community RO plant	14
Other	[Specify]

S1. Can you please tell me the reason for using the drinking water from [source in Q17]? [Capture spontaneously then probe] [Multiple options possible]



	Spontaneous [Do not read options]	Probe [Read options]
Easily available	1	1
Water is clean	2	2
Water tastes good	3	3
Other	[specify]	
None of the above	4	4

S2. Is the water collected from the [Main source in Q17] sufficient for daily needs?

Yes, always sufficient	3
Sometimes not sufficient	2
Insufficient	1
Don't know	98

S3. In the last month, for how many days was drinking water from [Main source] unavailable when needed?

Number of days	[ALLOW 0 to 30]
Don't know	

S4. Where is the [MAIN WATER SOURCE (IN Q17)] located? [IF MAINWATER SOURCE IS PIPE WATER INTO DWELLING ALLOW ONLY Option 1 AND IF PIPE WATER INTO YARD/COMPOUND ALLOW ONLY Option 2]

In this dwelling	1
In own Yard/plot	2
Delivered to dwelling	3
About 100 meters	4
More than 100 meters, less than 300 meters	5
More than 300 meters, less than 500 meters	6
More than 500 meters	7
Don't know	98

18. Who usually goes to the [main source in Q17] to fetch water for your household?

Adult woman	1
Adult man	2
Female Child (Under 15 years)	3
Male Child (Under 15 years)	4
Other	[Specify]
I don't know who goes to fetch water in my house	5

19. How long does it take to go to the [Main water Source in Q17], get water and come back in one trip?

Time taken in Minutes	
Delivered to Dwelling	00
On the premises	97
Don't know	98

### Health:



**Now we would like to discuss about the health of family members**

S18. Did you or anyone above 5 years in your household suffer from the following in last 1 year? [IF CHILDREN BELOW 5 YEARS IN HOUSE Check QD4] [Multiple option 1 to 5]

	In last 1 year
Diarrhoea	1
Jaundice	2
Cholera	3
Typhoid	4
Malaria	5
Don't remember	98

S19. Did any child below 5 years in your household suffer from the following in last 1 year? [IF CHILDREN BELOW 5 YEARS IN HOUSE Check Qd4] [Multiple response 1 to 5 ]

	In last 1 year
Diarrhoea	1
Jaundice	2
Cholera	3
Typhoid	4
Malaria	5
Don't remember	98

20. What is the birth location of [youngest child (Check QD4)] in your household? [Readout options]

At marital or maternal home alone/with family	1
At home with Skilled Birth Attendant	2
At the nearest PHC	3
At the CHC/District hospital	4
At a private hospital	5
Other	[Specify]

21. Can you please tell me approximate amount spent on health including medicines, tests and treatment for household members in last one year?

Amount in Rupees	[Allow entry]
No-one fell ill	1
Don't know	98

22. [IF Provided the amount spent IN Q21] Could you please tell me the source of money? [Read options] [Multiple option possible]

Own saving	1
Relatives/friends	2
Loan from money lender	3
Loan from Bank	4
Insurance	5
Other	[Specify]

**Module B: Agricultural Practices**

23. Do you own any agricultural land?



Own land	1
Taken on lease	2
Working on other's land	3

24. What is the size of total agricultural land that you own? [IF Q23=1/2] [Allow decimal]  
 ..... Acre

25. What is the total area of agricultural land that you use for cultivation in last three crop cycle? [Should be less than or equal to Q24] [If 23=1/2] [Allow Decimal]  
 ..... Acre

26. Usually in one annual cycle, for how many months are you engaged in agriculture/ farm related activities?

Through-out the year 12  
 Number of months (if not whole year) .....

27. Prior to command area development activities, how many months in a year, were you involved in agricultural activities?

Throughout the years (all 12 months) 12  
 If not throughout the year, mention number of [Allow Numeric 1 to 11]  
 year

S5. Usually what is your system of farming in your existing land holding?

Mono cropping	1
Multiple cropping	2
Integrated/diversified farming system (Combination of crop, livestock, and fish production)	3

S8. [If S5=1] are you willing to change the cropping pattern?

Yes	1
No	2

S9. [If S8=2] can you please tell me reason for not willing to change cropping pattern?

Reasons	Spontaneous [Do not read options]	Probe [Read options]
This is profitable	1	1
Water is not available throughout year	2	2
Lack knowledge about other cropping patter	3	3
Lack input/resources for crop rotation	4	4
Other	[Specify]	[Specify]
None of the above	5	

28. What are the primary sources of water you use for agriculture?

Surface water (River/stream)	1
Surface water (farm pond)	2



Ground water (Open well)	3
Rain water	4
Other	[Specify]

S10. Can you please tell me the reason for using the water for agriculture/irrigation from **[source(in Q28)]?**  
 [Capture spontaneously then probe] [Multiple options possible]

	Spontaneous	Probe
Easily available	1	1
Available throughout the year	2	2
Other	[specify]	[specify]

### Module C: Activities under CAD

#### मॉड्यूल C: CAD के अंतर्गत गतिविधियाँ

29. What are the on-farm development (OFD) activities done at your farm land? [Allow Multiple Options]  
 [capture spontaneously then probe]

OFD activities	Spontaneous (Do not read options)	Probe (Read options)
Construction of Field Channels	1	1
Construction of Intermediate and link drains	2	2
Reclamation of waterlogged areas/ drainage	3	3
Renovation & desilting of existing tanks/ control structures	4	4
Enforcement of warabandi	5	5
Land levelling and shaping	6	6
Realignment of field boundaries/ consolidation of holdings	7	7
Strengthening of extension services/ correction of system deficiencies	8	8
Other activities	[Specify]	[Specify]
None of the above	9	

30. Can you please tell me if any activities have been undertaken for ground water improvement?

Yes	1
No	2
Don't know	98

31. Has the 'rotational supply of water' been followed? [Instruction: Rotational Water supply is the method of rotation of the order of crop watering based on timetable designed for equitable distribution of irrigation water]

Yes	1
No	2
Don't know	98

S11. Are you currently using or have you ever used treated or untreated waste water for irrigation?

Yes	1
No	2

S12. If government makes it mandatory to use treated waste water, will you be willing to use the same?

Yes	1
No	2



S13. [If no(If S11=1 and S12=2),] Have you faced any challenges while using the same? [Multiple response]

Water smells	1
Fear of losing crops	2
Hampering crop production	3
Difficult to manage	4
Other	[Specify]

32. Can you please tell me if any of the following corrective measures been taken for correction of system deficiency? [Readout options]

	Yes	No
Cleaning of channels by de-silting and weeding	1	2
Strengthening of banks in filling sections	1	2
Restoring bed gradients	1	2
Raising earthwork in embankments	1	2

### Module D: Training and Skills development

33. Have you attended any training in last 3 years?

Yes	1
No	2

34. Can you tell me when did you attend last training(If Q33=1)?

This year	1
About a year ago,	2
About 2-3 years ago,	3
About 4-5 years ago,	4

35. How many training have you attended in last three years? IF Q33=1, DO NOT ASK IF LAST ATTENDED TRAINING Q36=4

Number of training [Numeric]

36. Can you please tell me the topics covered in the training? [Multiple option possible] [Capture spontaneously then probe] IF Q33=1

	Spontaneous	Probe
Water management	1	1
Crop Management	2	2
Maintenance of irrigation system	3	3
Other	[specify]	[specify]
None of the above	4	

37. Who conducted training? [IF Q33=1]

Project Staff	1
Water and Land Management Institute	2
Other	[Specify]
Don't know	98



38. Has there been any change in trainings organized due since command area development activities started?	
Yes, Increased	1
Remain same	2
Decreased	3
Don't know	98

### Module E: Water Users Association

39. Is there any registered Water User Association (WUA) in your command area?	
Yes	1
No	2
Don't know	98

40. Are you a member of the registered WUA in your command area(If Q39=1),?	
Yes	1
No	2

41. Are you involved in water resource management activities?	
Yes	1
No	2

42. How is the involvement of large contractors influencing the functioning of WUAs? (If Q39=1)	
It is helping in better functioning of WUA	1
It is creating problem in functioning of WUA	2
No influence	3
Don't know	4

43. Are there women members in WUA group? IF Q39=1, [Ask to male farmers If QA1=1] AND FEMALE FARMERS IF Q40=2	
Yes	1
No	2

### Module F: Fees for water supply

44. Do you pay any fees to avail water supply for agriculture?	
Yes	1
No	2

45. How often do you pay fees(If Q44=1),? Is it [Read options]	
Monthly	1
Quarterly	2
Bi yearly	3
Yearly	4

46. How much do you pay [take response from previous question Q45]? In Rupees [Allow Numeric]	
--	--



47. Do you feel the fees paid by you currently is fair? [IF Q44=1]		
Yes, fair		1
No, more		2
48. Will you be willing to pay additional fees for better and reliable water supply?		
Yes		1
No		2
49. Have you paid your 10% share of the functional grant?		
Yes		1
No		2
Don't know		98
<b>S14.</b> Are you paying currently for drinking water?		
Yes		1
No		2
S15. If yes(If S14=1),, how frequently are you paying?		
Monthly		1
Quarterly		2
Bi yearly		3
Yearly		4
S16. How much are you paying [take response from previous question S15] In Rupees		
S17. If there is increase in fees, under what condition will you be ready to pay more for drinking water? [Multiple option]		
If water will be available through-out the year		1
If there is improvement in quantity of water		2
If there is improvement in quality of water		3
If water is easily accessible with piped water supply near the house		4
If water is easily accessible with household tap connection		5
Other	[Specify]	
Do want to pay at all		10

### Module G: Efficiency and Impact of CAD

I would like to know changes occurred due to development activities of command areas.

50. Is water available at the supply outlets throughout the year?		
Yes		1
No		2
51. Is there any controlling structure for regulating water flow?		
Yes		1



No	2
Don't know	98

52. Do you sometimes need to use pumps to lift water for agriculture in case of non-availability of water in field outlets?

Yes	1
No	2

53. What are the benefits in agriculture as a result of command area development activities? [Capture spontaneously than probe]

Benefit	Spontaneous [Do not read]	Probe [Read options]
Increase in irrigated land	1	1
Able to cultivate multiple crops	2	2
[Do not appear if S5=1]		
Increase in crop yield	3	3
Increase in number of crops (improved crop intensity)	4	4
Covering more areas with same quantity of water (Improved water intensity)	5	5
Improved land productivity	6	6
Other	[Specify]	[Specify]
None	7	

54. [If increase in irrigated land (If Q53=1),] Can you please tell me the land covered under irrigation before the development activities and now (in acres)?

Before (in acres)	Now (in acres)
-------------------	----------------

55. [If increase in crop intensity (If Q53=4),] Can you please tell me the average number of crops cultivated annually on your land before CAD activities and now?

Before	Now
--------	-----

Number of crops in a year

S6. What are the different crops you harvested from your land in last one year? What are the primary crops / secondary crops you grow?

Crop	Primary Crop First code primary crop	Secondary Crop For this, only those not mentioned in primary crops should appear	New crop added in last 3 years Show all list
Vegetables	1	1	1
Paddy	2	2	2
Maize	3	3	3
Bajra	4	4	4
Ragi	5	5	5
Soyabean	6	6	6



Groundnut	7	7	7
Cotton	8	8	8
Wheat	9	9	9
Mustard	10	10	10
Grams (Red gram, black gram, green gram, Channah etc)	11	11	11
Lentil	12	12	12
Fruits	13	13	13
Flowers	14	14	14
Sugarcane	15	15	15
Soya	16	16	16
Other	[Specify]	[Specify]	[Specify]

S7. [Farmers growing water intensive crops like paddy, cotton, sugar cane, soya, wheat in S6 either in primary or secondary] Can you please tell me the reason for growing [crops]?

Reasons	Spontaneous [Do not read options]	Probe [Read options]
Profitable	1	1
Demand is more	2	2
There is no scarcity of water [not to appear of sufficient water throughout year] IF Q50=1	3	3
Lack knowledge to grow other crops	4	4
This is a traditional practice	5	5
Other	[Specify]	[Specify]

56. Have you observed any changes in barrenness of land due to command area development work?

Yes, Increased	1
Remain same	2
Decreased	3
Don't know	98

57. Has there been any changes in water logging instances due to command area development work?

Yes, Increased	1
Remain same	2
Decreased	3
Don't know	98

58. Has there been any changes in your involvement in agricultural activities due to command area development activities?

Engagement increased	1
Engagement Decreased	2
No change	3
Don't know	98

59. Has there been any change in the ground water level in the command area?

Yes, Increased	1
Remain same	2
Decreased	3
Don't know	98



60. Has there been any change in availability of quality drinking water due to CAD activities?

Improved	1
Remain Same	2
Deteriorated	3
Don't know	98

61. Given the increased access to water as a result of CADWM scheme, is there any plan to switch to water-intensive crops like paddy, sugarcane, etc [If increased ground water level Q60=1 and If not doing paddy, Cotton, Soya, wheat and sugarcane currently in S6],

Yes	1
No	2

62. Given the increased access to water as a result of CADWM scheme, would you prefer to use privately owned ground water minor irrigation structures like tube wells, bore wells? IF Q60=1

Yes	1
No	2
May be	3

63. Has there been any change in your income due to command area development activities?

Yes, Increased	1
Remain same	2
Decreased	3
Don't know	98

64. I will read out the conditions, please let us know if there is any increase, decrease or no change due to command area development activities?

	Increase	No change/remain same	Decrease	Don't know
Household income of people in village				
Education				
General Health of people				
Expenditure in agriculture				
New employment opportunities in the village				
Instances of migration for work/livelihood				

Mobile: Can you please share your mobile number

.....

Refused

.....Thank you for your time.....



### **Questionnaire: Per Drop More Crop**

#### **Screening and consent:**

My Name is .....from Ipsos Public Affairs, a research company. We regularly do research to understand people's perception and attitudes that can shape development programmes and policies. Currently we are conducting a study on behalf of NITI Aayog on different programmes and schemes. We are talking to different people across India to understand their life at home and work/occupation, and their community at large.

If you choose to participate, we assure that we will handle information provided by you carefully. The complete data base including your name and phone number will be shared with NITI Aayog. There is limited risk in this survey. You will also not get any direct benefit by participating in this survey, however, your participation will be useful for the research study.

Further participating in this survey will be your voluntary choice. You may decline from answering any question and may also ask question.

We also want to mention that your participation is important for us and your responses will be valuable for us.

A1. Do you have any questions?

5. Yes

6. No

A2. Do you consent to participate?

5. Yes

6. No- [If No, Thanks and Terminate](#)

A3. For quality check purpose, we would like to record this interview with your permission? Do you consent to record the interview?

5. Yes

6. No

#### **IDENTIFICATION:**



No.	Question	Response
I1	Name of the state	Dropdown will be provided
I1A	Name of the Project	Dropdown linked to state will be provided
I1B	Name of the scheme	Drop down of schemes mapped with selection of state
I2	Name of the District	Dropdown linked to state will be provided
I3	Name of Panchayat	Dropdown linked District will be provided
I4	Name of the Village	Dropdown linked to Panchayat will be provided
I5	Landmark and address of the household	
I6	Name of the respondent	

### Module: A Household member details

1. Enter gender by observation

Male 1

Female 2

2. Can you please tell me your age?

Response.....

3. How many family members are currently staying in this household?

[Number of members staying and eating in this household continuously for last 6 months]

Number of household [Specify]

members below 5 years

Number of household [Specify]

members above 5 years

4. What is the caste/ tribe of the HH?

Caste 1

Tribe 2

No Caste/ Tribe 3

Don't know 4

5. Is this a scheduled caste, a scheduled tribe, other backward class or none of them? *If Q4=1/2*

Scheduled Tribes 1

Scheduled Castes 2

Other Backward Classes 3

None of them 4

Don't know 9

6. I would like to know about the details of household members. Let us start from the eldest member of the household in descending order. I will ask about their personal, educational and occupation details?



	D1	D2	D3	D4	D5	D6	D7	D8	D9
<b>Index No.</b>	<b>Name of household members (WRITE SHORT NAME)</b>	<b>Residential status</b> Resident... 1 Non-resident..2	<b>Gender</b> Male..... 1 Female....2	<b>Age in completed years</b>  (CODE "00" IF LESS THAN 12 MONTHS)	<b>Marital status</b> <b>Do not ask if age below 15 years</b> Currently Married.1 Widow / Widower.2 Divorced..... .....3 Separated..... .... 4 Never married....5 Not Stated.....6 [If applicable]	<b>Education attainment</b> <b>(Do not ask if age below 5 years)</b>  13. Illiterate e 14. Primary 15. Upper primary (6/7 standard 16. Secondary (9/10 standard) 17. Senior secondary (11 <sup>th</sup> and 12 <sup>th</sup> Standard/diploma/ITI) 18. Graduation and above	<b>If children between 3 to 6 years whether going to Anganwadi</b> <b>(Ask if age of the member is between 3 to 6)</b>  <b>If children between 6 to 15 years whether going to school</b> <b>(Ask if age of the member is between 6 to 15)</b>	<b>Main occupation</b>  (On the basis of time spent)  (Refer codes)	<b>Is there any disability?</b>  (Options: Physical/mental/No)
01									
02									
<b>Codes for Occupation (D8)</b>									
Agriculture				1		Manufacturing, industrial (owner		11	
Collection of forest products				2		Unpaid family worker		12	
Wage labour				3		Retired and earning pension		13	
Contractual worker				4		Homemaker.		14	
Rickshaw puller/auto driver/driver				5		Student .		15	
Salaried employee in government or PSU				6		Social work		16	
Salaried employee in private				7		Unemployed		17	
Self-employed professional				8		Child below 6 years		18	
Self-employed worker (home based worker				9		None		19	
Retail / wholesale business				10		Other (specify		99	

7. If anyone between 6 to 15 years not going to school, ask why the child is not going to school? IF D4= 6 to 15 and D7 =NO



Could not afford education expenses	1
Required for work in household activities/family business	2
Further education not considered necessary	3
Required for outside work	4
Not interested in studies / Repeated failures	5
Child got ill	6
School is too far away	7
Got married	8
Discrimination with child in the school by students / teachers	9
There is no separate toilet facility for girls	10
No toilet facility in the school	11
Never Enrolled	12
Other (specify)	99

8. Can you please let us know the ownership of household?

Owns the dwelling	1
Rents the dwelling	2
Uses without paying rent	3
No dwelling	4

9. Can you please tell me what is the primary source of fuel for cooking in last 30 days for your household?

Firewood	1
Cow dung cake/Crop Residue	2
Coal/Lignite/Charcoal	3
Kerosene	4
LPG/PNG	5
Electricity	6
Bio-gas	7
Solar	8
Any other	Specify
No Cooking	0

10. Usually on any day how many hours do you usually go without electricity?

No cuts	1
Less than one hour	2
1-4 hours	3
4-8 hours	4
8-12 hours	5
More than 12 hours	6
No Access	7

11. Do you have own mobile phone?

Yes	1
No	2

12. Do you have access to internet?

Yes, by telephone or mobile device	1
Yes, Broadband Wifi at home	2
Yes, at a location just outside my home	3



Yes, other connection at home	4
No access to internet	5

13. Could you please let us know whether you have access to following financial services? [Multiple response]

Bank Account	1
Loans from Bank/Financial Institutions	2
Savings/deposit	3
Digital payment (Debit Card, Credit, UPI, Net banking)	4
Health insurance	5
Life insurance	6
Agricultural insurance	7
None of the above	8
Other	[specify]

14. Has anybody in your household migrated out of this village to other city in last 3 years?

Responses	Male	Female	Age	Reasons for migration
Yes				Drop down list of reasons- [Select most appropriate]
				11. Livelihood/income
				12. Education
				13. Conflict
				14. Marriage
				15. Others
No				

15. What kind of toilet facility do members of your household usually use?

Flush to piped sewer system	1
Flush to septic tank	2
Flush to pit latrine	3
Flush to somewhere else	4
Flush, don't know where	5
Ventilated improved	6
Pit (vip)/biogas latrine	7
Pit latrine with slab	8
Pit latrine without slab/	9
Open pit	10
Twin pit/composting toilet	11
Dry toilet	12
No facility/uses open space or field	13
Other	[Specify]

16. What type of drainage system connected to your household?

Open Kutcha	1
Open Pucca	2
Covered Pucca	3
Underground	4



No drainage

5

17. What is the **main source** of drinking water for members of your household? [SINGLE CODE]

- Piped water into Dwelling 1
- Piped water to yard/compound 2
- Public tap/stand pipe 3
- Tube well/Bore well 4
- Protected Dug well 5
- Unprotected Dug well 6
- Protected Spring 7
- Unprotected Spring 8
- Rain water 9
- Tanker truck 10
- Cart with Small Tank 11
- Surface Water 12
- (River/Dam/Lake/pond/Canal/Irrigation)
- Bottled water 13
- Community RO plant 14
- Other [Specify]

S1. Can you please tell me the reason for using the drinking water from [source in Q17]? [Capture spontaneously then probe] [Multiple options possible]

	Spontaneous [Do not read options]	Probe [Read options]
Easily available	1	1
Water is clean	2	2
Water tastes good	3	3
Other	[specify]	
None of the above	4	4

S2. Is the water collected from the [Main source in Q17] sufficient for daily needs?

- Yes, always sufficient 3
- Sometimes not sufficient 2
- Insufficient 1
- Don't know 98

S3. In the last month, for how many days was drinking water from [Main source] unavailable when needed?

- Number of days [ALLOW 0 to 30]
- Don't know

S4. Where is the [MAIN WATER SOURCE (IN Q17)] located? [IF MAINWATER SOURCE IS PIPE WATER INTO DWELLING ALLOW ONLY Option 1 AND IF PIPE WATER INTO YARD/COMPOUND ALLOW ONLY Option 2]

- In this dwelling 1
- In own Yard/plot 2
- Delivered to dwelling 3
- About 100 meters 4
- More than 100 meters, less than 300 meters 5
- More than 300 meters, less than 500 meters 6
- More than 500 meters 7



Don't know 98

18. Who usually goes to the [main source in Q17] to fetch water for your household?

Adult woman	1
Adult man	2
Female Child (Under 15 years)	3
Male Child (Under 15 years)	4
Other	[Specify]
I don't know who goes to fetch water in my house	5

19. How long does it take to go to the [Main water Source in Q17], get water and come back in one trip?

Time taken in Minutes	
Delivered to Dwelling	00
On the premises	97
Don't know	98

### Health:

#### Now we would like to discuss about the health of family members

S18. Did you or anyone above 5 years in your household suffer from the following in last 1 year? [IF CHILDREN BELOW 5 YEARS IN HOUSE Check QD4] [Multiple option 1 to 5]

	In last 1 year
Diarrhoea	1
Jaundice	2
Cholera	3
Typhoid	4
Malaria	5
Don't remember	98

S19. Did any child below 5 years in your household suffer from the following in last 1 year? [IF CHILDREN BELOW 5 YEARS IN HOUSE Check Qd4] [Multiple response 1 to 5 ]

	In last 1 year
Diarrhoea	1
Jaundice	2
Cholera	3
Typhoid	4
Malaria	5
Don't remember	98

20. What is the birth location of [youngest child (Check QD4)] in your household? [Readout options]

At marital or maternal home alone/with family	1
At home with Skilled Birth Attendant	2
At the nearest PHC	3
At the CHC/District hospital	4
At a private hospital	5
Other	[Specify]



21. Can you please tell me approximate amount spent on health including medicines, tests and treatment for household members in last one year?

Amount in Rupees	[Allow entry]
No-one fell ill	1
Don't know	98

22. [IF Provided the amount spent IN Q21] Could you please tell me the source of money? [Read options]

[Multiple option possible]

Own saving	1
Relatives/friends	2
Loan from money lender	3
Loan from Bank	4
Insurance	5
Other	[Specify]

### Module B: Agricultural Practices

23. Do you own any agricultural land?

Own land	1
Taken on lease	2
Working on other's land	3

24. What is the size of total agricultural land that you own? [IF Q23=1/2] [Allow Decimal]

..... Acre

25. What is the total area of agricultural land that you use for cultivation in last three crop cycle? [Should be less than or equal to Q24] [If 23=1/2] [Allow Decimal]

..... Acre

S5. Usually what is your system of farming in your existing land holding?

Mono cropping	1
Multiple cropping	2
Integrated/diversified farming system (Combination of crop, livestock, and fish production)	3

S6. What are the different crops you harvested from your land in last one year? What are the primary crops / secondary crops you grow?

Crop	Primary Crop First code primary crop	Secondary Crop For this, only those not mentioned in primary crops should appear	New crop added in last 3 years Show all list
Vegetables	1	1	1
Paddy	2	2	2
Maize	3	3	3
Bajra	4	4	4



Ragi	5	5	5
Soyabean	6	6	6
Groundnut	7	7	7
Cotton	8	8	8
Wheat	9	9	9
Mustard	10	10	10
Grams (Red gram, black gram, green gram, Channah etc)	11	11	11
Lentil	12	12	12
Fruits	13	13	13
Flowers	14	14	14
Sugarcane	15	15	15
Soya	16	16	16
Other	[Specify]	[Specify]	[Specify]

S7. [Farmers growing water intensive crops like paddy, cotton, sugar cane, soya, wheat in S6] Can you please tell me the reason for growing [crops]?

Reasons	Spontaneous	Probe
Profitable	1	1
Demand is more	2	2
There is no scarcity of water	3	3
Lack knowledge to grow other crops	4	4
This is a traditional practice	5	5
Other	[Specify]	[Specify]

S8. [If S5=1] are you willing to change the cropping pattern?

Yes	1
No	2

S9. [If S8=2] can you please tell me reason for not willing to change cropping pattern?

Reasons	Spontaneous [Do not read options]	Probe [read options]
This is profitable	1	1
Water is not available throughout year	2	2
Lack knowledge about other cropping patter	3	3
Lack input/resources for crop rotation	4	4
Other	[Specify]	[Specify]

26. Usually in one annual cycle, for how many months are you engaged in agriculture/farm related activities?

Through-out the year	12
If not throughout the year, mention number of year	.....

27. Prior to adoption of micro irrigation, how many months in a year, were you involved in agricultural activities?

Throughout the years (all 12 months)	12
If not throughout the year, mention number of year	[Allow Numeric 1 to 11]

**Module C: Work/activities undertaken under PDMC**



28. What are the different type of water sources used by you to provide water into micro irrigation system? [Multiple option]

Well	1
Pond	2
River	3
Stored rain water	4
Other	[Specify]

S10. Can you please tell me the reason for using the water for irrigation from [source(in28)]? [Capture spontaneously then probe] [Multiple options possible]

	Spontaneous [Do not read options]	Probe [Read options]
Easily available	1	1
Available throughout the year	2	2
Other	[specify]	[specify]
None	3	

29. Is there any water source/ structure created under the scheme PDMC for the use of micro irrigation system?

Yes	1
No	2
Don't know	98

30. Is fertigation done for micro irrigation? [Interviewer to clarify: injection of fertilizers, used for soil amendments, water amendments and other water-soluble products into an irrigation system]

Yes	1
No	2
Don't know	98

31. [If yes Q30=1], Is there reduction in use of fertilizers due to fertigation?

Yes, to a great extent	1
Yes, to some extent	2
No	3
Don't know	98

S11. Are you currently using or have you ever used treated or untreated waste water for irrigation?

Yes	1
No	2

S12. If government makes it mandatory to use treated waste water, will you be willing to use the same?

Yes	1
No	2

S13. [If no(If S11=1 and S12=2),] Have you faced any challenges while using the same? [Multiple response]

Water smells	1
Fear of losing crops	2
Hampering crop production	3
Difficult to manage	4
Other	[Specify]



32. Do you face any challenges in operation and maintenance the Micro irrigation?

- Yes, to a great extent 1
- Yes, to some extent 2
- Never 3

33. [If Yes Q32=1/2] can you share the difficulties in operation and maintenance Micro irrigation?

[Options to appear randomly] [Capture spontaneously then probe]

	Spontaneous [Do not read options]	Probe [Read options]
Electricity crisis	1	1
High cost of set-up	2	2
High cost of maintenance	3	3
Poor quality product	4	4
Damages by Rodents	5	5
Inadequate technical support	6	6
Clogging of emitters	7	7
Other	[Specify]	[Specify]
None	8	

34. Have you received any support from government agency for micro irrigation?

- Yes 1
- No 2

35. If yes Q34=1, can you please tell me the different support you have received from government agency? [Capture spontaneous then probe]

	Spontaneous	Probe
Technical support for micro irrigation	1	1
Financial support	2	2
Orientation and training	3	3
Other	[Specify]	[Specify]

36. How satisfied are you with the following supports from government institutions?

	Equipment	Financial support	Information on scheme
Satisfied	1	1	1
Neither satisfied nor dissatisfied	2	2	2
Dissatisfied	3	3	3
Don't know [Do not read]	98	98	98

37. Have you received subsidy on time for micro irrigation?

- Yes, I received on time 1
- Received but delayed 2
- Not received 3



38. Was the subsidy amount adequate for setting-up the micro irrigation system? [IF Q37=1/2]
- |            |    |
|------------|----|
| Yes        | 1  |
| No         | 2  |
| Don't Know | 98 |
39. Can you please tell me the after how many years you are eligible for subsidy to replace micro-irrigation assets?
- |                 |    |
|-----------------|----|
| Number of years |    |
| Don't know      | 98 |
40. Is the period [take from Q 39] for 2<sup>nd</sup> round of subsidy is too long, short or just year? [ASK IF Q39 IS NOT 98]
- |                |   |
|----------------|---|
| It is too long | 1 |
| Short          | 2 |
| Just right     | 3 |
41. Why do you say so?
- |                                |           |
|--------------------------------|-----------|
| MI asserts need to be replaced | 1         |
| Other                          | [Specify] |
42. Have you received any support from the manufacturer?
- |     |   |
|-----|---|
| Yes | 1 |
| No  | 2 |
43. If yes Q42=1, can you please tell me the support received from manufacturer? [Capture spontaneous then probe]
- |  | Spontaneous [Do not read options] | Probe [Read options] |
|--|-----------------------------------|----------------------|
| Technical support for micro irrigation | 1                                 | 1                    |
| Information                            | 2                                 | 2                    |
| Other                                  | [specify]                         | [specify]            |
44. Is there any toll-free customer care number provided by manufacturer to resolve queries?
- |            |    |
|------------|----|
| Yes        | 1  |
| No         | 2  |
| Don't Know | 98 |
45. If [yes Q44=1], have you ever raised any query through the toll-free number?
- |                 |   |
|-----------------|---|
| Yes, frequently | 1 |
| Yes, sometimes  | 2 |
| Rarely          | 3 |
| Never           | 4 |
46. If Yes Q45=1/2, have you received satisfactory response to the queries raised?
- |                |   |
|----------------|---|
| Yes, always    | 1 |
| Yes, sometimes | 2 |
| Rarely         | 3 |
| Never          | 4 |



47. Do you face any issues related to power supply for MI? [Pop-up message if response is "Electricity crisis" in Q 32 and "Not selected" here] [Read options]

interrupted power supply	1
Low voltage	2
Electricity not used for MI	3
Other	[Specify]
No issues	4

#### Module D: Water fees:

**S14.** Are you paying currently for drinking water?

Yes	1
No	2

S15. If yes(If S14=1),, how frequently are you paying?

Monthly	1
Quarterly	2
Bi yearly	3
Yearly	4

S16. How much are you paying [take response from previous question S15]

In Rupees

S17. If there is increase in fees, under what condition will you be ready to pay more for drinking water?

[Multiple option]

If water will be available through-out the year	1
If there is improvement in quantity of water	2
If there is improvement in quality of water	3
If water is easily accessible with piped water supply near the house	4
If water is easily accessible with household tap connection	5
Other	[Specify]
Do want to pay at all	10

S20. Are you paying currently for water for agriculture?

Yes	1
No	2

S21. If yes(If S20=1),, how frequently are you paying?

Monthly	1
Quarterly	2
Bi yearly	3
Yearly	4

S22. How much are you paying [take response from previous question S21]

In Rupees

#### Module D: Training and Skills development

48. Have you attended any training/workshop related on micro irrigation? [If says "NO" ask if not attended or there is no training/workshop organized in the village]

Yes	1
-----	---



No Training attended	2
No Training organized	3
49. Can you tell me when did you attend last training? IF Q48=1	
This year	1
About a year ago,	2
About 2-3 years ago,	3
About 4-5 years ago,	4

**Module D: Efficiency and Impact of Micro-Irrigation**

50. Currently, do you need lift irrigation for agriculture?	
Yes	1
No	2

51. What are the benefits in agriculture as a result of micro irrigation? [Capture spontaneously than probe]

Benefit	Spontaneous [Do not read options]	Probe [Read options]
Increase in irrigated land	1	1
Able to do multiple crops [Do not appear if S5=1]	2	2
Increase in crop yield	3	3
Increase in number of crops (improved crop intensity)	4	4
Covering more areas with same quantity of water (Improved water intensity)	5	5
Improved land productivity	6	6
Other	[Specify]	[Specify]
None	7	

52. [If increased in irrigated land Q51=1] Can you please tell me the land covered under irrigation in your farm before and after the interventions under PDMC (in acres)?

Before (in acres) Now (in acres)

53. Assuming there is no technical and financial support from any agency, would you still be able continue micro irrigation?

Yes, definitely	1
Yes, may be	2
Not sure	3
No	4

54. Has there been any changes in your involvement in agricultural activities due to Micro irrigation?

Engagement increased	1
Engagement Decreased	2
No change	3
Don't know	98



55. We understand that your community has adopted micro irrigation. I will read out the options, Could you please tell us if there is any increase, decrease or no change in your community due to micro irrigation?

Increase      No change/remain same      Decrease      Don't know

Income  
 Education  
 Expenditure in agriculture  
 New employment opportunities in the village

17. Can you please provide us your mobile number?

17	Mobile number of the respondent	
	Refused	

\*\*\*Thank you for your time\*\*\*



## Screening and consent:

My Name is .....from Ipsos Public Affairs, a research company. We regularly do research to understand people's perception and attitudes that can shape development programmes and policies. Currently we are conducting a study on behalf of NITI Aayog on different programmes and schemes. We are talking to different people across India to understand their life at home and work/occupation, and their community at large.

If you choose to participate, we assure that we will handle information provided by you carefully. The complete data base including your name and phone number will be shared with NITI Aayog. There is limited risk in this survey. You will also not get any direct benefit by participating in this survey, however, your participation will be useful for the research study.

Further participating in this survey will be your voluntary choice. You may decline from answering any question and may also ask question.

We also want to mention that your participation is important for us and your responses will be valuable for us.

A1. Do you have any questions?

1. Yes
2. No

A2. Do you consent to participate?

1. Yes
2. No- [If No, Thanks and Terminate](#)

A3. For quality check purpose, we would like to record this interview with your permission? Do you consent to record the interview?

1. Yes
2. No

## IDENTIFICATION:

No.	Question	Response
I1	Name of the state	<a href="#">Dropdown will be provided</a>
I1A	Name of the Project	<a href="#">Dropdown linked to state will be provided</a>
I1B	Name of the scheme	<a href="#">Drop down of schemes mapped with selection of state</a>
I2	Name of the District	<a href="#">Dropdown linked to state will be provided</a>
I3	Name of Panchayat	<a href="#">Dropdown linked District will be provided</a>
I4	Name of the Village	<a href="#">Dropdown linked to Panchayat will be provided</a>
I5	Landmark and address of the household	
I6	Name of the respondent	

### Module: A Household member details

1. Enter gender by observation

- |        |   |
|--------|---|
| Male   | 1 |
| Female | 2 |

2. Can you please tell me your age?

Response.....



3. How many family members are currently staying in this household?  
 [Number of members staying and eating in this household continuously for last 6 months]

Number of household members below 5 years [Specify]  
 Number of household members above 5 years [Specify]

4. What is the caste/ tribe of the HH?

Caste 1  
 Tribe 2  
 No Caste/ Tribe 3  
 Don't know 4

5. Is this a scheduled caste, a scheduled tribe, other backward class or none of them? *If Q4=1/2*

Scheduled Tribes 1  
 Scheduled Castes 2  
 Other Backward Classes 3  
 None of them 4  
 Don't know 9

6. I would like to know about the details of household members. Let us start from the eldest member of the household in descending order. I will ask about their personal, educational and occupation details?

	D1	D2	D3	D4	D5	D6	D7	D8	D9
<b>Index No.</b>	<b>Name of household members (WRITE SHORT NAME)</b>	<b>Residential status</b> Resident...1 Non-resident...2	<b>Gender</b> Male.....1 Female....2	<b>Age in completed years</b>  (CODE "00" IF LESS THAN 12 MONTHS)	<b>Marital status</b> <b>Do not ask if age below 15 years</b> Currently Married.1 Widow / Widower.2 Divorced.....3 Separated.....4 Never married....5 Not Stated.....6 [If applicable]	<b>Education attainment</b> <b>(Do not ask if age below 5 years)</b>  19. Illiterate 20. Primary 21. Upper primary (6/7 standard) 22. Secondary (9/10 standard) 23. Senior secondary (11 <sup>th</sup> and 12 <sup>th</sup> )	<b>If children between 3 to 6 years whether going to Anganwadi (Ask if age of the member is between 3 to 6)</b>  <b>If children between 6 to 15 years whether going to school</b>	<b>Main occupation</b>  (On the basis of time spent)  (Refer codes)	<b>Is there any disability?</b>  (Options: Physical/mental/No)



						Standard/diploma/ITI 24. Graduation and above	(Ask if age of the member is between 6 to 15)		
01									
02									

**Codes for Occupation (D8)**

Agriculture	1		Manufacturing, industrial (owner)	11
Collection of forest products	2		Unpaid family worker	12
Wage labour	3		Retired and earning pension	13
Contractual worker	4		Homemaker.	14
Rickshaw puller/auto driver/driver	5		Student .	15
Salaried employee in government or PSU	6		Social work	16
Salaried employee in private	7		Unemployed	17
Self-employed professional	8		Child below 6 years	18
Self-employed worker (home based worker	9		None	19
Retail / wholesale business	10		Other (specify	99

7. If anyone between 6 to 15 years not going to school, ask why the child is not going to school? IF D4= 6 to 15 and D7 =NO

Could not afford education expenses	1
Required for work in household activities/family business	2
Further education not considered necessary	3
Required for outside work	4
Not interested in studies / Repeated failures	5
Child got ill	6
School is too far away	7
Got married	8
Discrimination with child in the school by students / teachers	9
There is no separate toilet facility for girls	10
No toilet facility in the school	11
Never Enrolled	12
Other (specify)	99

8. Can you please let us know the ownership of household?

Owns the dwelling	1
Rents the dwelling	2
Uses without paying rent	3
No dwelling	4

9. Can you please tell me what is the primary source of fuel for cooking in last 30 days for your household?

Firewood	1
Cow dung cake/Crop Residue	2



Coal/Lignite/Charcoal	3
Kerosene	4
LPG/PNG	5
Electricity	6
Bio-gas	7
Solar	8
Any other	Specify
No Cooking	0

10. Usually on any day how many hours do you usually go without electricity?

No cuts	1
Less than one hour	2
1-4 hours	3
4-8 hours	4
8-12 hours	5
More than 12 hours	6
No Access	7

11. Do you have own mobile phone?

Yes	1
No	2

12. Do you have access to internet?

Yes, by telephone or mobile device	1
Yes, Broadband Wifi at home	2
Yes, at a location just outside my home	3
Yes, other connection at home	4
No access to internet	5

13. Could you please let us know whether you have access to following financial services? [Multiple response]

Bank Account	1
Loans from Bank/Financial Institutions	2
Savings/deposit	3
Digital payment (Debit Card, Credit, UPI, Net banking)	4
Health insurance	5
Life insurance	6
Agricultural insurance	7
None of the above	8
Other	[specify]

14. Has anybody in your household migrated out of this village to other city in last 3 years?

Responses	Male	Female	Age	Reasons for migration
Yes				Drop down list of reasons- [Select most appropriate]
				16. Livelihood/income
				17. Education
				18. Conflict
				19. Marriage
				20. Others



No

15. What kind of toilet facility do members of your household usually use?

Flush to piped sewer system	1
Flush to septic tank	2
Flush to pit latrine	3
Flush to somewhere else	4
Flush, don't know where	5
Ventilated improved	6
Pit (vip)/biogas latrine	7
Pit latrine with slab	8
Pit latrine without slab/	9
Open pit	10
Twin pit/composting toilet	11
Dry toilet	12
No facility/uses open space or field	13
Other	[Specify]

16. What type of drainage system connected to your household?

Open Kutcha	1
Open Pucca	2
Covered Pucca	3
Underground	4
No drainage	5

17. What is the **main source** of drinking water for members of your household? [SINGLE CODE]

Piped water into Dwelling	1
Piped water to yard/compound	2
Public tap/stand pipe	3
Tube well/Bore well	4
Protected Dug well	5
Unprotected Dug well	6
Protected Spring	7
Unprotected Spring	8
Rain water	9
Tanker truck	10
Cart with Small Tank	11
Surface Water (River/Dam/Lake/pond/Canal/Irrigation)	12
Bottled water	13
Community RO plant	14
Other	[Specify]

S1. Can you please tell me the reason for using the drinking water from [source in Q17]? [Capture spontaneously then probe] [Multiple options possible]



	Spontaneous [Do not read options]	Probe [Read options]
Easily available	1	1
Water is clean	2	2
Water tastes good	3	3
Other	[specify]	
None of the above	4	4

S2. Is the water collected from the [Main source in Q17] sufficient for daily needs?

Yes, always sufficient	3
Sometimes not sufficient	2
Insufficient	1
Don't know	98

S3. In the last month, for how many days was drinking water from [Main source] unavailable when needed?

Number of days	[ALLOW 0 to 30]
Don't know	

S4. Where is the [MAIN WATER SOURCE (IN Q17)] located? [IF MAINWATER SOURCE IS PIPE WATER INTO DWELLING ALLOW ONLY Option 1 AND IF PIPE WATER INTO YARD/COMPOUND ALLOW ONLY Option 2]

In this dwelling	1
In own Yard/plot	2
Delivered to dwelling	3
About 100 meters	4
More than 100 meters, less than 300 meters	5
More than 300 meters, less than 500 meters	6
More than 500 meters	7
Don't know	98

18. Who usually goes to the [main source in Q17] to fetch water for your household?

Adult woman	1
Adult man	2
Female Child (Under 15 years)	3
Male Child (Under 15 years)	4
Other	[Specify]
I don't know who goes to fetch water in my house	5

19. How long does it take to go to the [Main water Source in Q17], get water and come back in one trip?

Time taken in Minutes	
Delivered to Dwelling	00
On the premises	97
Don't know	98

### Health:

Now we would like to discuss about the health of family members



S18. Did you or anyone above 5 years in your household suffer from the following in last 1 year? [IF CHILDREN BELOW 5 YEARS IN HOUSE Check QD4] [Multiple option 1 to 5]

	In last 1 year
Diarrhoea	1
Jaundice	2
Cholera	3
Typhoid	4
Malaria	5
Don't remember	98

S19. Did any child below 5 years in your household suffer from the following in last 1 year? [IF CHILDREN BELOW 5 YEARS IN HOUSE Check Qd4] [Multiple response 1 to 5 ]

	In last 1 year
Diarrhoea	1
Jaundice	2
Cholera	3
Typhoid	4
Malaria	5
Don't remember	98

20. What is the birth location of [youngest child (Check QD4)] in your household? [Readout options]

At marital or maternal home alone/with family	1
At home with Skilled Birth Attendant	2
At the nearest PHC	3
At the CHC/District hospital	4
At a private hospital	5
Other	[Specify]

21. Can you please tell me approximate amount spent on health including medicines, tests and treatment for household members in last one year?

Amount in Rupees	[Allow entry]
No-one fell ill	1
Don't know	98

22. [IF Provided the amount spent IN Q21] Could you please tell me the source of money? [Read options] [Multiple option possible]

Own saving	1
Relatives/friends	2
Loan from money lender	3
Loan from Bank	4
Insurance	5
Other	[Specify]

### Module B: Agricultural Practices

23. Do you own any agricultural land?

Own land	1
Taken on lease	2



24. What is the size of total agricultural land that you own? IF Q23=1/2 [Allow Decimal]

..... Acre

25. What is the total area of agricultural land that you use for cultivation in last three crop cycle?

..... Acre [Should be less than or equal to Q24] [If 23=1/2] [Allow Decimal]

S5. Usually what is your system of farming in your existing land holding?

- Mono cropping 1
- Multiple cropping 2
- Integrated/diversified farming system (Combination of crop, livestock, and fish production) 3

S8. [If S5=1] are you willing to change the cropping pattern?

- Yes 1
- No 2

S9. [If S8=2] can you please tell me reason for not willing to change cropping pattern?

Reasons	Spontaneous [Do not read options]	Probe options]	[Read
This is profitable	1	1	
Water is not available throughout year	2	2	
Lack knowledge about other cropping patter	3	3	
Lack input/resources for crop rotation	4	4	
Other	[Specify]	[Specify]	

26. Usually in one annual cycle, for how many months are you engaged in agriculture/farm related activities?

Through-out the year 12  
 Number of months (if not whole year) .....

27. Prior to RRR activities, how many months in a year, were you involved in agricultural activities?

Throughout the years (all 12 months) 12  
 If not throughout the year, mention number of year [Allow Numeric 1 to 11]

S23. What is the source of water for irrigation/agriculture?

- Surface water [River/stream] 1
- Surface water [Farm Pond] 2
- Ground water 3
- Rain water 4
- Other [Specify]

S10. Can you please tell me the reason for using the water for irrigation from [source(S23)]? [Capture spontaneously then probe] [Multiple options possible]

	Spontaneous	Probe
Easily available	1	1
Available throughout the year	2	2
Other	[specify]	[specify]



S11. Are you currently using or have you ever used treated or untreated waste water for irrigation?

Yes	1
No	2

S12. If government makes it mandatory to use treated waste water, will you be willing to use the same?

Yes	1
No	2

S13. [If no(If S11=1 and S12=2),] Have you faced any challenges while using the same? [Multiple response]

Water smells	1
Fear of losing crops	2
Hampering crop production	3
Difficult to manage	4
Other	[Specify]

### Module C: Work/activities undertaken under RRR

28. Has there been any repair/renovation/rehabilitation work done for water bodies in your village under RRR-Har Khet ko Pani?

Yes	1
No	2
Don't know	98

29. [If Yes IF Q28=1] Is the water body repaired/ renovated/rehabilitated under Har Khet Ko Pani - RRR scheme currently in use?

Yes, currently in use	1
No, not used as it is not functional	2
No, not use as it is not required	3
Don't know	98

30. [If in use Q29=1] for what purpose do you use the water from the restored water bodies?

Agricultural	1
Domestic water needs	2
Other	[Specify]

31. Have you received any support from government agency under RRR scheme?

Yes	1
No	2

### Module C: Training and Skills development

32. Have you attended any training/workshop related to RRR? [If says 'NO' ask if not attended or there is no training/workshop organized in the village]

Yes	1
No Training attended	2



No Training organized 3

33. Can you tell me when did you attend last training? IF Q32=1

This year 1  
About a year ago, 2  
About 2-3 years ago, 3  
About 4-5 years ago, 4

34. How many training have you attended in last three years? IF Q32=1 and Q33 is NOT 4

Number of training [Numeric]

35. Can you please tell me the topics covered in the training? [Multiple option possible] [Capture spontaneously then probe] IF Q32=1

	Spontaneous [Do not read options]	Probe [read options]
Water management	1	1
Crop Management	2	2
Other	[specify]	[specify]
Do not remember		

36. Has there been any change in trainings organized since RRR activities started?

Yes, Increased 1  
Remain same 2  
Decreased 3  
Don't know 98

#### Module D: Water Users Group

37. Is there any registered Water User Association (WUA) in your command area?

Yes 1  
No 2  
Don't know 98

38. Are you a member of the registered WUA in your command area? IF Q37=1

Yes 1  
No 2

39. Are you involved in water resource management activities?

Yes 1  
No 2

40. How is the involvement of large contractors influencing the functioning of WUAs? IF Q 37=1



It is helping in better functioning of WUA	1
It is creating problem in functioning of WUA	2
No influence	3
Don't know	4

41. Are there women members in WUA group? Ask to male farmers IF Q37=1 and female farmers Q38=2

Yes	1
No	2

### Module E: Fees

42. Are you currently paying to access water from restored water bodies?

- Yes
- No

43. [[If yes Q42=1] Are you willing to continue to pay to access water from restored bodies? [[If No Q42=2] Are you willing to pay to access water from restored bodies?

- Yes
- No

44. Are you willing to pay towards the restoration of water bodies to incur the expenses of labour, fuel, machines etc.?

Yes	1
No	2

S20. Are you paying currently for water for agriculture?

Yes	1
No	2

S21. If yes(If S20=1),, how frequently are you paying?

Monthly	1
Quarterly	2
Bi yearly	3
Yearly	4

S22. How much are you paying [take response from previous question S21]

In Rupees

**S14.** Are you paying currently for drinking water?

Yes	1
No	2

S15. If yes(If S14=1),, how frequently are you paying?

Monthly	1
Quarterly	2
Bi yearly	3
Yearly	4



S16. How much are you paying [take response from previous question S15]

In Rupees

S17. If there is increase in fees, under what condition will you be ready to pay more for drinking water?  
[Multiple option]

- If water will be available through-out the year 1
- If there is improvement in quantity of water 2
- If there is improvement in quality of water 3
- If water is easily accessible with piped water supply near the house 4
- If water is easily accessible with household tap connection 5
- Other [Specify]
- Do want to pay at all 10

### Module F: Efficiency and Impact of RRR scheme

45. Is water available at the supply outlets through the year?

- Yes 1
- No 2

46. Currently, do you need lift irrigation for agriculture?

- Yes 1
- No 2

47. What are the benefits in agriculture as a result of RRR activities? [Capture spontaneously than probe]

Benefit	Spontaneous [Do not read options]	Probe {Read options}
Increase in irrigated land	1	1
Able to do multiple crops [DO NOT ASK IF S5=1]	2	2
Increase in crop yield	3	3
Increase in number of crops (improved crop intensity)	4	4
Covering more areas with same quantity of water (Improved water intensity)	5	5
Improved land productivity	6	6
Other	[Specify]	[Specify]
None	7	

48. [If increase in irrigated land Q47=1] Can you please tell me the land covered under irrigation in your farm before the RRR activities and now (in acres)?

Before (in acres)

Now (in acres)

49. [If increase in crop intensity Q47=4] Can you please tell me the average number of crops cultivated annually on your land before RRR activities and now?



Before Now

Number of crops in a year  
 S6. What are the different crops you harvested from your land in last one year? What are the primary crops / secondary crops you grow?

Crop	Primary Crop First code primary crop	Secondary Crop For this, only those not mentioned in primary crops should appear	New crop added in last 3 years Show all list
Vegetables	1	1	1
Paddy	2	2	2
Maize	3	3	3
Bajra	4	4	4
Ragi	5	5	5
Soyabean	6	6	6
Groundnut	7	7	7
Cotton	8	8	8
Wheat	9	9	9
Mustard	10	10	10
Grams (Red gram, black gram, green gram, Channah etc)	11	11	11
Lentil	12	12	12
Fruits	13	13	13
Flowers	14	14	14
Sugarcane	15	15	15
Soya	16	16	16
Other	[Specify]	[Specify]	[Specify]

S7. [Farmers growing water intensive crops like paddy, cotton, sugar cane, soya, wheat in S6] Can you please tell me the reason for growing [crops]?

Reasons	Spontaneous	Probe
Profitable	1	1
Demand is more	2	2
There is no scarcity of water [not to appear of sufficient water throughout year Q47=1]	3	3
Lack knowledge to grow other crops	4	4
This is a traditional practice	5	5
Other	[Specify]	[Specify]

50. Has there been any changes in water logging instances due to RRR work?

Yes, Increased	1
Remain same	2
Decreased	3
Don't know	98

51. Has there been any changes in **ground water storage** after RRR work?

Yes, Increased	1
Remain same	2
Decreased	3
Don't know	98



52. Has there been any changes in **surface water storage** after RRR work?

Yes, Increased	1
Remain same	2
Decreased	3
Don't know	98

53. Has there been any change in availability of quality drinking water due to RRR activities?

Improved	1
Remain Same	2
Deteriorated	3
Don't know	98

54. Has there been any changes in your involvement in agricultural activities due to RRR activities?

Engagement increased	1
Engagement Decreased	2
No change	3
Don't know	98

55. I will read out the options, please let us know if there is any increase, decrease or no change due to RRR activities in your village?

	Increase	No change/remain same	Decrease	Don't know
Household income of villagers				
Education				
Expenditure in agriculture				
new employment opportunities in the village				
Tourism and cultural activities				

MOBILE: Can you please share your mobile number

Yes.....

Refused

.....Thank you for your time.....



## **Questionnaire: Surface Minor Irrigation - Har Khet Ko Pani**

### **Screening and consent:**

My Name is .....from Ipsos Public Affairs, a research company. We regularly do research to understand people's perception and attitudes that can shape development programmes and policies. Currently we are conducting a study on behalf of NITI Aayog on different programmes and schemes. We are talking to different people across India to understand their life at home and work/occupation, and their community at large.

If you choose to participate, we assure that we will handle information provided by you carefully. The complete data base including your name and phone number will be shared with NITI Aayog. There is limited risk in this survey. You will also not get any direct benefit by participating in this survey, however, your participation will be useful for the research study.

Further participating in this survey will be your voluntary choice. You may decline from answering any question and may also ask question.

We also want to mention that your participation is important for us and your responses will be valuable for us.

A1. Do you have any questions?

- 3. Yes
- 4. No

A2. Do you consent to participate?

- 3. Yes
- 4. No- [If No, Thanks and Terminate](#)

A3. For quality check purpose, we would like to record this interview with your permission? Do you consent to record the interview?

- 3. Yes



4. No

**IDENTIFICATION:**

No.	Question	Response
I1	Name of the state	Dropdown will be provided
I1A	Name of the Project	Dropdown linked to state will be provided
I1B	Name of the scheme	Drop down of schemes mapped with selection of state
I2	Name of the District	Dropdown linked to state will be provided
I3	Name of Panchayat	Dropdown linked District will be provided
I4	Name of the Village	Dropdown linked to Panchayat will be provided
I5	Landmark and address of the household	
I6	Name of the respondent	

**Module: A Household member details**

1. Enter gender by observation

Male	1
Female	2

2. Can you please tell me your age?

Response.....

3. How many family members are currently staying in this household?

[Number of members staying and eating in this household continuously for last 6 months]

Number of household [Specify]  
members below 5 years

Number of household [Specify]  
members above 5 years

4. What is the caste/ tribe of the HH?

Caste	1
Tribe	2
No Caste/ Tribe	3
Don't know	4

5. Is this a scheduled caste, a scheduled tribe, other backward class or none of them? If Q4=1/2

Scheduled Tribes	1
Scheduled Castes	2
Other Backward Classes	3
None of them	4
Don't know	9

6. I would like to know about the details of household members. Let us start from the eldest member of the household in descending order. I will ask about their personal, educational and occupation details?



Index No.	D1 Name of household members (WRITE SHORT NAME)	D2 Residential status Resident...1 Non-resident..2	D3 Gender Male.....1 Female....2	D4 Age in completed years  (CODE "00" IF LESS THAN 12 MONTHS)	D5 Marital status Do not ask if age below 15 years Currently Married.1 Widow / Widower.2 Divorced.....3 Separated.....4 Never married....5 Not Stated.....6 [If applicable]	D6 Education attainment  (Do not ask if age below 5 years) 25. Illiterate 26. Primary 27. Upper primary (6/7 standard) 28. Secondary (9/10 standard) 29. Senior secondary (11 <sup>th</sup> and 12 <sup>th</sup> ) Standard/diploma/ITI) 30. Graduation and above	D7 If children between 3 to 6 years whether going to Anganwadi  (Ask if age of the member is between 3 to 6)  If children between 6 to 15 years whether going to school  (Ask if age of the member is between 6 to 15)	D8 Main occupation  (On the basis of time spent)  (Refer codes)	D9 Is there any disability?  (Options: Physical/mental/No)
01									
02									

**Codes for Occupation (D8)**

Agriculture	1	Manufacturing, industrial (owner)	11
Collection of forest products	2	Unpaid family worker	12
Wage labour	3	Retired and earning pension	13
Contractual worker	4	Homemaker.	14
Rickshaw puller/auto driver/driver	5	Student .	15
Salaried employee in government or PSU	6	Social work	16
Salaried employee in private	7	Unemployed	17
Self-employed professional	8	Child below 6 years	18
Self-employed worker (home based worker)	9	None	19
Retail / wholesale business	10	Other (specify	99

7. If anyone between 6 to 15 years not going to school, ask why the child is not going to school? IF D4= 6 to 15 and D7 =NO

Could not afford education expenses	1
Required for work in household activities/family business	2
Further education not considered necessary	3
Required for outside work	4
Not interested in studies / Repeated failures	5
Child got ill	6



School is too far away	7
Got married	8
Discrimination with child in the school by students / teachers	9
There is no separate toilet facility for girls	10
No toilet facility in the school	11
Never Enrolled	12
Other (specify)	99

8. Can you please let us know the ownership of household?

Owns the dwelling	1
Rents the dwelling	2
Uses without paying rent	3
No dwelling	4

9. Can you please tell me what is the primary source of fuel for cooking in last 30 days for your household?

Firewood	1
Cow dung cake/Crop Residue	2
Coal/Lignite/Charcoal	3
Kerosene	4
LPG/PNG	5
Electricity	6
Bio-gas	7
Solar	8
Any other	Specify
No Cooking	0

10. Usually on any day how many hours do you usually go without electricity?

No cuts	1
Less than one hour	2
1-4 hours	3
4-8 hours	4
8-12 hours	5
More than 12 hours	6
No Access	7

11. Do you have own mobile phone?

Yes	1
No	2

12. Do you have access to internet?

Yes, by telephone or mobile device	1
Yes, Broadband Wifi at home	2
Yes, at a location just outside my home	3
Yes, other connection at home	4
No access to internet	5

13. Could you please let us know whether you have access to following financial services? [Multiple response]

Bank Account	1
--------------	---



Loans from Bank/Financial Institutions	2
Savings/deposit	3
Digital payment (Debit Card, Credit, UPI, Net banking)	4
Health insurance	5
Life insurance	6
Agricultural insurance	7
None of the above	8
Other	[specify]

14. Has anybody in your household migrated out of this village to other city in last 3 years?

Responses	Male	Female	Age	Reasons for migration
Yes				Drop down list of reasons- [Select most appropriate]
				21. Livelihood/income
				22. Education
				23. Conflict
				24. Marriage
				25. Others
No				

15. What kind of toilet facility do members of your household usually use?

Flush to piped sewer system	1
Flush to septic tank	2
Flush to pit latrine	3
Flush to somewhere else	4
Flush, don't know where	5
Ventilated improved	6
Pit (vip)/biogas latrine	7
Pit latrine with slab	8
Pit latrine without slab/	9
Open pit	10
Twin pit/composting toilet	11
Dry toilet	12
No facility/uses open space or field	13
Other	[Specify]

16. What type of drainage system connected to your household?

Open Kutcha	1
Open Pucca	2
Covered Pucca	3
Underground	4
No drainage	5

17. What is the **main source** of drinking water for members of your household? [SINGLE CODE]

Piped water into Dwelling	1
Piped water to yard/compound	2



Public tap/stand pipe	3
Tube well/Bore well	4
Protected Dug well	5
Unprotected Dug well	6
Protected Spring	7
Unprotected Spring	8
Rain water	9
Tanker truck	10
Cart with Small Tank	11
Surface Water (River/Dam/Lake/pond/Canal/Irrigation)	12
Bottled water	13
Community RO plant	14
Other	[Specify]

S1. Can you please tell me the reason for using the drinking water from **[source in Q17)]?** [Capture spontaneously then probe] [Multiple options possible]

	Spontaneous [Do not read options]	Probe [Read options]
Easily available	1	1
Water is clean	2	2
Water tastes good	3	3
Other	[specify]	
None of the above	4	4

S2. Is the water collected from the **[Main source in Q17]** sufficient for daily needs?

Yes, always sufficient	3
Sometimes not sufficient	2
Insufficient	1
Don't know	98

S3. In the last month, for how many days was drinking water from **[Main source]** unavailable when needed?

Number of days	[ALLOW 0 to 30]
Don't know	

S4. Where is the **[MAIN WATER SOURCE (IN Q17)]** located? [IF MAINWATER SOURCE IS PIPE WATER INTO DWELLING ALLOW ONLY Option 1 AND IF PIPE WATER INTO YARD/COMPOUND ALLOW ONLY Option 2]

In this dwelling	1
In own Yard/plot	2
Delivered to dwelling	3
About 100 meters	4
More than 100 meters, less than 300 meters	5
More than 300 meters, less than 500 meters	6
More than 500 meters	7
Don't know	98

18. Who usually goes to the **[main source in Q17]** to fetch water for your household?

Adult woman	1
Adult man	2



Female Child (Under 15 years)	3
Male Child (Under 15 years)	4
Other	[Specify]
I don't know who goes to fetch water in my house	5

19. How long does it take to go to the [Main water Source in Q17], get water and come back in one trip?

Time taken in Minutes	
Delivered to Dwelling	00
On the premises	97
Don't know	98

### Health:

#### Now we would like to discuss about the health of family members

S18. Did you or anyone above 5 years in your household suffer from the following in last 1 year? [IF CHILDREN BELOW 5 YEARS IN HOUSE Check QD4] [Multiple option 1 to 5]

	In last 1 year
Diarrhoea	1
Jaundice	2
Cholera	3
Typhoid	4
Malaria	5
Don't remember	98

S19. Did any child below 5 years in your household suffer from the following in last 1 year? [IF CHILDREN BELOW 5 YEARS IN HOUSE Check Qd4] [Multiple response 1 to 5 ]

	In last 1 year
Diarrhoea	1
Jaundice	2
Cholera	3
Typhoid	4
Malaria	5
Don't remember	98

20. What is the birth location of [youngest child (Check QD4)] in your household? [Readout options]

At marital or maternal home alone/with family	1
At home with Skilled Birth Attendant	2
At the nearest PHC	3
At the CHC/District hospital	4
At a private hospital	5
Other	[Specify]

21. Can you please tell me approximate amount spent on health including medicines, tests and treatment for household members in last one year?

Amount in Rupees	[Allow entry]
No-one fell ill	1



Don't know

98

22. [IF Provided the amount spent IN Q21] Could you please tell me the source of money? [Read options]

[Multiple option possible]

- Own saving 1
- Relatives/friends 2
- Loan from money lender 3
- Loan from Bank 4
- Insurance 5
- Other [Specify]

**Module B: Agricultural Practices**

23. Do you own any agricultural land?

- Own land 1
- Taken on lease 2
- Working on other's land 3

24. What is the size of total agricultural land that you own? [ASK IF Q23=1/2] [Allow Decimal]

..... Acre

25. What is the total area of agricultural land that you use for cultivation in last three crop cycle?

..... Acre [Should be less than or equal to Q24] [If 23=1/2] [Allow Decimal]

S5. Usually what is your system of farming in your existing land holding?

- Mono cropping 1
- Multiple cropping 2
- Integrated/diversified farming system (Combination of crop, livestock, and fish production) 3

S8. [If S5=1] are you willing to change the cropping pattern?

- Yes 1
- No 2

S9. [If S8=2] can you please tell me reason for not willing to change cropping pattern?

Reasons	Spontaneous [Do not read options]	Probe [Read options]
This is profitable	1	1
Water is not available throughout year	2	2
Lack knowledge about other cropping patter	3	3
Lack input/resources for crop rotation	4	4
Other	[Specify]	[Specify]
None of the above	5	

26. Usually in one annual cycle, for how many months are you engaged in agriculture/farm related activities?

Through-out the year 12  
Number of months (if not whole year) .....



27. Prior to SMI activity, how many months in a year, were you involved in agricultural activities?  
 Throughout the years (all 12 months) 12  
 If not throughout the year, mention number of [Allow Numeric 1 to 11]  
 year

S23. What is the source of water for irrigation?

Surface water [River/stream]	1
Surface water [Farm Pond]	2
Ground water	3
Rain water	4
Other	[Specify]

28. What is your preferable mode of irrigation? [Read out the option] [Single code]

Ground Water	1
Surface Minor Irrigation	2

S10. Can you please tell me the reason for using the water for irrigation from [source(in S23)]? [Capture spontaneously then probe] [Multiple options possible]

	Spontaneous	Probe
Easily available	1	1
Available throughout the year	2	2
Other	[specify]	[specify]
None of the above	3	

S11. Are you currently using or have you ever used treated or untreated waste water for irrigation?

Yes	1
No	2

S12. If government makes it mandatory to use treated waste water, will you be willing to use the same?

Yes	1
No	2

S13. [If no(If S11=1 and S12=2),] Have you faced any challenges while using the same? [Multiple response]

Water smells	1
Fear of losing crops	2
Hampering crop production	3
Difficult to manage	4
Other	[Specify]

### Module C: Work/activities undertaken under SMI

29. Can you please tell me if any of the following structures created under Surface Minor Irrigation scheme?

	Yes	No	Don't know
New Surface water Source	1	2	98
New Ground water source	1	2	98

30. Can you please tell me if any of the following corrective measures been taken for correction of system deficiency? [Readout options]



	Yes	No
Cleaning of channels by de-silting and weeding	1	2
Strengthening of banks in filling sections	1	2
Restoring bed gradients	1	2
Raising earthwork in embankments	1	2

31. Do you face any challenges in operation and maintenance the surface Minor irrigation?

Yes, to a great extent	1
Yes, to some extent	2
Never	3

32. If Yes [Q31=1], can you share the difficulties in adopting the provisions under SMI schemes?

[Options to appear randomly] [Capture spontaneously then probe]

	Spontaneous [Do not read options]	Probe [Do not read options]
Electricity crisis	1	1
High cost of set-up	2	2
High cost of maintenance	3	3
Poor quality product	4	4
Damages by Rodents	5	5
Inadequate technical support	6	6
Blockages	7	7
Other	[Specify]	[Specify]
None of the above	8	

33. Have you received any support from government agency under SMI scheme?

Yes	1
No	2

34. [If yes Q33=1], can you please tell me the different support you have received from government agency? [Capture spontaneous then probe]

	Spontaneous [Do not read]	Probe [Read option]
Technical support for irrigation	1	1
Financial support	2	2
Orientation and training	3	3
Other	[Specify]	[Specify]
None of the above	4	

#### Module D: Training and Skills development

35. Have you attended any training/workshop related to SMI? [If says 'NO' ask if not attended or there is no training/workshop organized in the village]

Yes	1
No Training attended	2
No Training organized	3

36. Can you tell me when did you attend last training? [IF Q35=1]

This year	1
-----------	---



About a year ago,	2
About 2-3 years ago,	3
About 4-5 years ago,	4

37. How many training have you attended in last three years? [If Q35=1] **DO NOT ASK IF LAST**

**ATTENDED TRAINING Q36=4**

Number of training [Numeric]

38. Can you please tell me the topics covered in the trainings? [Multiple option possible] [Capture spontaneously then probe] [Q35=1]

	Spontaneous [Do not read options]	Probe [Read options]
Water management	1	1
Crop Management	2	2
Maintenance of irrigation system	3	3
Other	[specify]	[specify]
None of the above	4	

39. Has there been any change in trainings organized since SMI activities started?

Yes, Increased	1
Remain same	2
Decreased	3
Don't know	98

#### Module D: Water Users Group

40. Is there any registered Water User Association (WUA) in your command area?

Yes	1
No	2
Don't know	98

41. Are you a member of the registered WUA in your command area? [IF Q40=1]

Yes	1
No	2

42. Are you involved in water resource management activities?

Yes	1
No	2

43. How is the involvement of large contractors influencing the functioning of WUAs? [IF Q40=1]

It is helping in better functioning of WUA	1
It is creating problem in functioning of WUA	2
No influence	3
Don't know	4

44. Do you receive required support from WUA group? [Q40=1]

Yes	1
No	2
Can't Say	98



45. Are the WUA carrying out operation and management activities under SMI scheme effectively? [If

Q40=1]

Yes, to great extent	1
To some extent	2
No	3
Can't Say	98

46. Are there women members in WUA group? [Ask to male farmers] [IF Q40=1] [ASK female farmers if

Q41=2]

Yes	1
No	2

### Module E: Fees:

S20. Are you paying currently for water for agriculture?

Yes	1
No	2

S21. If yes (If S20=1),, how frequently are you paying?

Monthly	1
Quarterly	2
Bi yearly	3
Yearly	4

S22. How much are you paying [take response from previous question S21]

In Rupees

**S14.** Are you paying currently for drinking water?

Yes	1
No	2

S15. If yes(If S14=1), how frequently are you paying?

Monthly	1
Quarterly	2
Bi yearly	3
Yearly	4

S16. How much are you paying [take response from previous question S15]

In Rupees

S17. If there is increase in fees, under what condition will you be ready to pay more for drinking water?

[Multiple option]

If water will be available through-out the year	1
If there is improvement in quantity of water	2
If there is improvement in quality of water	3
If water is easily accessible with piped water supply near the house	4
If water is easily accessible with household tap connection	5
Other	[Specify]



Do want to pay at all

10

### Module E: Efficiency and Impact of SMI scheme

47. Is water available through SMI irrigation created available throughout the year?

- Yes 1
- No 2

48. Currently, do you need lift irrigation for agriculture?

- Yes 1
- No 2

49. What are the benefits in agriculture as a result of micro irrigation? [Capture spontaneously than probe]

Benefit	Spontaneous [Do not read]	Probe [Read option]
Increase in irrigated land	1	1
Able to do multiple crops [Do not appear if S5=1]	2	2
Increase in crop yield	3	3
Increase in number of crops (improved crop intensity)	4	4
Covering more areas with same quantity of water (Improved water intensity)	5	5
Improved land productivity	6	6
Other [Specify]		[Specify]
None	7	

50. [If increase in irrigated land IF Q49=1] Can you please tell me the land covered under irrigation in your farm before the SMI activities and now (in acres)?

Before (in acres) Now (in acres)

51. [If increase in crop intensity if Q49=4] Can you please tell me the average number of crops cultivated annually on your land before SMI activities and now?

Before Now

Number of crops in a year

S6. What are the different crops you harvested from your land in last one year? What are the primary crops / secondary crops you grow?

Crop	Primary Crop First code primary crop	Secondary Crop For this, only those not mentioned in primary crops should appear	New crop added in last 3 years Show all list
Vegetables	1	1	1
Paddy	2	2	2



Maize	3	3	3
Bajra	4	4	4
Ragi	5	5	5
Soyabean	6	6	6
Groundnut	7	7	7
Cotton	8	8	8
Wheat	9	9	9
Mustard	10	10	10
Grams (Red gram, black gram, green gram, Channah etc)	11	11	11
Lentil	12	12	12
Fruits	13	13	13
Flowers	14	14	14
Sugarcane	15	15	15
Soya	16	16	16
Other	[Specify]	[Specify]	[Specify]

S7. [Farmers growing water intensive crops like paddy, cotton, sugar cane, soya, wheat S6] Can you please tell me the reason for growing [crops]?

Reasons	Spontaneous	Probe
Profitable	1	1
Demand is more	2	2
There is no scarcity of water [not to appear of sufficient water throughout year Q47=1]	3	3
Lack knowledge to grow other crops	4	4
This is a traditional practice	5	5
Other	[Specify]	[Specify]

52. Has there been any changes in water logging instances after SMI work?

Yes, Increased	1
Remain same	2
Decreased	3
Don't know	98

53. Has there been any changes in ground water after SMI work?

Yes, Increased	1
Remain same	2
Decreased	3
Don't know	98

54. Assuming there is no technical and financial support from any agency, would you still be able continue surface minor irrigation?

Yes, definitely	1
Yes, may be	2
Not sure	3
No	4

55. Has there been any changes in your involvement in agricultural activities after SMI activities?

Engagement increased	1
Engagement Decreased	2



No change 3  
Don't know 98

56. We understand that your community has adopted surface micro irrigation. I will read out the options, Could you please tell us if there is any increase, decrease or no change in your community due to micro irrigation?

Increase      No change/remain same      Decrease      Don't know

Income  
Education  
Expenditure in agriculture  
New employment opportunities in the village

MOBILE: Can you please share your Mobile Number

Yes.....

Refused

.....Thank you for your time.....



## Questionnaire: Watershed Development Component

### Screening and consent:

My Name is .....from Ipsos Public Affairs, a research company. We regularly do research to understand people's perception and attitudes that can shape development programmes and policies. Currently we are conducting a study on behalf of NITI Aayog on different programmes and schemes. We are talking to different people across India to understand their life at home and work/occupation, and their community at large.

If you choose to participate, we assure that we will handle information provided by you carefully. The complete data base including your name and phone number will be shared with NITI Aayog. There is limited risk in this survey. You will also not get any direct benefit by participating in this survey, however, your participation will be useful for the research study.

Further participating in this survey will be your voluntary choice. You may decline from answering any question and may also ask question.

We also want to mention that your participation is important for us and your responses will be valuable for us.

A1. Do you have any questions?

1. Yes
2. No

A2. Do you consent to participate?

1. Yes
2. No- [If No, Thanks and Terminate](#)

A3. For quality check purpose, we would like to record this interview with your permission? Do you consent to record the interview?

1. Yes
2. No

### IDENTIFICATION:

No.	Question	Response
I1	Name of the state	<a href="#">Dropdown will be provided</a>
I1A	Name of the Project	<a href="#">Dropdown linked to state will be provided</a>
I1B	Name of the scheme	<a href="#">Drop down of schemes mapped with selection of state</a>
I2	Name of the District	<a href="#">Dropdown linked to state will be provided</a>
I3	Name of Panchayat	<a href="#">Dropdown linked District will be provided</a>
I4	Name of the Village	<a href="#">Dropdown linked to Panchayat will be provided</a>
I5	Landmark and address of the household	
I6	Name of the respondent	

### Module: A Household member details

1. Enter gender by observation

Male	1
Female	2



2. Can you please tell me your age?

Response.....

3. How many family members are currently staying in this household?

[Number of members staying and eating in this household continuously for last 6 months]

Number of household [Specify]

members below 5 years

Number of household [Specify]

members above 5 years

4. What is the caste/ tribe of the HH?

- Caste 1
- Tribe 2
- No Caste/ Tribe 3
- Don't know 4

5. Is this a scheduled caste, a scheduled tribe, other backward class or none of them? *If Q4=1/2*

- Scheduled Tribes 1
- Scheduled Castes 2
- Other Backward Classes 3
- None of them 4
- Don't know 9

6. I would like to know about the details of household members. Let us start from the eldest member of the household in descending order. I will ask about their personal, educational and occupation details?

	D1	D2	D3	D4	D5	D6	D7	D8	D9
<b>Index No.</b>	<b>Name of household members (WRITE SHORT NAME)</b>	<b>Residential status</b> Resident... 1 Non-resident...2	<b>Gender</b> Male..... 1 Female....2	<b>Age in completed years</b>  (CODE "00" IF LESS THAN 12 MONTHS)	<b>Marital status</b> <b>Do not ask if age below 15 years</b> Currently Married.1 Widow / Widower.2 Divorced..... .....3 Separated..... .... 4 Never married....5 Not Stated.....6 [If applicable]	<b>Education attainment</b>  <b>(Do not ask if age below 5 years)</b>  31. Illiterate e 32. Primary 33. Upper primary (6/7 standard 34. Secondary (9/10 standard) 35. Senior secondary	<b>If children between 3 to 6 years whether going to Anganwadi</b>  <b>(Ask if age of the member is between 3 to 6)</b>  <b>If children between 6 to 15 years whether</b>	<b>Main occupation</b>  (On the basis of time spent)  (Refer codes)	<b>Is there any disability?</b>  (Options: Physical/mental/No)



						(11 <sup>th</sup> and 12 <sup>th</sup> Standard/diploma/ITI) 36. Graduation and above	<b>going to school</b> <b>(Ask if age of the member is between 6 to 15)</b>		
01									
02									

**Codes for Occupation (D8)**

Agriculture	1		Manufacturing, industrial (owner)	11
Collection of forest products	2		Unpaid family worker	12
Wage labour	3		Retired and earning pension	13
Contractual worker	4		Homemaker.	14
Rickshaw puller/auto driver/driver	5		Student .	15
Salaried employee in government or PSU	6		Social work	16
Salaried employee in private	7		Unemployed	17
Self-employed professional	8		Child below 6 years	18
Self-employed worker (home based worker	9		None	19
Retail / wholesale business	10		Other (specify	99

7. If anyone between 6 to 15 years not going to school, ask why the child is not going to school? **IF D4= 6 to 15 and D7 =NO**

Could not afford education expenses	1
Required for work in household activities/family business	2
Further education not considered necessary	3
Required for outside work	4
Not interested in studies / Repeated failures	5
Child got ill	6
School is too far away	7
Got married	8
Discrimination with child in the school by students / teachers	9
There is no separate toilet facility for girls	10
No toilet facility in the school	11
Never Enrolled	12
Other (specify)	99

8. Can you please let us know the ownership of household?

- |                          |   |
|--------------------------|---|
| Owns the dwelling        | 1 |
| Rents the dwelling       | 2 |
| Uses without paying rent | 3 |
| No dwelling              | 4 |



9. Can you please tell me what is the primary source of fuel for cooking in last 30 days for your household?

Firewood	1
Cow dung cake/Crop Residue	2
Coal/Lignite/Charcoal	3
Kerosene	4
LPG/PNG	5
Electricity	6
Bio-gas	7
Solar	8
Any other	Specify
No Cooking	0

10. Usually on any day how many hours do you usually go without electricity?

No cuts	1
Less than one hour	2
1-4 hours	3
4-8 hours	4
8-12 hours	5
More than 12 hours	6
No Access	7

11. Do you have own mobile phone?

Yes	1
No	2

12. Do you have access to internet?

Yes, by telephone or mobile device	1
Yes, Broadband Wifi at home	2
Yes, at a location just outside my home	3
Yes, other connection at home	4
No access to internet	5

13. Could you please let us know whether you have access to following financial services? [\[Multiple response\]](#)

Bank Account	1
Loans from Bank/Financial Institutions	2
Savings/deposit	3
Digital payment (Debit Card, Credit, UPI, Net banking)	4
Health insurance	5
Life insurance	6
Agricultural insurance	7
None of the above	8
Other	[specify]

14. Has anybody in your household migrated out of this village to other city in last 3 years?

Responses	Male	Female	Age	Reasons for migration
Yes				<a href="#">Drop down list of reasons-</a> <a href="#">[Select most appropriate]</a>



- 26. Livelihood/income
- 27. Education
- 28. Conflict
- 29. Marriage
- 30. Others

No

15. What kind of toilet facility do members of your household usually use?

Flush to piped sewer system	1
Flush to septic tank	2
Flush to pit latrine	3
Flush to somewhere else	4
Flush, don't know where	5
Ventilated improved	6
Pit (vip)/biogas latrine	7
Pit latrine with slab	8
Pit latrine without slab/	9
Open pit	10
Twin pit/composting toilet	11
Dry toilet	12
No facility/uses open space or field	13
Other	[Specify]

16. What type of drainage system connected to your household?

Open Kutcha	1
Open Pucca	2
Covered Pucca	3
Underground	4
No drainage	5

17. What is the **main source** of drinking water for members of your household? [SINGLE CODE]

Piped water into Dwelling	1
Piped water to yard/compound	2
Public tap/stand pipe	3
Tube well/Bore well	4
Protected Dug well	5
Unprotected Dug well	6
Protected Spring	7
Unprotected Spring	8
Rain water	9
Tanker truck	10
Cart with Small Tank	11
Surface Water (River/Dam/Lake/pond/Canal/Irrigation)	12
Bottled water	13



Community RO plant	14
Other	[Specify]

S1. Can you please tell me the reason for using the drinking water from **[source in Q17)]?** [Capture spontaneously then probe] [Multiple options possible]

	Spontaneous [Do not read options]	Probe [Read options]
Easily available	1	1
Water is clean	2	2
Water tastes good	3	3
Other	[specify]	
None of the above	4	4

S2. Is the water collected from the **[Main source in Q17]** sufficient for daily needs?

Yes, always sufficient	3
Sometimes not sufficient	2
Insufficient	1
Don't know	98

S3. In the last month, for how many days was drinking water from **[Main source]** unavailable when needed?

Number of days	[ALLOW 0 to 30]
Don't know	

S4. Where is the **[MAIN WATER SOURCE (IN Q17)]** located? [IF MAINWATER SOURCE IS PIPE WATER INTO DWELLING ALLOW ONLY Option 1 AND IF PIPE WATER INTO YARD/COMPOUND ALLOW ONLY Option 2]

In this dwelling	1
In own Yard/plot	2
Delivered to dwelling	3
About 100 meters	4
More than 100 meters, less than 300 meters	5
More than 300 meters, less than 500 meters	6
More than 500 meters	7
Don't know	98

18. Who usually goes to the **[main source in Q17]** to fetch water for your household?

Adult woman	1
Adult man	2
Female Child (Under 15 years)	3
Male Child (Under 15 years)	4
Other	[Specify]
I don't know who goes to fetch water in my house	5

19. How long does it take to go to the **[Main water Source in Q17]**, get water and come back in one trip?

Time taken in Minutes	
Delivered to Dwelling	00
On the premises	97
Don't know	98



## Health:

### Now we would like to discuss about the health of family members

S18. Did you or anyone above 5 years in your household suffer from the following in last 1 year? [IF CHILDREN BELOW 5 YEARS IN HOUSE Check QD4] [Multiple option 1 to 5]

	In last 1 year
Diarrhoea	1
Jaundice	2
Cholera	3
Typhoid	4
Malaria	5
Don't remember	98

S19. Did any child below 5 years in your household suffer from the following in last 1 year? [IF CHILDREN BELOW 5 YEARS IN HOUSE Check Qd4] [Multiple response 1 to 5 ]

	In last 1 year
Diarrhoea	1
Jaundice	2
Cholera	3
Typhoid	4
Malaria	5
Don't remember	98

20. What is the birth location of [youngest child (Check QD4)] in your household? [Readout options]

At marital or maternal home alone/with family	1
At home with Skilled Birth Attendant	2
At the nearest PHC	3
At the CHC/District hospital	4
At a private hospital	5
Other	[Specify]

21. Can you please tell me approximate amount spent on health including medicines, tests and treatment for household members in last one year?

Amount in Rupees	[Allow entry]
No-one fell ill	1
Don't know	98

22. [IF Provided the amount spent IN Q21] Could you please tell me the source of money? [Read options]  
[Multiple option possible]

Own saving	1
Relatives/friends	2
Loan from money lender	3
Loan from Bank	4
Insurance	5
Other	[Specify]

## Module B: Agricultural Practices

23. Do you own any agricultural land?



Own land	1
Taken on lease	2
Working on other's land	3

24. What is the size of total agricultural land that you own? [Q23=1/2] [allow Decimal]

..... Acre

25. What is the total area of agricultural land that you use for cultivation in last 3 cropping cycle? [Should be less than or equal to Q24] [If 23=1/2] [Allow Decimal]

..... Acre

S5. Usually what is your system of farming in your existing land holding?

Mono cropping	1
Multiple cropping	2
Integrated/diversified farming system (Combination of crop, livestock, and fish production)	3

S8. [If S5=1] are you willing to change the cropping pattern?

Yes	1
No	2

S9. [If S8=2] can you please tell me reason for not willing to change cropping pattern?

Reasons	Spontaneous [Do not Read options]	Probe [Read options]
This is profitable	1	1
Water is not available throughout year	2	2
Lack knowledge about other cropping patter	3	3
Lack input/resources for crop rotation	4	4
Other	[Specify]	[Specify]
None of the above	5	

S23. What is the source of water for irrigation?

Surface water [River/stream]	1
Surface water [Farm Pond]	2
Ground water	3
Rain water	4
Other	[Specify]

S10. Can you please tell me the reason for using the water for irrigation from [source(S23)]? [Capture spontaneously then probe] [Multiple options possible]

	Spontaneous [Do not Read options]	Probe [Read options]
Easily available	1	1
Available throughout the year	2	2
Other	[specify]	[specify]
None of the above	3	



S11. Are you currently using or have you ever used treated or untreated waste water for irrigation?

- Yes 1
- No 2

S12. If government makes it mandatory to use treated waste water, will you be willing to use the same?

- Yes 1
- No 2

S13. [If no (If S11=1 and S12=2),] Have you faced any challenges while using the same? [Multiple response]

- Water smells 1
- Fear of losing crops 2
- Hampering crop production 3
- Difficult to manage 4
- Other [Specify]

26. Usually in one annual cycle, for how many months are you engaged in agriculture/ farm related activities?

- Through-out the year 12
- Number of months (if not whole year) .....

**Module C: Planning and processes**

27. Was there any consultation meeting organized with the farmers for planning activities under WDC scheme?

- Yes 1
- No 2
- Don't Know 98

28. If yes (If Q27=1), have you attended any meeting for planning of activities under WDC?

- Yes 1
- No 2

**Module D: Work/activities undertaken under WDC**

29. Can you please provide the activities undertaken **on your farm land** under Watershed Development Component scheme? [Ask spontaneously then probe] [IF NONE, OPTIONS 1 to 17 and [Other] should not be allowed]

	Spontaneous [Do not Read options]	Probed [Read options]
Improvement in water table in tube well / dug well / ground water	1	1
Rejuvenation of groundwater structures (tube well / dug well / hand pumps)	2	2
Wasteland converted to cultivable land	3	3
Improvement in forest cover (afforestation)	4	4
Measures to increase the duration of water flow in streams / rivers during the year	5	5
Restoration at catchment area through afforestation, Staggered trenching etc.	6	6



Drainage line treatment	7	7
Water harvesting structure	8	8
Nursery	9	9
Soil and moisture conservation activities	10	10
Livestock development activities (bee keeping, sericulture, poultry)	11	11
Fisheries	12	12
Crop demonstration	13	13
Bio-fuel plantations	14	14
Fodder cultivation	15	15
Milch cattle distribution	16	16
Establishment of milk cooperatives	17	17
Other	[Specify]	[Specify]
None	15	15

30. Is there any other assistance required in on-farm activities under the WDC scheme?

Yes	1
No	2

31. If, Yes, can you please specify the required assistance on your farm land(If Q30=1)?

32. What are the activities undertaken **on common property** under Watershed Development Component scheme? [Ask spontaneously then probe] [IF NONE, OPTIONS 1 to 17 and [Other] should not be allowed]

	Spontaneous [Do not Read options]	Probed [Read options]
Improvement in water table in tube well / dug well / ground water	1	1
Rejuvenation of groundwater structures (tube well / dug well / hand pumps)	2	2
Wasteland converted to cultivable land	3	3
Improvement in forest cover (afforestation)	4	4
Measures to increase the duration of water flow in streams / rivers during the year	5	5
Restoration at catchment area through afforestation, Staggered trenching etc.	6	6
Drainage line treatment	7	7
Water harvesting structure	8	8
Nursery	9	9
Soil and moisture conservation activities	10	10
Livestock development activities (bee keeping, sericulture, poultry)	11	11
Fisheries	12	12
Crop demonstration	13	13
Bio-fuel plantations	14	14



Other	[Specify]	[Specify]
None	15	15

### Module E: Maintenance and Fees

33. In case of any breakdown in the infrastructure created under WDC scheme, who is responsible for maintenance?

Association	1
Contractor	2
Implementing agency	3
Others	[specify]
Don't know	98

34. Is there any association formed under WDC scheme for repair and maintenance of infrastructure created under the scheme? [IF Q33 IS NOT 1]

Yes	1
No	2
Don't know	98

35. If yes, (If Q34/Q33=1) are you a member of any association working for repair and maintenance of infrastructure created under WDC scheme?

Yes	1
No	2

36. Is there a watershed development Fund?

Yes	1
No	2
Don't know	98

37. Is the fund available adequate for operation and management of the infrastructure under scheme (If Q36=1)?

Yes	1
No	2
Don't know	98

38. What is/are the source/sources of funding for watershed development? [Multiple response]

Contribution by villagers	1
Government	2
Other	[Specify]
Don't know	98

39. Do you give any user fees to Watershed Development Fund (If Q36=1)?

Yes	1
No	2

40. If yes, can you tell me how much do you pay annually (If Q39=1)?

In rupees

41. If yes (If Q39=1), Is the current fees appropriate?



		Code
High		1
Low		2
Appropriate		3
S20. Are you paying currently for water for agriculture?		
Yes	1	
No	2	
S21. If yes (If S20=1),, how frequently are you paying?		
Monthly	1	
Quarterly	2	
Bi Yearly	3	
Yearly	4	
S22. How much are you paying [take response from previous question S21] In Rupees		
<b>S14.</b> Are you paying currently for drinking water?		
Yes	1	
No	2	
S15. If yes (If S14=1), how frequently are you paying?		
Monthly	1	
Quarterly	2	
Bi yearly	3	
Yearly	4	
S16. How much are you paying [take response from previous question S12]? In Rupees		
S17. If there is increase in fees, under what condition will you be ready to pay more for drinking water? [Multiple option]		
If water will be available through-out the year	1	
If there is improvement in quantity of water	2	
If there is improvement in quality of water	3	
If water is easily accessible with piped water supply near the house	4	
If water is easily accessible with household tap connection	5	
Other	[Specify]	
Do want to pay at all	10	

### Module E: Training

42. Have you received any training under the scheme for operation and maintenance of infrastructure created?		
Yes, attended	1	
No, Not attended	2	
No training organized	3	



43. Have you attended any training/orientation on following topics (If Q42=1)? [Randomize topics]

Topics	Yes	No
Inter cropping	1	2
Crop varieties	1	2
Contour cultivation	1	2
Crop management	1	1

44. How satisfied are you with the quality of works executed through watershed development activities? Are you [Read options]

Satisfied	1
Neither satisfied nor dissatisfied	3
Dissatisfied	4
Don't know [Do not read]	98

### Module E: Satisfaction

45. How satisfied are you with the following supports from government institutions?

	Equipment	Financial support	Information on scheme
Satisfied	1	1	1
Neither satisfied nor dissatisfied	2	2	2
Dissatisfied	3	3	3
Don't know [Do not read]	98	98	98

46. How was the process of beneficiary selection under WDC scheme? [Read options] [2 and 3 multiple option possible]

Easy and simple	1
Time consuming	2
Complicated	3
Don't know	98

### Module E: Effectiveness and Impact of WDC

47. What are the benefits in agriculture as a result of WDC activities? [Capture spontaneously than probe]

Benefit	Spontaneous [Read options]	Probe [Do not read options]
Increase in agriculture land	1	1
Increase in horticulture land	2	2
Increase in land forest and plantation	3	3
Increase in irrigated land	4	4
Able to do multiple crops [Don't ask if S5=1]	5	5
Increase in crop yield	6	6



Increase in number of crops (improved crop intensity)	7	7
Covering more areas with same quantity of water (Improved water intensity)	8	8
Improved land productivity	9	9
Other	[Specify]	[Specify]
None	10	

48. [If increase in irrigated land(If Q47=1)] Can you please tell me the land covered under irrigation in your farm before the WDC activities and now (in acres)?

Before (in acres) Now (in acres)

49. [If increase in crop intensity(If Q47=7)] Can you please tell me the average number of crops cultivated annually on your land before WDC activities and now?

Before Now

Number of crops in a year

50. I would like to know the crops cultivated by you in last cropping cycle. I will read options, Please let me know what are the primary and secondary crops cultivated by you and what are the new crops added in last three years?

Crop	Primary Crop First code primary crop	Secondary Crop For this, only those not mentioned in primary crops should appear	New crop added in last 3 years Show all list
Vegetables	1	1	1
Paddy	2	2	2
Maize	3	3	3
Bajra	4	4	4
Ragi	5	5	5
Soyabean	6	6	6
Groundnut	7	7	7
Cotton	8	8	8
Wheat	9	9	9
Mustard	10	10	10
Grams (Red gram, black gram, green gram, Channah etc)	11	11	11
Lentil	12	12	12
Fruits	13	13	13
Flowers	14	14	14
Sugarcane	15	15	15
Other	[Specify]	[Specify]	[Specify]

S7. [Farmers growing water intensive crops like paddy, cotton, sugar cane, soya, wheat in Q50] Can you please tell me the reason for growing [crops]?



Reasons	Spontaneous [Do not read options]	Probe [Read options]
Profitable	1	1
Demand is more	2	2
There is no scarcity of water]	3	3
Lack knowledge to grow other crops	4	4
This is a traditional practice	5	5
Other	[Specify]	[Specify]

51. Has there been change in availability of groundwater level post watershed development activities as a result of watershed development?

Increased	1
Decreased	2
No change	3
Don't know	98

52. [If increased ground water level Q51=1 and If not doing paddy, Cotton, Soya, wheat and sugarcane currently in Q50], would you prefer to shift to more water-intensive crops like paddy or sugarcane?

Yes, I would like to take up water intensive-crops such as paddy and sugarcane	1
No, I would like continue with traditional crops that I have been cultivating	2

53. Has there been change in availability of surface water during summer season as a result of watershed development?

Increased	1
Decreased	2
No change	3
Don't know	98

54. Can you tell me number of wells constructed and recharged under watershed development activities?

	Number	Don't know
New Well Constructed		98
Number of well recharged		98

55. Has there been change in availability of quality drinking water as a result of watershed development?

Increased	1
Decreased	2
No change	3
Don't know	98

56. Has there been change in grazing land as a result of watershed development?

Increased	1
-----------	---



Decreased	2
No change	3
Don't know	98

57. I would like to know the change in soil quality as a result of watershed development, Can you please tell me if [Read soil quality options] has [read options]?

Social Quality	Increased	Decreased	No Change	Don't know [Do not read]
Soil Fertility	1	2	3	98
Soil Erosion	1	2	3	98

58. Has there been change in migratory bird population as a result of watershed development?

Increased	1
Decreased	2
No change	3
Don't know	98

59. Has there been change in revenue from forest land as a result of watershed development?

Increased	1
Decreased	2
No change	3
Don't know	98

60. Has there been any change in your HH income as a result of watershed development?

Increased	1
Decreased	2
No change	3
Don't know	98

61. We understand that your community has adopted micro irrigation. I will read out the options, Could you please tell us if there is any increase, decrease or no change in your community due to watershed development?

	Increase	No change/remain same	Decrease	Don't know
Income				
Expenditure in agriculture				
employment opportunities				
Housing quality				
Incidence of migration				

62. Can you please tell me if any of the following income generation activities carried out in your village since initiation of watershed development activities?

	Yes	No
Wage earning through community asset creation such as community building, village road	1	2



Cottage industry (Bamboo, cane, wood craft etc)

1

2

Now we would like to know issues in the scheme implementation and your suggestions

63. Have you experienced any hurdles in accessing benefits under the scheme?

Yes

1

No

2

64. If yes(If Q63=1), Can you specify the hurdles in accessing benefits?

65. I would like to know to the coverage of farmers under scheme benefit. Is it [\[Read options\]](#)

Accessible to all farmers in the village

1

Accessible to some farmers in the village

2

Accessible to few farmers in the village

3

Don't know

98

66. Is there equitable distribution of water to all farmers?

Yes

1

No

2

MOBILE: Can you please give me your mobile number?

Yes.....

Refused

.....Thank you for your time.....



## Conservation of Natural Resources and Ecosystems

### Screening and consent:

My Name is .....from Ipsos Public Affairs, a research company. We regularly do research to understand people's perception and attitudes that can shape development programs and policies. Currently we are conducting a study on behalf of NITI Aayog on different programmes and schemes. We are talking to different people across India to understand their life at home and work/occupation, and their community at large.

If you choose to participate, we assure that we will handle information provided by you carefully. The complete data base including your name and phone number will be shared with NITI Aayog. There is limited risk in this survey. You will also not get any direct benefit by participating in this survey, however, your participation will be useful for the research study.

Further participating in this survey will be your voluntary choice. You may decline from answering any question and may also ask question.

We also want to mention that your participation is important for us and your responses will be valuable for us.

A1. Do you have any questions?

1. Yes
2. No

A2. Do you consent to participate?

1. Yes
2. No - [If No, Thanks and Terminate](#)

A3. For quality check purpose, we would like to record this interview with your permission? Do you consent to record the interview?

1. Yes
2. No

### IDENTIFICATION:

No.	Question	Response
I1	Name of the state	<a href="#">Dropdown will be provided</a>
I1A	Name of the Project	<a href="#">Dropdown linked to state will be provided</a>
I1B	Name of the scheme	<a href="#">Drop down of schemes mapped with selection of state</a>
I2	Name of the District	<a href="#">Dropdown linked to state will be provided</a>
I3	Name of Panchayat	<a href="#">Dropdown linked District will be provided</a>
I4	Name of the Village	<a href="#">Dropdown linked to Panchayat will be provided</a>
I5	Landmark and address of the household	
I6	Name of the respondent	

### Module: A Household member details

1. Enter gender by observation

- |        |   |
|--------|---|
| Male   | 1 |
| Female | 2 |

2. Can you please tell me your age?



Response.....

3. How many family members are currently staying in this household?  
 [Number of members staying and eating in this household continuously for last 6 months]

Number of household members below 5 years [Specify]  
 Number of household members above 5 years [Specify]

4. What is the caste/ tribe of the HH?

- Caste 1
- Tribe 2
- No Caste/ Tribe 3
- Don't know 4

5. Is this a scheduled caste, a scheduled tribe, other backward class or none of them? *If Q4=1/2*

- Scheduled Tribes 1
- Scheduled Castes 2
- Other Backward Classes 3
- None of them 4
- Don't know 9

6. I would like to know about the details of household members. Let us start from the eldest member of the household in descending order. I will ask about their personal, educational and occupation details?

	D1	D2	D3	D4	D5	D6	D7	D8	D9
<b>Index No.</b>	<b>Name of household members (WRITE SHORT NAME)</b>	<b>Residential status</b> Resident... 1 Non-resident..2	<b>Gender</b> Male..... 1 Female....2	<b>Age in completed years</b>  (CODE "00" IF LESS THAN 12 MONTHS)	<b>Marital status</b> <b>Do not ask if age below 15 years</b> Currently Married.1 Widow / Widower.2 Divorced..... .....3 Separated..... .... 4 Never married....5 Not Stated.....6 [If applicable]	<b>Education attainment</b> <b>(Do not ask if age below 5 years)</b>  37. Illiterate e 38. Primary 39. Upper primary (6/7 standard 40. Secondary (9/10 standard) 41. Senior secondary (11 <sup>th</sup> and	<b>If children between 3 to 6 years whether going to Anganwadi (Ask if age of the member is between 3 to 6)</b>  <b>If children between 6 to 15 years whether going to school</b>	<b>Main occupation</b>  (On the basis of time spent)  (Refer codes	<b>Is there any disability?</b>  (Options: Physical/mental/No)



						12 <sup>th</sup> Standard/di ploma/ITI) 42. Gradua tion and above	(Ask if age of the member is between 6 to 15)		
01									
02									
<b>Codes for Occupation (D8)</b>									
Agriculture		1		Manufacturing, industrial (owner				11	
Collection of forest products		2		Unpaid family worker				12	
Wage labour		3		Retired and earning pension				13	
Contractual worker		4		Homemaker.				14	
Rickshaw puller/auto driver/driver		5		Student .				15	
Salaried employee in government or PSU		6		Social work				16	
Salaried employee in private		7		Unemployed				17	
Self-employed professional		8		Child below 6 years				18	
Self-employed worker (home based worker		9		None				19	
Retail / wholesale business		10		Other (specify				99	

7. If anyone between 6 to 15 years not going to school, ask why the child is not going to school? IF D4= 6 to 15 and D7 =NO

Could not afford education expenses	1
Required for work in household activities/family business	2
Further education not considered necessary	3
Required for outside work	4
Not interested in studies / Repeated failures	5
Child got ill	6
School is too far away	7
Got married	8
Discrimination with child in the school by students / teachers	9
There is no separate toilet facility for girls	10
No toilet facility in the school	11
Never Enrolled	12
Other (specify)	99

8. Can you please let us know the ownership of household?

Owns the dwelling	1
Rents the dwelling	2
Uses without paying rent	3
No dwelling	4

9. Can you please tell me what is the primary source of fuel for cooking in last 30 days for your household?



Firewood	1
Cow dung cake/Crop Residue	2
Coal/Lignite/Charcoal	3
Kerosene	4
LPG/PNG	5
Electricity	6
Bio-gas	7
Solar	8
Any other	Specify
No Cooking	0

10. Usually on any day how many hours do you usually go without electricity?

No cuts	1
Less than one hour	2
1-4 hours	3
4-8 hours	4
8-12 hours	5
More than 12 hours	6
No Access	7

11. Do you have own mobile phone?

Yes	1
No	2

12. Do you have access to internet?

Yes, by telephone or mobile device	1
Yes, Broadband Wifi at home	2
Yes, at a location just outside my home	3
Yes, other connection at home	4
No access to internet	5

13. Could you please let us know whether you have access to following financial services? [\[Multiple response\]](#)

Bank Account	1
Loans from Bank/Financial Institutions	2
Savings/deposit	3
Digital payment (Debit Card, Credit, UPI, Net banking)	4
Health insurance	5
Life insurance	6
Agricultural insurance	7
None of the above	8
Other	[specify]

14. Has anybody in your household migrated out of this village to other city in last 3 years?

Responses	Male	Female	Age	Reasons for migration
Yes				<a href="#">Drop down list of reasons-</a> <a href="#">[Select most appropriate]</a> 31. Livelihood/income 32. Education



- 33. Conflict
- 34. Marriage
- 35. Others

No

15. What kind of toilet facility do members of your household usually use?

Flush to piped sewer system	1
Flush to septic tank	2
Flush to pit latrine	3
Flush to somewhere else	4
Flush, don't know where	5
Ventilated improved	6
Pit (vip)/biogas latrine	7
Pit latrine with slab	8
Pit latrine without slab/	9
Open pit	10
Twin pit/composting toilet	11
Dry toilet	12
No facility/uses open space or field	13
Other	[Specify]

16. What type of drainage system connected to your household?

Open Kutcha	1
Open Pucca	2
Covered Pucca	3
Underground	4
No drainage	5

17. What is the **main source** of drinking water for members of your household? [SINGLE CODE]

Piped water into Dwelling	1
Piped water to yard/compound	2
Public tap/stand pipe	3
Tube well/Bore well	4
Protected Dug well	5
Unprotected Dug well	6
Protected Spring	7
Unprotected Spring	8
Rain water	9
Tanker truck	10
Cart with Small Tank	11
Surface Water (River/Dam/Lake/pond/Canal/Irrigation)	12
Bottled water	13
Community RO plant	14
Other	[Specify]



18. Who usually goes to the [main source in Q17] to fetch water for your household?

- Adult woman 1
- Adult man 2
- Female Child (Under 15 years) 3
- Male Child (Under 15 years) 4
- Other [Specify]
- I don't know who goes to fetch water in my house 5

19. How long does it take to go to the [Main water Source in Q17], get water and come back in one trip?  
Time taken in Minutes

- Delivered to Dwelling 00
- On the premises 97
- Don't know 98

20. What is the birth location of [youngest child] in your household? [Readout options]

At marital or maternal home alone/with family	1
At home with Skilled Birth Attendant	2
At the nearest PHC	3
At the CHC/District hospital	4
At a private hospital	5
Other	[Specify]

21. Can you please tell me approximate amount spent on health including medicines, tests and treatment for household members in last one year?

- Amount in Rupees [Allow entry]
- No-one fell ill 1
- Don't know 98

22. [IF Provided the amount spent IN Q21] Could you please tell me the source of money? [Read options]

[Multiple option possible]

- Own saving 1
- Relatives/friends 2
- Loan from money lender 3
- Loan from Bank 4
- Insurance 5
- Other [Specify]

### Module C: Awareness and participation

23. Do you know the benefits which you can avail under Conservation of natural resources scheme?



Yes, to a great extent	1
To some extent	2
Very little	3
Not at all	4

24. Which of the following benefits have been available to you under Conservation of natural resources scheme? [Multiple response 1 to 6 and others]

Improved health-care	1
Supply of drinking water	2
Establishment of new schools	3
Small scale household industries	4
Eco-tourism-based employment	5
Capacity building/training	6
Others	[Specify]
None of the above	8

25. Was there any meeting organized prior to implementation of scheme to understand need of the community?

Yes	1
No	2
Don't know	98

26. If yes, [Q25=1] have you or any member of your household attended the meeting?

Yes, I attended	1
Another member of HH attended	2
No-one from my HH attended	98

27. [IF 25=1] How many consultation meetings on understanding need did you or any other member of your HH attended?

Number of meeting	
-------------------	--

28. Was there any meeting organized on formulation of conservation plans?

Yes	1
No	2
Don't know	98

29. If yes, [IF Q28=1] have you or any member of your household attended the meeting on conservation plan?

Yes, I attended	1
Another member of HH attended	2
No-one from my HH attended	98

30. [IF Q28=1 ] How many review meetings did you or any other member of your HH attended?

Number of meeting	
-------------------	--



31. Was there any training/workshop organized under Conservation of natural resources scheme?

Yes	1
No	2
Don't know	98

32. If yes, [Q31=1] have you or any member of your household attended any training?

Yes, I attended	1
Another member of HH attended	2
No-one from my HH attended	98

33. If no, [Q31=2] can you please tell me reason for not attending training?

Did not know about the training	1
Training place was far from home	2
Not allowed to participate	3
Not useful	4
Other	[specify]

34. [IF Q31=1] What are the topics covered in the training?

	Spontaneous [Do not read options]	Probe [Read options]
Forest management	1	1
Improving eco-system	2	2
Water management	3	3
Fire awareness	4	4
Use of local produce	5	5
Eco-friendly practices	6	6
Other	[specify]	
Do not remember	98	98

### Module C: Livelihood and basic amenities

35. Has there been any change in your livelihood practices due to conservation activities?

Yes	1	
No	2	
Can't say	98	

36. [If yes Q35=1] Can you please tell me effect of alternative livelihood on your current income in comparison to income before implementation of scheme? [Read options]

Increased	1
Decreased	2
No change	3



37. Has there been any change in fishing practices since implementation of conservation activities? [Read options]

Earlier was not involved in fish farming, now started raring	1
Has fish farm earlier, now increased	2
Reduced fish farming	3
No change, same as earlier	4
Not doing any fish farming	5

38. Are there any small-scale industries currently operational in your area?

Yes	1
No	2

39. I will read out some of the necessary facilities. Please let us know if you have access to these facilities?

	Yes	No
Drinking water		
Health facility		
Primary education		

### Module C: Conflict

40. Are there any incidence of conflict with forest officials in last 2 years?

Yes	1
No	2

41. [IF Q40=1] What is/are the reason/reasons for conflict?

Use of forest products	1
Forest fire	2
Wildlife management	3
Other	[Others]

42. [IF Q40=1] How much time did it take to resolve the issues?

Few days	1
Few months	2
More than 6 months	3
More than a year	4
Not yet resolved	5

### Module D: Environment

43. Has there been any change in plant and animal population post implementation of Conservation of natural resources scheme?



Increased	1
Decreased	2
No change	3

44. Has there been any change in plant varieties post implementation of Conservation of natural resources scheme?

More varieties	1
Less varieties	2
No change	3

45. I will read out some environmental aspects. Please let me know whether there is an improvement, deterioration or on change in the environmental aspect post implementation of Conservation of natural resources scheme?

	Improvement	Deterioration	No change
Green cover	1	2	3
Air Quality	1	2	3
Water Quality	1	2	3
Bio-diversity	1	2	3
Natural resources	1	2	3

MOBILE: CAN YOU PLEASE TELL ME YOUR MOBILE NUMBER

Yes.....

Refused

\*\*\*Thank you for your time\*\*\*

## Integrated Development of Wildlife Habitats

### Screening and consent:

My Name is .....from Ipsos Public Affairs, a research company. We regularly do research to understand people's perception and attitudes that can shape development programmes and policies. Currently we are conducting a study on behalf of NITI Aayog on different programmes and schemes. We are talking to different people across India to understand their life at home and work/occupation, and their community at large.

If you choose to participate, we assure that we will handle information provided by you carefully. The complete data base including your name and phone number will be shared with NITI Aayog. There is limited risk in this survey. You will also not get any direct benefit by participating in this survey, however, your participation will be useful for the research study.



Further participating in this survey will be your voluntary choice. You may decline from answering any question and may also ask question.

We also want to mention that your participation is important for us and your responses will be valuable for us.

A1. Do you have any questions?

1. Yes
2. No

A2. Do you consent to participate?

1. Yes
2. No- [If No, Thanks and Terminate](#)

A3. For quality check purpose, we would like to record this interview with your permission? Do you consent to record the interview?

3. Yes
4. No

**IDENTIFICATION:**

No.	Question	Response
I1	Name of the state	<a href="#">Dropdown will be provided</a>
I1A	Name of the Project	<a href="#">Dropdown linked to state will be provided</a>
I1B	Name of the scheme	<a href="#">Drop down of schemes mapped with selection of state</a>
I2	Name of the District	<a href="#">Dropdown linked to state will be provided</a>
I3	Name of Panchayat	<a href="#">Dropdown linked District will be provided</a>
I4	Name of the Village	<a href="#">Dropdown linked to Panchayat will be provided</a>
I5	Landmark and address of the household	
I6	Name of the respondent	

**Module: A Household member details**

1. Enter gender by observation

- |        |   |
|--------|---|
| Male   | 1 |
| Female | 2 |

2. Can you please tell me your age?

Response.....

3. How many family members are currently staying in this household?

[Number of members staying and eating in this household continuously for last 6 months]

Number of household [Specify]  
members below 5 years

Number of household [Specify]  
members above 5 years

4. What is the caste/ tribe of the HH?

- |                 |   |
|-----------------|---|
| Caste           | 1 |
| Tribe           | 2 |
| No Caste/ Tribe | 3 |
| Don't know      | 4 |



5. Is this a scheduled caste, a scheduled tribe, other backward class or none of them? If Q4=1/2

- Scheduled Tribes 1
- Scheduled Castes 2
- Other Backward Classes 3
- None of them 4
- Don't know 9

6. I would like to know about the details of household members. Let us start from the eldest member of the household in descending order. I will ask about their personal, educational and occupation details?

	D1	D2	D3	D4	D5	D6	D7	D8	D9
<b>Index No.</b>	<b>Name of household members (WRITE SHORT NAME)</b>	<b>Residential status</b> Resident... 1 Non-resident...2	<b>Gender</b> Male..... 1 Female....2	<b>Age in completed years</b>  (CODE "00" IF LESS THAN 12 MONTHS)	<b>Marital status</b> <b>Do not ask if age below 15 years</b> Currently Married.1 Widow / Widower.2 Divorced..... .....3 Separated..... .... 4 Never married....5 Not Stated.....6 [If applicable]	<b>Education attainment</b> <b>(Do not ask if age below 5 years)</b>  43. Illiterate e 44. Primary 45. Upper primary (6/7 standard 46. Secondary (9/10 standard) 47. Senior secondary (11 <sup>th</sup> and 12 <sup>th</sup> Standard/diploma/ITI) 48. Graduation and above	<b>If children between 3 to 6 years whether going to Anganwadi (Ask if age of the member is between 3 to 6)</b>  <b>If children between 6 to 15 years whether going to school (Ask if age of the member is between 6 to 15)</b>	<b>Main occupation</b>  (On the basis of time spent)  (Refer codes)	<b>Is there any disability?</b>  (Options: Physical/mental/No)
01									
02									

**Codes for Occupation (D8)**

Agriculture	1		Manufacturing, industrial (owner	11
Collection of forest products	2		Unpaid family worker	12
Wage labour	3		Retired and earning pension	13
Contractual worker	4		Homemaker.	14
Rickshaw puller/auto driver/driver	5		Student .	15
Salaried employee in government or PSU	6		Social work	16



Salaried employee in private	7	Unemployed	17
Self-employed professional	8	Child below 6 years	18
Self-employed worker (home based worker	9	None	19
Retail / wholesale business	10	Other (specify	99

7. If anyone between 6 to 15 years not going to school, ask why the child is not going to school? IF D4= 6 to 15 and D7 =NO

Could not afford education expenses	1
Required for work in household activities/family business	2
Further education not considered necessary	3
Required for outside work	4
Not interested in studies / Repeated failures	5
Child got ill	6
School is too far away	7
Got married	8
Discrimination with child in the school by students / teachers	9
There is no separate toilet facility for girls	10
No toilet facility in the school	11
Never Enrolled	12
Other (specify)	99

8. Can you please let us know the ownership of household?

Owns the dwelling	1
Rents the dwelling	2
Uses without paying rent	3
No dwelling	4

9. Can you please tell me what is the primary source of fuel for cooking in last 30 days for your household?

Firewood	1
Cow dung cake/Crop Residue	2
Coal/Lignite/Charcoal	3
Kerosene	4
LPG/PNG	5
Electricity	6
Bio-gas	7
Solar	8
Any other	Specify
No Cooking	0

10. Usually on any day how many hours do you usually go without electricity?

No cuts	1
Less than one hour	2
1-4 hours	3
4-8 hours	4
8-12 hours	5
More than 12 hours	6
No Access	7

11. Do you have own mobile phone?



Yes				1
No				2
12. Do you have access to internet?				
Yes, by telephone or mobile device				1
Yes, Broadband Wifi at home				2
Yes, at a location just outside my home				3
Yes, other connection at home				4
No access to internet				5
13. Could you please let us know whether you have access to following financial services? [Multiple response]				
Bank Account				1
Loans from Bank/Financial Institutions				2
Savings/deposit				3
Digital payment (Debit Card, Credit, UPI, Net banking)				4
Health insurance				5
Life insurance				6
Agricultural insurance				7
None of the above				8
Other				[specify]
14. Has anybody in your household migrated out of this village to other city in last 3 years?				
Responses	Male	Female	Age	Reasons for migration
Yes				Drop down list of reasons- [Select most appropriate] 36. Livelihood/income 37. Education 38. Conflict 39. Marriage 40. Others
No				
15. What kind of toilet facility do members of your household usually use?				
Flush to piped sewer system				1
Flush to septic tank				2
Flush to pit latrine				3
Flush to somewhere else				4
Flush, don't know where				5
Ventilated improved				6
Pit (vip)/biogas latrine				7
Pit latrine with slab				8
Pit latrine without slab/				9
Open pit				10
Twin pit/composting toilet				11
Dry toilet				12
No facility/uses open space or field				13
Other				[Specify]



16. What type of drainage system connected to your household?

- Open Kutcha 1
- Open Pucca 2
- Covered Pucca 3
- Underground 4
- No drainage 5

17. What is the **main source** of drinking water for members of your household? [SINGLE CODE]

- Piped water into Dwelling 1
- Piped water to yard/compound 2
- Public tap/stand pipe 3
- Tube well/Bore well 4
- Protected Dug well 5
- Unprotected Dug well 6
- Protected Spring 7
- Unprotected Spring 8
- Rain water 9
- Tanker truck 10
- Cart with Small Tank 11
- Surface Water 12
- (River/Dam/Lake/pond/Canal/Irrigation)
- Bottled water 13
- Community RO plant 14
- Other [Specify]

18. Who usually goes to the [main source in Q17] to fetch water for your household?

- Adult woman 1
- Adult man 2
- Female Child (Under 15 years) 3
- Male Child (Under 15 years) 4
- Other [Specify]
- I don't know who goes to fetch water in my house 5

19. How long does it take to go to the [Main water Source in Q17], get water and come back in one trip?

- Time taken in Minutes
- Delivered to Dwelling 00
  - On the premises 97
  - Don't know 98

20. What is the birth location of [youngest child] in your household? [Readout options]

At marital or maternal home alone/with family	1
At home with Skilled Birth Attendant	2
At the nearest PHC	3
At the CHC/District hospital	4



At a private hospital	5
Other	[Specify]

21. Can you please tell me approximate amount spent on health including medicines, tests and treatment for household members in last one year?

Amount in Rupees	[Allow entry]
No-one fell ill	1
Don't know	98

22. [IF Provided the amount spent IN Q21] Could you please tell me the source of money? [Read options]  
[Multiple option possible]

Own saving	1
Relatives/friends	2
Loan from money lender	3
Loan from Bank	4
Insurance	5
Other	[Specify]

## Module B: Awareness and participation

23. Do you know the benefits of conservation schemes?

Yes, to a great extent	1
To some extent	2
Very little	3
Not at all	4

24. Which of the following benefits have been made available to you under the conservation schemes?

[Multiple response 1 to 6 and others]

Livelihood for conservation activities	1
Eco-tourism-based livelihood	2
Compensation for damage	3
Relocation compensation	4
Capacity building for managing wildlife conflict	5
Others	6
None of the above	7

25. Was there any meeting organized prior to implementation of scheme to understand need of the community?

Yes	1
No	2
Don't know	98



26. [If yes Q25=1] have you or any member of your household attended the meeting?

Yes, I attended	1
Another member of HH attended	2
No-one from my HH attended	98

27. [If Q25=1] How many consultation meeting on understanding need did you or any other member of your HH attend?

Number of meeting	
-------------------	--

28. Was there any meeting organized for formulation of conservation plan?

Yes	1
No	2
Don't know	98

29. [If yes Q28=1] have you or any member of your household attended the meeting on conservation plan?

Yes, I attended	1
Another member of HH attended	2
No-one from my HH attended	98

30. [If Q28=1] How many review meetings did you or any other member of your HH attended?

Number of meeting	
-------------------	--

31. Was there any training/workshop organized under IDWH scheme?

Yes	1
No	2
Don't know	98

32. [If yes Q31=1] have you or any member of your household attended any training?

Yes, I attended	1
Another member of HH attended	2
No-one from my HH attended	98

33. [If Q31=2] can you please tell me reason for not attending training?

Did not know about the training	1
Training place was far from home	2
Not allowed to participate	3
Not useful	4
Other	[specify]

34. [If Q31=1] What are the topics covered in the training?

	Spontaneous [Do not read option]	Probe [Read options]
Forest management	1	1
Conservation of ecosystem	2	2
Livelihood	3	3
Fire awareness	4	4



Use of local materials	5	5
Eco-friendly practices	6	6
Other	[specify]	[specify]
Do not remember	98	

35. Have you relocated in last 5 years from your original village due to the conservation activities?

Yes	1
No	2

36. [If Yes Q35=1] was there any consultation meeting organized prior to relocation?

Yes	1
No	2
Don't know	98

37. [If Yes Q36=1] Have you or any member of your HH attended the consultation meeting?

Yes, I attended	1
Other member of my HH attended	2
No-one attended	3

38. [If Q35=1] How was the process of relocation?

Smooth and systematic	1
Hectic	2
Don't know	98

39. Have you received any compensation for relocation? [IF Q35=1]

Yes	1
No	2

40. [If yes Q39=1] Can you please tell me how much compensation did you receive?

Rupees	
--------	--

41. [If yes Q39=1] was the compensation amount sufficient?

Yes	1
No	2

42. Do you have access to following facilities in current village? [Ask to all]

	Yes	No
Drinking water	1	2
Road connectivity	1	2
Health facility	1	2
Primary education	1	2
Safety	1	2

## Module D: Livelihood



43. Has there been any change in your livelihood practices due to implementation of IDWH scheme?

Yes	1
No	2
Can't say	98

44. [If yes Q43=1] Can you please tell me effect of alternative livelihood on your current income in comparison to income before implementation of scheme? [Read options]

Increased	1
Decreased	2
No change	3

### Module E: Animal Attack and conflict

45. Are there any instances of animal attack in your village since the implementation of IDWH scheme?

Yes	1
No	2

46. [If yes Q45=1] can you please tell me number of attacks occurred in last one year?

Number of attacks	
-------------------	--

47. Has the animal attack caused any damage to your household? IF Q46 is not 0 [Read options]

Loss of Human life	1
Loss of property (house damage)	2
Damages in farm land	3
Other	[Specify]
No damage	4

48. [If any kind of damage occurred IF Q47 is not 4] Have you received any monetary compensation for the same?

Yes	1
No	2

49. [If yes Q48=1] Can you please tell me how much compensation did you receive for the mentioned damage or loss?

In Rupees	[Allow Numeric]
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50. Did the compensation amount sufficient to recover the loss/damage due to animal attack? [IF Q48=1]

Yes	1
No, it was very less	2

51. Has there been any change in incidence of animal attack since implementation of IDWH scheme?

Increased	1
Decreased	2
No change	3



Don't know	98
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52. Is there any incidence of conflict with forest officials in last 2 years?

Yes	1
No	2

53. What is/are the reason/reasons for conflict? [Q52=1]

Use of forest products	1
Forest fire	2
Wildlife management	3
Other	[Others]

54. How much time did it take to resolve the issues? [If Q52=1]

Few days	1
Few months	2
More than 6 months	3
More than a year	4
Not yet resolved	5

## Module F: Environment

55. Has there been any change in plant population due to conservation and protection of wildlife?

Increased	1
Decreased	2
No change	3

56. Has there been any change in plant varieties due to conservation and protection of wildlife?

More varieties	1
Less varieties	2
No change	3

57. I will read out some environmental aspects. Please let me know whether there is an improvement, deterioration or on change in the environmental aspect due to wildlife conservation and protection activities?

	Improvement	Deterioration	No change
Green cover	1	2	3
Air Quality	1	2	3
Water Quality	1	2	3
Bio-diversity	1	2	3
Natural resources	1	2	3
Eco-tourism	1	2	3

MOBILE: CAN YOU PLEASE TELL ME YOUR MOBILE NUMBER

Yes.....

Refused

\*\*\*Thank you for your time\*\*\*



## National Mission for a Green India

### Screening and consent:

My Name is .....from Ipsos Public Affairs, a research company. We regularly do research to understand people's perception and attitudes that can shape development programmes and policies. Currently we are conducting a study on behalf of NITI Aayog on different programmes and schemes. We are talking to different people across India to understand their life at home and work/occupation, and their community at large.

If you choose to participate, we assure that we will handle information provided by you carefully. The complete data base including your name and phone number will be shared with NITI Aayog. There is limited risk in this survey. You will also not get any direct benefit by participating in this survey, however, your participation will be useful for the research study.

Further participating in this survey will be your voluntary choice. You may decline from answering any question and may also ask question.

We also want to mention that your participation is important for us and your responses will be valuable for us.

A1. Do you have any questions?

1. Yes
2. No

A2. Do you consent to participate?

1. Yes
2. No- [If No, Thanks and Terminate](#)

A3. For quality check purpose, we would like to record this interview with your permission? Do you consent to record the interview?

1. Yes
2. No

### IDENTIFICATION:

No.	Question	Response
I1	Name of the state	<a href="#">Dropdown will be provided</a>
I1A	Name of the Project	<a href="#">Dropdown linked to state will be provided</a>



I1B	Name of the scheme	Drop down of schemes mapped with selection of state
I2	Name of the District	Dropdown linked to state will be provided
I3	Name of Panchayat	Dropdown linked District will be provided
I4	Name of the Village	Dropdown linked to Panchayat will be provided
I5	Landmark and address of the household	
I6	Name of the respondent	

**Module: A Household member details**

1. Enter gender by observation

- Male 1
- Female 2

2. Can you please tell me your age?

Response.....

3. How many family members are currently staying in this household?

[Number of members staying and eating in this household continuously for last 6 months]

Number of household members below 5 years [Specify]

Number of household members above 5 years [Specify]

4. What is the caste/ tribe of the HH?

- Caste 1
- Tribe 2
- No Caste/ Tribe 3
- Don't know 4

5. Is this a scheduled caste, a scheduled tribe, other backward class or none of them? *If Q4=1/2*

- Scheduled Tribes 1
- Scheduled Castes 2
- Other Backward Classes 3
- None of them 4
- Don't know 9

6. I would like to know about the details of household members. Let us start from the eldest member of the household in descending order. I will ask about their personal, educational and occupation details?

	<b>D1</b>	<b>D2</b>	<b>D3</b>	<b>D4</b>	<b>D5</b>	<b>D6</b>	<b>D7</b>	<b>D8</b>	<b>D9</b>
--	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------



Index No.	Name of household members (WRITE SHORT NAME)	Residential status Resident... 1 Non-resident...2	Gender Male..... 1 Female....2	Age in completed years  (CODE "00" IF LESS THAN 12 MONTHS)	Marital status <b>Do not ask if age below 15 years</b> Currently Married.1 Widow / Widower.2 Divorced..... .....3 Separated..... .... 4 Never married....5 Not Stated.....6 [If applicable]	Education attainment <b>(Do not ask if age below 5 years)</b>  49. Illiterate e 50. Primary 51. Upper primary (6/7 standard 52. Secondary (9/10 standard) 53. Senior secondary (11 <sup>th</sup> and 12 <sup>th</sup> Standard/diploma/ITI) 54. Graduation and above	If children between 3 to 6 years whether going to Anganwadi <b>(Ask if age of the member is between 3 to 6)</b>  If children between 6 to 15 years whether going to school <b>(Ask if age of the member is between 6 to 15)</b>	Main occupation  (On the basis of time spent)  (Refer codes)	Is there any disability?  (Options: Physical/mental/No)
01									
02									

#### Codes for Occupation (D8)

Agriculture	1		Manufacturing, industrial (owner	11
Collection of forest products	2		Unpaid family worker	12
Wage labour	3		Retired and earning pension	13
Contractual worker	4		Homemaker.	14
Rickshaw puller/auto driver/driver	5		Student .	15
Salaried employee in government or PSU	6		Social work	16
Salaried employee in private	7		Unemployed	17
Self-employed professional	8		Child below 6 years	18
Self-employed worker (home based worker	9		None	19
Retail / wholesale business	10		Other (specify	99

7. If anyone between 6 to 15 years not going to school, ask why the child is not going to school? IF D4= 6 to 15 and D7 =NO

Could not afford education expenses	1
Required for work in household activities/family business	2



Further education not considered necessary	3
Required for outside work	4
Not interested in studies / Repeated failures	5
Child got ill	6
School is too far away	7
Got married	8
Discrimination with child in the school by students / teachers	9
There is no separate toilet facility for girls	10
No toilet facility in the school	11
Never Enrolled	12
Other (specify)	99

8. Can you please let us know the ownership of household?

Owns the dwelling	1
Rents the dwelling	2
Uses without paying rent	3
No dwelling	4

9. Can you please tell me what is the primary source of fuel for cooking in last 30 days for your household?

Firewood	1
Cow dung cake/Crop Residue	2
Coal/Lignite/Charcoal	3
Kerosene	4
LPG/PNG	5
Electricity	6
Bio-gas	7
Solar	8
Any other	Specify
No Cooking	0

10. Usually on any day how many hours do you usually go without electricity?

No cuts	1
Less than one hour	2
1-4 hours	3
4-8 hours	4
8-12 hours	5
More than 12 hours	6
No Access	7

11. Do you have own mobile phone?

Yes	1
No	2

12. Do you have access to internet?

Yes, by telephone or mobile device	1
Yes, Broadband Wifi at home	2
Yes, at a location just outside my home	3



Yes, other connection at home	4
No access to internet	5

13. Could you please let us know whether you have access to following financial services? [Multiple response]

Bank Account	1
Loans from Bank/Financial Institutions	2
Savings/deposit	3
Digital payment (Debit Card, Credit, UPI, Net banking)	4
Health insurance	5
Life insurance	6
Agricultural insurance	7
None of the above	8
Other	[specify]

14. Has anybody in your household migrated out of this village to other city in last 3 years?

Responses	Male	Female	Age	Reasons for migration
Yes				Drop down list of reasons- [Select most appropriate] 41. Livelihood/income 42. Education 43. Conflict 44. Marriage 45. Others
No				

15. What kind of toilet facility do members of your household usually use?

Flush to piped sewer system	1
Flush to septic tank	2
Flush to pit latrine	3
Flush to somewhere else	4
Flush, don't know where	5
Ventilated improved	6
Pit (vip)/biogas latrine	7
Pit latrine with slab	8
Pit latrine without slab/	9
Open pit	10
Twin pit/composting toilet	11
Dry toilet	12
No facility/uses open space or field	13
Other	[Specify]

16. What type of drainage system connected to your household?

Open Kutcha	1
Open Pucca	2
Covered Pucca	3



Underground 4  
 No drainage 5

17. What is the **main source** of drinking water for members of your household? [SINGLE CODE]

Piped water into Dwelling 1  
 Piped water to yard/compound 2  
 Public tap/stand pipe 3  
 Tube well/Bore well 4  
 Protected Dug well 5  
 Unprotected Dug well 6  
 Protected Spring 7  
 Unprotected Spring 8  
 Rain water 9  
 Tanker truck 10  
 Cart with Small Tank 11  
 Surface Water 12  
 (River/Dam/Lake/pond/Canal/Irrigation)  
 Bottled water 13  
 Community RO plant 14  
 Other [Specify]

18. Who usually goes to the [main source in Q17] to fetch water for your household?

Adult woman 1  
 Adult man 2  
 Female Child (Under 15 years) 3  
 Male Child (Under 15 years) 4  
 Other [Specify]  
 I don't know who goes to fetch water in my house 5

19. How long does it take to go to the [Main water Source in Q17], get water and come back in one trip?

Time taken in Minutes  
 Delivered to Dwelling 00  
 On the premises 97  
 Don't know 98

20. What is the birth location of [youngest child] in your household? [Readout options]

At marital or maternal home alone/with family	1
At home with Skilled Birth Attendant	2
At the nearest PHC	3
At the CHC/District hospital	4
At a private hospital	5
Other	[Specify]

21. Can you please tell me approximate amount spent on health including medicines, tests and treatment for household members in last one year?

Amount in Rupees [Allow entry]



No-one fell ill	1
Don't know	98

22. [IF Provided the amount spent IN Q21] Could you please tell me the source of money? [Read options]

[Multiple option possible]

Own saving	1
Relatives/friends	2
Loan from money lender	3
Loan from Bank	4
Insurance	5
Other	[Specify]

### Module B: Awareness and participation

23. Do you know the benefits which you can avail under Green India Mission schemes?

Yes, to a great extent	1
To some extent	2
Very little	3
Not at all	4

24. Which of the following benefits have been available to you under Green India Mission schemes?

[Multiple response]

Forest-based livelihood	1
Non-forest-based livelihood	2
Alternative energy devices	3
Capacity building	4
Others	5

25. Was there any meeting organized prior to implementation of scheme to understand need of the community?

Yes	1
No	2
Don't know	98

26. [If Q25=1] have you or any member of your household attended the meeting?

Yes, I attended	1
Another member of HH attended	2
No-one from my HH attended	98

27. How many consultation meeting on understanding need did you or any other member of your HH attended? [If yes Q25=1]

Number of meeting	
-------------------	--

28. Was there any review meeting organized during implementation of scheme?

Yes	1
-----	---



No	2
Don't know	98

29. [If Q28=1] have you or any member of your household attended the review meeting?

Yes, I attended	1
Another member of HH attended	2
No-one from my HH attended	98

30. [Q28=1] How many review meeting did you or any other member of your HH attended?

Number of meeting	
-------------------	--

31. Was there any training/workshop organized under GIM scheme?

Yes	1
No	2
Don't know	98

32. [Q31=1] have you or any member of your household attended any training?

Yes, I attended	1
Another member of HH attended	2
No-one from my HH attended	98

33. [Q31=2] can you please tell me reason for not attending training?

Did not know about the training	1
Training place was far from home	2
Not allowed to participate	3
Not useful	4
Other	[specify]

34. What are the topics covered in the training? [Q31=1]

	Spontaneous [Do not read options]	Probe [Read options]
Forest management	1	1
Wild life management	2	2
Water management	3	3
Livelihood	4	4
Eco-friendly practices	5	5
Fire awareness	6	6
Use of local products	7	7
Other	[specify]	[specify]
Do not remember	98	

### Module C: Resources and livelihood

35. Thinking about your current socio-economic condition, can you please tell me whether there has been any changes in the following? Has there been any increase, decrease or no change in [read options]



	Increase	Decrease	No change
Livelihood opportunities	1	2	3
Income	1	2	3

36. Has there been any change in raring livestock since implementation of GIM scheme? [\[Read options\]](#)

Earlier did not have livestock, now started raring	1
Earlier have few livestock, now increased	2
Reduced number of livestock	3
No change	4

37. Has there been any change in energy source post implementation of GIM scheme?

Yes	1
No	2
Don't know	98

38. Can you please tell me the current energy source?

Grid electricity	1
Solar	2
Wind	3
Hydro	4
Kerosene	5
Coal	6
Forest biomass	7
Don't know	98

39. Can you please tell me the energy source prior to implementation of GIM scheme?

Grid electricity	1
Solar	2
Wind	3
Hydro	4
Kerosene	5
Coal	6
Forest biomass	7
Don't know	98

40. How satisfied are you with the current electricity supply?

Very satisfied	1
Somewhat satisfied	2
Neither satisfied not dissatisfied	3
Somewhat dissatisfied	4
Very dissatisfied	5
No electricity	0

#### Module D: disaster and conflict resolution



41. Is there incidence of forest fire in last 2 years?

Yes	1
No	2

42. Are you aware of the measures to be taken forest fire?

Yes, to great extent	1
Yes, to some extent	2
No	3

43. Are there any incidence of conflict with forest officials in last 2 years?

Yes	1
No	2

44. What is/are the reason/reasons for conflict? [Q43=1]

Use of forest products	1
Forest fire	2
Wildlife management	3
Other	[Others]

45. How much time did it take to resolve the issues? [Q43=1]

Few days	1
Few months	2
More than 6 months	3
More than a year	4
Not yet resolved	5

### Module C: Environment

46. Has there been any change in plant population post implementation of GIM scheme?

Increased	1
Decreased	2
No change	3

47. Has there been any change in plant varieties post implementation of GIM scheme?

More varieties	1
Less varieties	2
No change	3

48. I will read out some environmental aspects. Please let me know whether there is an improvement, deterioration or on change in the environmental aspect post implementation of GIM scheme?

	Improvement	Deterioration	No change
Green cover	1	2	3
Air Quality	1	2	3
Water Quality	1	2	3
Bio-diversity	1	2	3
Natural Resources	1	2	3



MOBILE: CAN YOU PLEASE TELL ME YOUR MOBILE NUMBER

Yes.....

Refused

\*\*\*Thank you for your time\*\*\*





## **Development Monitoring and Evaluation Office**

NITI Bhawan, Sansad Marg, New Delhi-110001

**contact-dmeo@gov.in | <https://dmeo.gov.in/>**

**Commentary,  
Narration and Analysis**



**KPMG**

**Survey Partner**



**Ipsos**