

Report on Arkepally Cheruvu MI Tank Restored under Mission Kakatiya, Telangana

1. Introduction

The Arkepally chervu is a Minor Irrigation tank (PR tank) located near Arkepally Village and it is under the control of Executive Engineer IB Division Mancherial. Arkepally village is a habitation of Bhemaram Grama Panchayath (GP) in Jaipur Mandal in Adilabad District. It is situated about 5 Km from North side of Bhemaram GP. Arkepally is surrounded by forest and has no access to road and electricity facility. About 60 families belonging to BC (Peruka) community are living in Arkepally village. They are mainly dependent on tank based agriculture and it is the main source of livelihood for them.

Due to non-connectivity of roads, lack of electricity facility, thick forest and other problems, the villagers migrated from Arkepally 30 years back and settled in Bhemaram village but they were still depending on Agriculture land of Arkepally village for their livelihood.

2. Arkepally Cheruvu

The Arkepally Cheruvu is having an ayacut of 40 Acres but presently this tank is serving 30 Acres only due to leakages of water from sluice, improper water regulating system and less tank capacity.

Due to insufficient water in the tank the farmers are using diesel engine pumps to irrigate the crops from nearest local nala for 20 to 30 days by lifting.



Newspaper cutting of Arkepally Cheruvu Before Mission Kakatiya program

3. Restoration Works under Mission Kakatiya-II

As per the representation of the farmers, public representatives and Hon'ble Member of Legislative Assembly Sri Nallala Odelu recommendations, Estimate for Renovation of Arkepally Cheruvu has been prepared and submitted to Government in Mission Kakatiya Phase-II program with the following provision.

- I. Construction of new weir
- II. Strengthening of Bund
- III. Construction of new sluice with Regulating arrangements
- IV. Construction of Irrigation Canal Guide walls
- V. Silt removal from tank bed

The above work was sanctioned under G.O.Ms.No.248 I&CAD (MIT.I) Dept. Dt:02.03.2016 for Rs. 36.80 Lakhs and awarded to Sri Gade Prathap Reddy, Contractor, R/o Ammagaripalli (V), Khammam (dis) at 16.40% less vide L.S A. B No:86 /2016-17, Dt:26.04.2016for Rs.28.67 Lakhs.

I. Construction of new weir:

The existing weir was a By-Wash weir with stone pitching. To increase the tank capacity broad crested weir of 29m length was constructed duly calculating catchment area and land available in foreshore of the tank.



II. Strengthening of Bund:

Bund length is increased from 350m to 420m and strengthened as per MI guidelines to suit newly constructed weir standards.

Bund Standards

Top width: 3m

Slopes : 1.5:1



III. Construction of new sluice

New sluice was constructed with regulating arrangements to avoid leakages and improve water regulating system.



IV. Construction of canal Guide walls:

Irrigation canal is renovated for a length of 300m and guide wall is constructed for 200m length to improve water management systems.



V. Silt removal from tank bed:

10000 Cum of silt was removed from tank bed to improve the tank capacity.





Photograph shows tank filled with water after Compilation of Repair works

4. Benefits due to Restoration under Mission Kakatiya Program

S.No	Description	Before MK work	After MK Work
1	Ayacut	30 to 40 Acres (pumping additional water from nearest Nala)	50 Acres with Tank water
2	Capacity	6mcft	10mcft
3	Yield	22 Quintal / Acre	25 Quintal / Acre

5. Conclusion

After restoration of the Arkepally Cheruvu, the farmers are very happy and fully utilizing the water from this tank for cultivation of 50 acres.