













<b>Name of Work</b>	<b>Ground Water Recharge through Abandoned Borewells by Roof Top Rain Water Harvesting</b>
Location with coordinates	Location: Neelam Nagar Area, Prabhag no. 20 and 40, Solapur, Maharashtra  Coordinates: Shantai Orphanage: 17°38'33.82"N 75°57'2.06"E Temple in Neelam Nagar: 17°38'34.38"N 75°56'51.01"E Bidi Gharkul (EWS colony): 17°39'27.41"N 75°57'11.50"E
Block/Mandal /Taluka	Solapur North - Solapur city
Category of block/mandal/ taluka	<b>Safe</b>
District	Solapur
Implementing Agency	ICLEI – Local Governments for Sustainability, South Asia and Solapur Municipal Corporation
Cost (in lakh)	10 Lakhs – 241750+ 165000+296900= 703650
Type of Intervention	<p><b>Background:</b> The increasing water demand and number of abandoned borewells in <b>Solapur</b> has brought forward realization that the underground reservoirs formed by the aquifers constitute invaluable water supply sources as well as natural water storage facilities. As a result to reduce over-draft, conserving surface runoff and increasing available water supplies, ‘Ground water recharge through abandoned bore-wells’ was selected as one of the pilot implementation under the European Commission funded project on Integrated Urban Water Management in Indian Cities (Adopt IUWM). This intervention was executed as a model for replication and showcase benchmark for future plans of the city. The area selected for this intervention is located outskirts of core city with lack of water supply and sewerage network. Solapur Municipal Corporation supplies drinking water twice in a week through tankers. Majority of the community depends on ground water for secondary purposes resulted in many borewells and handpumps in a small area. Steps followed during the implementation of this intervention at various levels are as following:</p> <p>Community level:</p> <ol style="list-style-type: none"> <li>1) Baseline surveys to document type of locality, identification of structures, number of beneficiaries and local water usage practices</li> <li>2) Conducted various activities on awareness for rain water harvesting, catchment cleanliness drives and Swachh Bharat Mission</li> <li>3) Formation of local implementation committee (includes representatives from beneficiaries and ULB officials) to supervise execution of the project</li> </ol> <p>Technical level:</p> <ol style="list-style-type: none"> <li>1) Conducted geo-physical survey to select abandoned bore-wells having maximum potential of recharge</li> <li>2) Designed a customized process to suit local practices and acquire maximum acceptance by residents which includes two stage filtration to avoid contamination, separate outlet to store rainwater in individual houses (existing practice) and channelization to abandoned bore-wells for ground water</li> </ol>

	<p>recharge</p> <ol style="list-style-type: none"> <li>3) Provision of water level monitoring kit and training to use</li> <li>4) One year quality testing to check contamination in ground water</li> </ol> <p>ULB level:</p> <ol style="list-style-type: none"> <li>1) Solapur Municipal Corporation was inclusive part of the implementation team</li> <li>2) Experts provided training to the officials of Public Health Engineering Department and Town Planning Department on the ground water recharge potential of various areas within city, different techniques of recharge and operation and maintenance of such interventions.</li> <li>3) Other stakeholders including zonal officers responsible for bore-well maintenance, labour working on ground, private contractors for bore-well and residents were also trained on cleaning of the roofs, maintenance of recharge pits and monitoring of water level</li> </ol>						
<p>Out Come</p>	<ul style="list-style-type: none"> <li>• About 5000 sq.ft roof top area has been connected to abandoned bore-wells for ground water recharge</li> <li>• About 4.5 lakh liters of rain water used to recharge ground water in last 3 years after fulfilling secondary needs of the residents during monsoon</li> <li>• The pilot project helped an orphanage cum school and also more than 1500 population in Neelam nagar area including Economically Weaker Section (EWS) housing colony located upstream side of the catchment. This includes about 103 direct beneficiaries trough recharge of three abandoned bore wells/ hand pumps.</li> <li>• With this learning, Solapur Municipal Corporation has proposed to recharge 200 more bore wells in the city through AMRUT and the work is in progress today.</li> </ul>						
<p>Photographs</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> </tr> <tr> <td style="text-align: center;"> <p>Situation during water Scarcity</p>  </td> <td style="text-align: center;"> <p>Geo-physical survey</p>  </td> </tr> <tr> <td style="text-align: center;"> <p>Community interactions</p> </td> <td style="text-align: center;"> <p>Awareness activities</p> </td> </tr> </table>			<p>Situation during water Scarcity</p> 	<p>Geo-physical survey</p> 	<p>Community interactions</p>	<p>Awareness activities</p>
							
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Catchment cleanliness drive



GW recharge site at Neelam Nagar



Recharge structure at orphanage



Filtration and recharge pit



Training to ULB officials



Training on water level monitoring