

Water resource evaluation for Udaipur district

The Udaipur district of Rajasthan state is famous for its system of interconnected lakes. The lakes were to function as a source of water availability for drinking, agriculture, industries, groundwater recharge and as a tourist attraction. Despite these available infrastructures to facilitate water availability, Udaipur district lies in the over exploited category with respect to the stage of groundwater development. The significant reduction in rainfall coupled with increase in water consumption has created a situation of water crisis in the district. Such an adverse water scenario could pose a severe threat to the development of Udaipur city into a smart city.

To mitigate the district from such a precarious situation, Secure MetersLtd. and CII – Triveni Water Institute came together with the objective of evaluating the water resources from a hydrological (watershed level) perspective for the Udaipur district by assessing the water availability, demand-supply gaps at the Udaipur watershed level and undertaking a hydrological cum groundwater evaluation to determine the water availability and thereby arrive at appropriate water management interventions to benefit the community at the watershed level.

These objectives were achieved by undertaking a thorough hydrological evaluation for Udaipur district using the WATSCAN Tool to assess the total water availability, water accessibility and water losses in the district. Groundwater evaluation for the district was undertaken to ascertain the spatial groundwater distribution, groundwater fluctuations and also monitor the changes in groundwater quality over time. This was followed by ground truth verification through field surveys to validate the information to finally arrive at appropriate strategies to improve the water scenario of the district and develop a water management plan for the district to ensure its long-term sustainability.



Community Interaction at Udaisagar Chaurahi



Jaisamand Reservoir (Major source of water in the district)



Checkdam at Kunda Village (Evaluation of Existing structures)



Abandoned well at Udaisgar Chaurahi (Rejuvenation Options)



Drinking water supply at Borakheda village (Evaluation of water supply infrastructure)



Pumphouse at Picchola Lake (Evaluation of existing drinking water schemes)