



**MAKING EVERY  
DROP COUNT**  
UDAIPUR, RAJASTHAN



**U**daipur District in the State of Rajasthan is a water scarce area in the middle of Aravalli Mountain Ranges. With very limited annual rainfall, the population of the district is overwhelmingly dependent on ground water to meet its domestic and non-domestic water needs. It is no surprise that the annual withdrawal of water from underground aquifers is much more than the annual rainfall replenishment. This has caused a severe downward impact on the water table. Majority of blocks of the district have been categorised as vulnerable, or over exploited, in this context. Challenges posed by demand driven depletion of ground water resources and the prospect of imminent severe water scarcity, or a straight forward drought, were serious indeed. To mitigate these prospects, a special initiative was conceptualized to make villages of Udaipur district self-reliant in terms of their sources of water. This effort included not only the relevant Government agencies and general public, but also corporate, social and religious organisations of the region. It is not that efforts had not been made in the past to achieve the same goals. What differentiated the new initiative from past efforts was that selection of works to be executed was done strictly on the basis of a scientific analysis that adhered to a 'ridge to valley approach'. The project was rolled out with concerted efforts involving all stakeholders to make it a mass movement. All powers of execution were conceded to the Gram Sabhas but without compromising on the imperatives of scientific planning and maneuvering.

The project followed a systematic process to achieve its stated objectives. This included:

- A multilayered review & examination of project proposals before ratification of all DPRs.
- A scientific assessment of minimum basic water requirement of each village.
- Working out the present status and deficit assessment.

- Conducting survey of clusters by joint team of all stakeholder line departments with active involvement of locals. Monitoring the survey on Wapnot software mobile application.
- Identifying probable interventions to bridge deficit.
- Preparation of DPRs recognizing local parameters and conditions.

Initially, model DPRs were prepared for one village in each of the 10 agro-climatic zones of the state. These DPRs were put up for a review and endorsement by the Gram Sabhas. All works proposed for execution were geo-tagged for regular monitoring.

The overwhelming emphasis of the project was on watershed development activities in a scientific manner. Each and every DPR was thoroughly scrutinized to attain maximum accuracy. This was done through convergence of expertise and experience of all relevant line departments of the State Government namely Water Resources, Panchayat Raj, Rural Development, Forests, Public Health Engineering, Agriculture and Horticulture.

Each work was geo-tagged, a task that required considerable effort, to establish authenticity/veracity corroborating facts of structures for monitoring and quality control. Physical status of works was uploaded on a day to day basis on a mobile app for effective monitoring of the pace of execution and identification of deficiencies/anomalies. Besides being innovative and scientific, the outstanding aspect of the campaign was its character of a mass movement. All the stakeholders were mobilized under one umbrella to put in their efforts to make the movement a success. People did Shramdaan (voluntary labour) with enthusiasm, and almost all sections of the society including religious, corporate and civil society institutions pitched in with contributions in cash and/or kind.

## OBJECTIVES

- ENHANCING WATER SECURITY OF UDAIPUR DISTRICT.
- TO STEM DROP IN GROUNDWATER LEVELS BY REDUCING DEPENDENCE.
- TO ARGUMENT INFRASTRUCTURE AND REJUVENATE WATER BODIES FOR ENSURING ROUND THE YEAR AVAILABILITY OF WATER FOR VARIOUS NEEDS.

## OUTCOMES

On the supply side, ground water levels improved to an extent of 2.24-2.35 Ms. The surface water storage also saw a net increment of 19209.67 TCM along. This was due to additional interception of 53785 TCM of monsoon precipitation.

On the demand side the project led to a reduction of 56.13% in tanker deployment between 2015-16 & 2016-17. The number of defunct handpumps in 2018-19 was just 47.8 % of the same in year 2017-18. This led to an increase of cropping area (6.6 % in Raik, 12.99% in Khanif, and 3.7% in sayal) in the areas covered by the project. It has also led to revival of 18 tubewells & 619 Open Wells in the intervention areas in year 2017-18. The outcomes listed above were verified by an independent agency i.e. the Rajasthan River Basin & Water Resource Planning Authority.

This initiative to promote self-reliance in water has been well received not only by local people but even by several foreign dignitaries who have since visited the district including the Deputy Prime Minister of South Africa. Many national & state media teams have also covered the project. Several 3rd party reviews, state level quality control team reports and RBA state level inspection reviews have held the project in good stead.

The initiative has helped Udaipur turn a new leaf in its water management efforts through effective and sustainable water conservation and restoration of water harvesting structures. Plans are now afoot to replicate the success of Phase I in other villages of the district. ■

