



Battling Water Scarcity with Community Owned Models

Madore is a remote village in the hilly terrain of Niwari district (Madhya Pradesh) of Bundelkhand in. It faces acute water shortage because it lacks the appropriate infrastructure to carry water to high altitudes. A large number of people in this region still suffer the burden of water scarcity. The face of severe distress changed with a technological implementation by Development Alternatives, with support from the Department of Science and Technology (DST). The result was evident – improved water supply in the village, eliminating the drudgery in the lives of women who earlier used to walk daily for three kilometers to fetch water.

One such Locally Owned and Community Operated (LOCO) water supply system has been installed in the Ahirwar hamlet of this village that is home to 39 families. This example of implementation of the LOCO model is part of a larger initiative to introduce the alternative self-sustaining model for the delivery of safe drinking water and lighting solutions powered by renewable energy. The alternative model relies largely on local, bottom-up planning and implementation. The aim is to assist communities in their access to basic services, generate livelihoods, and to take leadership in designing their own futures.

The LOCO model is based on action led by communities, creating a sense of community ownership of services and accountability. Together, these principles make it a sustainable model and ensure equitable distribution of basic services and positive outcomes on sanitation, health and income.

This self-sustaining LOCO water supply system comprises two Horse Power solar pumps and pipelines to supply water up to community water stand posts. Safe water is drawn from a water source by a solar powered motor, and then carried by a pipeline to a high water tank, from where water goes to these community water stand posts. There are no running costs or fuel costs and the system is not dependent on the power supply which is often erratic in the region. The use of solar pumps also minimises carbon footprint.

This is a pay-for-use model and can be used in household connections for regular water supply. The community stand-post taps are connected for use by three households per stand-post, the maintenance and operation of which is charged at the rate of INR 50-100 per month. Village level *Jal Pradai Samiti* is in charge of the operation and maintenance of the system. This model supplies water not only to the hamlet, but also to the entire village. To ensure buy-in and ownership from the community for sustainability, each household agreed to contribute INR 1,000 to create a common pool of funds for construction. The committee monitoring this model meets monthly, and takes collective decisions on expenditure from the maintenance fund – making it a truly locally-owned and community-operated model.

Taking a leaf out of this example, five other remote villages of Bundelkhand – Pipra, Govindnagar, Mazra, Punwali Kalan and Chandrabani – are providing doorstep service of reliable drinking water to over 600 families, implementing this model. Some villages of Sonbhadra district of Uttar Pradesh are also replicating the LOCO model. The technological intervention has led to improved quality of life by building local capacities, and has also generated livelihoods in these villages.