

Conservation Measures to Maintain Sustainable Supply of Water in Rajasthan

By Advit Foundation

Advit made a difference in 20 villages of Rajasthan, with a population of about 3000 in each, by constructing five anicuts (small check dams) for water availability.

The goal of the Water Project

in Rajasthan was the "Development of a model to maintain the sustainable supplies of ground/surface water to the rural communities.

The overall purpose of the project was to plan, develop and maintain water resources in the water impoverished state of Rajasthan to support the growth and well being of the communities and respond to the growing need of water for drinking, agriculture, industrial and general improvement of living conditions. Advit Foundation initiated this project along with a few industries in this water impoverished state of Rajasthan.

The initiative was designed to ensure that all the industries in Rajasthan should adopt the best possible practices while utilizing the local resources including water and ensure sustainable supplies of water and other natural resources. The communities/ workers involved in the industries also participated in the project to improve the



environment in and around their villages. Advit Foundation conducted a detailed study and designed the program.

The development objectives of the water project were:

- To identify technologies and management approaches to help achieve sustainable groundwater recharge systems in and around the identified factories and adopted villages
- To aggressively promote solutions for sustainable groundwater recharge among the target groups

Project Area

A belt of about 20 villages was identified as the project site along the River Vani near the city of Jaipur, Rajasthan: Bagru, Rotwada, Kunjbiharipura, Sanwal, Kunchiyawas, Bhimpura, Harbanspura, Kiratpura, Jhund, Rampuranwali, Mandor, Chandwas, Harsoolia, Gohandi, Navalkishorepura, Mandao, Jagatshiromanipura, Mohana.

Advit Foundation designed and constructed 5 model water harvesting structures (checkdams) as model. Water user groups for maintaining the structures were also formed in the villages.

Dimensions of the constructed structures were:

- ▶ Bhimpura: Dimension of the structure 643 ft long and 16 ft high
- ▶ Sanwal: 2442 ft long and 11 ft high
- ▶ Kiratpura: 544 ft long and 10 ft high
- ➤ Chandwas: 470 ft long and 15 ft high

Impact of the Project

Community Involvement

- Contribution: Villagers contributed in kind on each structure, i.e., they worked without being paid once a day in a week. Village maps were made by the villagers themselves to design the checkdam and decide location.
- Ownership: To ensure sustainability of these structures the formed water user groups (WUGs) have taken the responsibility of maintaining the structures.
- Replication: Besides the 5 villages where the structures have been made the neighboring villagers too are interested to make such structures and so training has been imparted and WUGs have been formed in those villages as well.

Community Empowerment

- ▶ Formed water user groups (WUGs) in each village
- The WUGs were trained to maintain the constructed checkdams in each of the villages
- They were empowered to dovetail the village initiative with ongoing government programmes (village Kiratpura Panchayat got money from a government project to maintain the structure in their village)
- Besides the 5 villages where the structures were made WUGs were formed and training imparted in the neighboring villagers as well

Social Impact

➤ The water table of the region has improved. There is water for more than 5 months in the villages.



Figure 1: Impact of the Project

Figure 2 A: Bhimpura Village - Before Rains

Figure 2 B: Bhimpura Village - After Rains





Figure 3 A: Kirat pura - Before Rains

Figure 3 B: Kirat pura - After Rains



Figure 4 A: Chandwas - Before Rains

- ... There is water for the cattle for more than 8 months now.
- ➤ The soil moisture has increased. So the cropping pattern has become twice a year and thereby the income has enhanced.

Environment Impact

➡ Each structure has the capacity to recharge

Figure 4 B: Chandwas - After Rains

about 1 km radius land area, i.e., about 100 wells

- ➡ Total of 34,286 cubic meter of water storage capacity was created through these structures
- ▶ Each structure can support at least 4 nearby villages for water
- > Population in each village is more than 500 therefore, more than 2000 people got benefited by each structure

- >> There was increase in soil moisture with even slight rain thereby increasing the green cover of the land and so the productivity
- ➤ At least 5.500 livestock was benefited with water

Advit facilitates training, research, assessment, documentation, and information dissemination programmes in environment education and conservation. The organization provides a platform for training, capacity building and skill upgradation through participatory approaches. The work of promoting vocational skills/ entrepreneurship and providing marketing linkages involves training and better technologies to enable wider production and thereby providing economic security.

Forward linkages are sought through outreach programmes for sustainability of enterprises. Such trainings and outreach help the entrepreneur realize his capability. Conservation work is undertaken by identifying local needs, selecting, generating, improving, adopting and developing appropriate implementation plans.

Advit operates through the following project areas:

Awareness: We are striving to generate awareness on the need to educate, provide a platform for learning to all and impart the importance of conserving environment and managing waste in our everyday life. Activities focus on socially and economically deprived sections of the society.

Education: Our vision is to create and nurture a learning culture that believes in and breathes change through education. Through change we look towards the infinite possibilities that can be created for the positive development of children and adults.

Advit designs and implements environmental education and awareness activities pertinent to:

- >> Design and implementation of village development models that help in livelihood enhancement.
- ➡ Basic education and skill development





Figure 5 A: Chandwas - Before Rains

Figure 5 B: Chandwas - After Rains



Figure 6 A: Navalkishorepura - Before Rains

Figure 6 B: Navalkishorepura - After Rains

models for weaker sections of the society.Environment education programmes

Conservation: The programme highlights and suggests alternatives that can help address the challenges of resource conservation. The need for intervention and the alternatives that would improve resource management and development activities are sought. These include water conservation, waste management and Energy efficiency.

About the Contributor

Advit Foundation is a non government development organization, registered in India working for Livelihood Enhancement. Since inception, Advit has sought to conserve environment and empower communities through various viable options of environment conservation for livelihood enhancement and sustainable development. With a vision of promoting approaches to poverty reduction for improved economic and social support Advit's work focuses on promoting traditional skills/practices through environment education and conservation practices using information and communication systems tools. The prime areas of work include - promoting traditional skills towards poverty reduction and creating livelihoods, providing environment education and conservation services and providing information and communication services.

To know more about the contributor, you can write to us at mayur@eawater.com