

# Communities revive traditional water springs

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*Women of Bajeeena village are taking active role in managing water resources. With TERI's support, besides their access to drinking water being improved, communities feel that the people's knowledge and skill levels in managing water resources has been enhanced.*

Photo: Author



Water source in Bajeeena village.

Traditional springs, called naulas, are the main source of drinking water in Bajeeena, a village in Almora district in Uttarakhand. The continuous felling of trees and other different reasons have had a major impact on the availability of drinking water in the region. The discharge of naula has not been sufficient to meet the village water demand. The degrading forest eco-system had led to increase surface run off and reduced water recharge. With no possibilities of irrigation, around 90% of the households in the village have been dependant on rainfed agriculture. Migration is a common phenomenon, as the crop productivity is low and there are no alternative income generating sources.

To address this situation, TERI in collaboration with HOPE, an NGO systematically studied the situation of the region. It found that women had enormous knowledge on water management issues. Based on the study results, a water conservation programme was designed in such a way that it facilitated women participation. The programme was implemented in several villages.

## Understanding the community needs

With the help of local NGO, key informants were identified and some basic information about the village was collected. Meetings were held with the key personnel from the village. The village level rural development activities and possible programme were discussed with them. A few more meetings helped in establishing rapport with the important people in the community.

Subsequent meetings were organised with all the villagers. Women and men attended and took part in discussion. Women raised the day to day energy and water issues. Keeping these points in mind it was decided to address the issue of energy and water by facilitating the locally available technology with the local support.

Lots of suggestions from the participants were discussed in detail for future action.

Women had different perceptions on energy and water situation (see box on p.15). Women felt that earlier the forest was close to the village and they could fetch fuel wood easily. But now the forest is degrading and they have to travel 3 km uphill to collect fuel wood. According to them, depletion of forests is also a cause for the reducing water discharge from the water springs. Depleting underground water sources is presently able to cater 15 to 25% of the water requirement.

## Mobilising communities

Men and women with leadership qualities were identified for facilitating community mobilisation. One woman and one man were selected as a key persons to sensitize communities about the project. Contact was established with each household in the village by door to door visit by the project team.

### Women's perceptions on water and energy situation at village level

Parameter	Situation
Ground water	Depleting
Availability of surface water	Low
Forest cover in the forest land	Reducing
Soil productivity	Reduced
Drinking water sources in the village	Inadequate
Irrigation water	Inadequate
Availability of fuel wood	Decrease
Crop production	Reduced

Before the intervention process, support was sought from the village level institutions like the village Panchayat, forest Panchayat, youth groups and cooperative societies. As local institutions like the Panchayat were playing a key role in village level development programmes, it was considered necessary to involve them in the project. Intensive dialogues and interactions took place with the panchayat members to know their strength and possible collaboration under the project. The panchayat members were also guided to realise the needs and priorities of different households for different types of energy and water resources and technology.

Village level community meetings were organized at the time convenient to most of the people, especially the women. Efforts were made to ensure participation of atleast one member from each household. These meetings enabled understanding the view of the community regarding the energy and water related situation, their interest in participation, cost sharing and choice of technology.

Group discussions were organized to analyse the situation in terms of the status of natural resources and the knowledge and perception of the women on its use. A number of meetings were organized to create awareness among women on the water and energy situation, natural resource management practices and importance of self help mechanisms in addressing these problems. The women were informed about the potential of income generating activities and renewable energy resources. Specific skill based trainings were organized both on technical as well as managerial aspects. The project facilitated in building linkages.

### Implementation

A detailed study was carried with a group of experts to suggest the possible interventions to improve the situation. Visits were also made to different locations of possible sites to understand the ground water situation in the village. The site of naula was visited to explore the possibility of reviving them. On visiting the sites it was found that the water level had depleted owing to factors like open barren land above the water source. The experts observed that the slope of the land was more than 40 degrees and 90% of the forest land was degraded. This implied that tree plantation had to be taken up as one of the interventions to improve water situation.

The village community decided to take up plantation in the forest area during the monsoon months. While the village Pradhan had the overall responsibility of programme implementation, a committee was formed to help in planning, implementation, supervision, operation and maintenance of the programme. Committee members were trained in technical as well as management aspects.

Villagers also agreed to contribute to the activities, each household paying around Rs.200. During monsoon, *Van Panchayat* forest and barren land were taken for plantation and about 14 water harvesting structures and water recharging ponds were constructed on the upper location of the spring. Community members also constructed improved chulhas to reduce the use of firewood and smoke from the kitchens.



Photo: Author

*Water conservation measures*

### Impact

The plantation and water conservation activities have led to recharge of the village spring after two months of rainfall. This small effort has had such an impact that the water availability has increased three times. The visual impact can be very well seen in the village. Access to drinking water has improved. Above all, the communities feel that there has been an improvement in the knowledge and skill levels of the inhabitants due to the capacity building activities of the project.

This effort is well acclaimed at the local level. The local newspapers too carried a story on this initiative of TERI - though small but with a great impact.

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