



Nishika Haat

Revival of Traditional source of water in Kumaon hills.

Naula Revival



Issue

Climate change which is a serious global environmental problem is impacting the fragile natural ecosystems and water resources of the Himalayan region due to changes in precipitation and evapo-transpiration. This coupled with increasing water demands, unplanned development, reduced green cover and decline in traditional community water management systems which is leading to drying up of the natural sources of water and also affecting the agricultural based livelihoods of the people in the remote Himalayan villages.

Project Rationale

Change in climate over time has dwindled the amount of rainfall the region receives. The usual seven-day spell of continuous rainfall, called Satjhar, during the monsoon does not happen and dry spells have become increasingly common which is affecting the quantum of surface water discharge as well as infiltration to recharge the streams that feed the Naulas (**traditional source of water**). Moreover, due to massive deforestation, there is high surface run-off and poor rainwater recharge. This has adversely affected the feeding of mountain springs and streams. The reduction in rain and the lack of rainwater, recharge of springs and streams has adversely affected the availability of water in the Naulas. During summers pipeline fails and also during floods and rainy season pipelines got filled with sand and debris leading to water crisis. In such situation Naulas are the most reliable source of water. Most of the villages are still depend upon its Naulas for drinking water supplies and if no water conservation, sanitary protection and revival measures are taken now, these natural sources of water will either run dry or will not be in a state to be used within the next few years. Thus, Mahila Haat wants to revive the traditional sources of water for its sustainability.

Importance of Naulas in Uttarakhand

Uttarakhand has a glorious history of water harvesting. People stored and conserved rainwater that flowed down hillsides in the form of streams (locally called *Gadheras*). The percolated water was collected in special structures called *Naulas*. *Naulas* were considered common property resources. They were largely owned, used and maintained by local communities for meeting domestic requirements. An amazing aspect of these structures and systems is that a large number of them function even today, hundreds of years after their construction. A basic factor for the longevity of these *Naulas* appears to be their maintenance by the local communities. **The local communities tended to have a holistic perception of the local ecosystem. They not only looked after the *naulas* but also tried to protect their catchments.** Kumaon region is traditionally depended upon its *Naulas*, *Dharas* and *Gadheras* (seepages, natural springs and small streams) for water requirements. But today most of the *Naulas* are drying up or decaying because unplanned development, urbanization, massive deforestation and growing demand for irrigation water are adversely affecting the springs and *Gadheras* which feed them. Moreover, due to climate change there is greater monsoon variability which is affecting the quantum of surface water discharge as well as infiltration to recharge the streams and aquifers that feed the *naulas*.

Seeking the issue of water crisis in country, The Prime Minister of India, Narendra Modi appealed people to conserve water. He also urged the leaders of different areas to lead innovative campaigns for water conservation and contribute in saving water in their own way.

Project goal

The aim of the project is to revive the traditional water resource (Naulas) and to adopt rain harvesting system in order to maintain water sustainability year after year

Objective(s)

- 1) To revive Naulas structure and treatment of its catchment area.
- 2) To develop rain water harvesting system in the village for proper use of rain water.
- 3) To involve local community in reviving and maintaining these natural sources of water.
- 4) To develop a model to combat the effect of climate change on the local water resources.

The Project envisages people's participation

The whole project will be implemented through community participation, therefore before implementation of the project there will be programmes of awareness building through meetings. In-depth discussions with the community will be done regarding planning, taking of ownership of the project, implementation strategy of the project and expected contribution in kind.

Previous steps taken

During resource mapping, meetings were organized with the villagers and in the meetings villagers demanded for revival of Naulas as secondary sources of water is not reliable.

Project location

Chitai village, Block HawalBagh, District Almora, State Uttarakhand.

Outcome of the project

- Restores biodiversity of the area.
- Recharge ground water.
- Helps in maintaining moisture in the area.
- Traditional water sources get revived.
- Development of a model that can be replicated in other mountainous areas.
- Better informed and responsible village level institutions and communities.

Socio-economic Change

- Revival of traditional systems of water management.
- With easy availability of water there would be reduction in drudgery of women in collection of water. Subsequently, they will get more time for some productive work.
- Involvement of the people will develop a sense of responsibility in them to protect their ecosystems.