





## Success stories

## Participatory Water Resource Development

Attal. A remote tribal village, Attal in Tuni block of Dehra Dun district was selected by Central Soil and Water Conservation Research and Training Institute, Dehra Dun for implementing Tribal-Sub Plan. There are about 300 households in the village and more than half of them are engaged in agriculture. Mostly cereals, pulses, vegetables and fruit crops are cultivated in this village. On field visits and interactions with farmers, Institute's scientists critically observed that there exists a huge potential of agricultural development if water scarcity problem is addressed.

The village community was organized in nine user groups to establish group horticultural plantation as alternative land use in about 7.2 ha area. All groups were further organized as Attal Fruit and Vegetable

Grower Association. As per the area available with each group, 3,250 fruit seedlings were distributed. Training was given to these groups for planting technique of horticultural plants, etc. But only 30% of horticultural plants survived due to water scarcity. Similarly in vegetable production the success was

limited due to lack of assured irrigation facility.

In last 3 decades the other agencies have tried to solve the problem of water scarcity — hydrum system (could not be functional in long Attal Village



Non-Functional Water Storage Tank in Attal Village



Activity of HDPE pipe laying in Attal Village



Water Source - Inlet Chamber 6 km away from Attal Village



Functional Water Resource Development in Attal Village

run), lift irrigation system (but with limited success due to high elevation difference and shortage of electricity power for running the system) and a masonry tank of about 280 cum storage capacity at elevated place (lying defunct).

After conducting detailed field survey and interaction with the farmers, water resource development was taken up in Attal village. An HDPE pipe line of 6.0 km length was laid in a very difficult hilly terrain to harvest the water from a perennial source where sufficient discharge was available (15 lps). This pipeline was connected to the above said nonfunctional water tank for water storage. On monitoring the water stages with time in this tank it was found that huge seepage loss of stored water (3 cm/hr at 1.25 m stage or about 1.45 lps) is occurring due to minor cracks developed in the tank. These seepage losses were arrested by lining the tank

with silpaulin sheet of 250 gsm. In these interventions, villagers had contributed in terms of labour required for digging of trench and burying of pipe for entire length of 6.0 km. This intervention was taken up in a participatory mode with a total cost of ₹ 7,20,000 in which about 21% (₹ 1,50,000) was contributed by the farmers towards cost of digging trench, manual labour required for transportation of pipes, laying the pipe line, cleaning of tank and fixing of silpaulin sheet in the tank. By now, 125 farmers have associated with this intervention of water resource development in Attal village, and tomato cultivation in about 20 ha area was initiated while total potential of this water resource is about 70 ha. Initiatives have been taken up for further extending this water resource to the entire agricultural area of Attal village.

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