

Participatory Water Resource Development in Attal Village under Tribal-Sub Plan

– A Success Story

A remote tribal village viz., Attal situated in Tuni block of Dehradun district was selected by Central Soil and Water Conservation Research and Training Institute, Dehradun for implementing TSP. There are about 300 numbers of 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 exist a huge potential of agricultural development if water scarcity problem is addressed.

In the beginning, series of meetings and interactions with farmers were held and village community was organized in terms of 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, a total of 3250 fruit seedlings were distributed. Training was given to all members of these groups for planting technique of horticultural plants, etc. But there was a little success of survival (30 %) of horticultural plants due to water scarcity. Farmers in this village also grow vegetables but the success was limited due to lack of assured irrigation facility.

In the past, about 30 years ago, other agencies had tried to solve the problem of water scarcity by installing the hydram system which could not be functional in long run. After that, about five years ago, lift irrigation system was installed in Attal village but in this intervention also the success was very much limited due to high elevation difference and shortage of electricity power for running the system. As a part of last intervention, a masonry tank of about 280 cum storage capacity was constructed for storing the water at elevated place but it was lying defunct.

After conducting detailed field survey and interaction with the farmers, water resource development was taken up in Attal village. A 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 pipe line was connected to the above said non-functional 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 per hour 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 is taken up in a participatory mode with a total cost of Rs 7,20,000/- in which about 21 percent (Rs 1,50,000/-) is 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. Till date, a total of 125 farmers have associated with this intervention of water resource development in Attal village and tomato cultivation in about 20 ha area is initiated while total potential of this water resource is about 70 ha. Initiatives have been taken up to further extending this water resource to the entire agricultural area of Attal village.



Interaction Meeting with Village Community



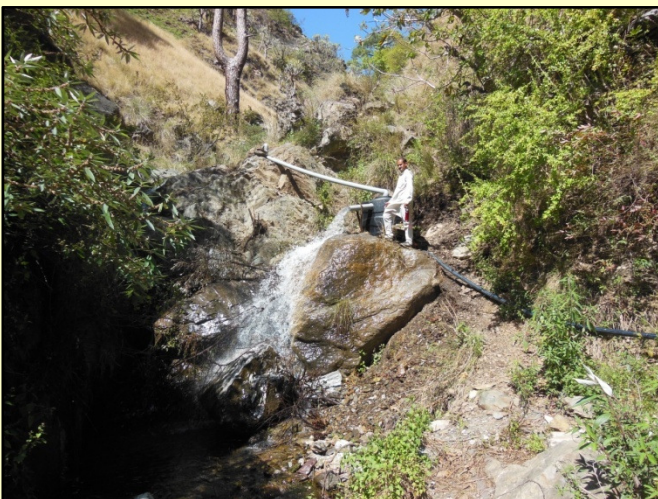
Executive Committee Meeting of the Association



Non-Functional Water Storage Tank in Attal Village



Functional Water Resource Development in Attal Village



Water Source - Inlet Chamber 6 km away from Attal Village



Activity of HDPE pipe laying in Attal Village