

Participatory Water Resource Development Making a Difference

Attal, a remote tribal village, is situated in Tuni block of Dehradun district. There are about 300 households in the village and more than half of them are engaged in agriculture. Cereals, pulses, vegetables and fruit crops are mainly cultivated in this village but due to water scarcity round the year agricultural production of the village was not satisfactory.

CSWCRTI Trained the Farmers

Attal was selected by Central Soil and Water Conservation Research and Training Institute (CSWCRTI), Dehradun for implementing Tribal Sub Plan (TSP). On field visits and interactions with farmers, it was 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 hectare 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 among the farmers. CSWCRTI trained all the members of these groups for planting technique of horticultural plants. 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 facilities.

Serious Problem of Water Scarcity

About 30 years ago, other agencies tried to solve the problem of water scarcity in the area by installing the hydram system but it could not be sustained. About five years ago, lift irrigation system was installed but in this intervention also the success was 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 m³ storage capacity was constructed for storing the water at elevated place but it also proved non-functional.



Interventions Made Changes

After conducting detailed field survey and interaction with the farmers, water resource development initiatives were taken up in Attal village through laying a HDPE pipe line of 6.0 km length in a very difficult hilly terrain to harvest the water from a perennial source. The source had sufficient discharge available (about 15 lps) and was connected to the previous non-functional water tank. On monitoring, 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 was taken up in a participatory mode with a total cost of Rs. 7,20,000/-, in which about 21 percent (Rs. 1,50,000/-) was contributed by the farmers towards cost of digging trench, manual labour required for transportation of pipes, laying the pipe line and cleaning of tank and fixing of silpaulin sheet in the tank.

A total of 125 farmers are associated so far with this intervention of water resource development in Attal village and initiated tomato cultivation in about 20 hectare area while total potential of this water resource is about 70 hectare. Production results are encouraging. Further, initiatives have been taken up to extend this water resource to entire agricultural area of the Attal village. More and more farmers are joining the hands in this endeavour. Scenario of agriculture is changing in the village.

(Source: CSWCRTI)