



A SCIENCE AND TECHNOLOGY NEWSLETTER

NEW INITIATIVES

Participatory Water Resource Development in a village under Tribal-Sub Plan

A remote tribal village, Attal, situated in Tuni block of Dehradun district, was selected. There are about 300 households in the village, and more than half of them are engaged in agriculture, cultivating mostly cereals, pulses, vegetables and fruit crops. A huge potential exists for agricultural development in the village if water scarcity problem can be addressed.



Functional Water Resource Development in Attal Village

In the beginning, village community was organized in terms of nine user groups to establish group horticultural plantation as an alternative land-use in about 7.2 hectares. All groups were further organized as the Attal Fruit and Vegetable Grower Association. As per the area available with each group, a total of 3,250 fruit seedlings were distributed. Training was given to

all members. But there was a little success of survival (30 %) of horticultural plants due to water scarcity.

After conducting detailed field surveys and interactions with farmers, water resource development was taken up in Attal village. A HDPE pipe-line of 6.0- km length was laid to harvest water from a perennial source where sufficient discharge was available (15 lps). This pipe-line was connected to the water-tank. Huge seepage losses of stored water in the tank (3 cm per hour at 1.25 m stage or about 1.45 lps) were observed due to minor cracks, which were arrested by lining the tank with silpaulin sheet of 250 gsm. In these all activities, villagers contributed in labour required for trench-digging and burying pipe.

The intervention was taken up in a participatory mode with a total cost of ₹720,000, out of which about 21% (₹150,000) was contributed by farmers towards cost of digging trenches, manual labour required for transportation of pipes, laying pipe-line, cleaning tank and fixing silpaulin sheet. Till date, a total of 125 farmers are associated with this water resource development in Attal village. Tomato cultivation in about 20 hectares has been initiated, while total potential of this water resource is about 70 hectares.

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