



Project Snapshot

Name of the Project : Climate Smart Actions and Strategies in North Western Himalayan Region for Sustainable Livelihoods of Agriculture-Dependent Hill Communities

Project Focus : Agriculture

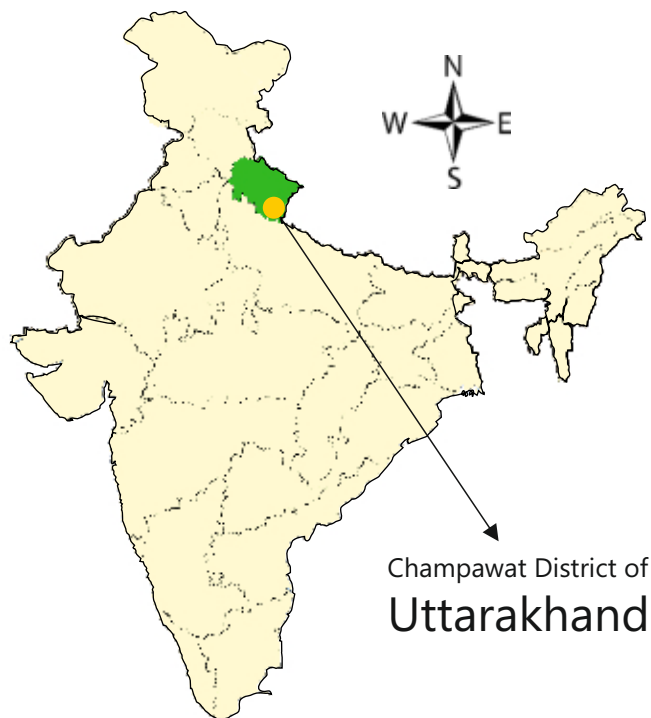
Location : 10 Villages in Champawat District of Uttarakhand State

Project Finance : USD 0.97 Million

Duration : 4 Years (2015-2019)

Name of Executing Entity : BAIF Development Research Foundation

Project Beneficiaries : 1357 families of Small and Marginal farmers having land holding < 2 ha



“Community Mobilization and Organization for the Promotion of Climate Smart Farming Technologies”



Figure 1 : Drying Spring in the project district



Figure 2: Water Stress and Need for Scientific Crop Planning

Uttarakhand, a part of Zone I of the Indian Himalayan Region has varying climatic conditions due to variation in altitude and spatial distribution of the rainfall. The net increase in temperature of the state has ranged from 1.7°C to 2.2°C and rainfall from 5% to 13% with respect to the 1970s (Uttarakhand SAPCC, 2014). Climate Change has been reported to cause receding of glaciers, changes in snowline, erratic rainfall, irregular winter rains, rise in temperature, increasing intensity and frequency of flash floods, etc.

Champawat is the hill district of Uttarakhand spread over 1,766 km² area, has 2.59 Lakh human population, and 82 % workers engaged in agriculture and allied sector. Only 9 % area of the total sown area is irrigated in the district. Poor soil health and soil erosion coupled with heavy rainfall and landslides has been observed to adversely affect the agriculture and ecosystem productivity in the region.

To address the above vulnerabilities, the given project endeavors to improve the adaptive capacity of rural small and marginal farmers including hill women by using combination of Climate Smart Farming Technologies, Social Engineering and Capacity Building Processes.

Project Approach:

The given project is under implementation in 10 villages of Champawat District of Uttarakhand where average annual income per household is only Rs. 28,000 (US \$476) per year. Baseline vulnerability assessment of the project sites and community mobilization is being carried out for conducting project planning. Water efficiency improvement measures like rejuvenation of natural springs, construction of roof top rain water harvesting systems, drip and sprinkler method of irrigation has been adopted. Use of climate smart farming technologies for horticulture, protected cultivation, tree farming, conservation of agro-bio diversity, etc. with the use of traditional knowledge has been promoted. Improved livestock breeding and management services has been provided to the door steps of farmers. Technical reports and documentaries would be developed based on ground level data, experiences, tested technologies, and best practices. Multi stakeholder's consultation would be facilitated through organizing national and state level workshops.



Figure 3 : Deployment of Poly house



Figure 4 : Soil and Moisture Conservation Works



Figure 5 : Spring Rejuvenation

Project Impacts:

- Climate adaptation strategy planning for 10 village clusters of Champawat District of Uttarakhand.
- Adoption of climate smart farm practices by 800 families.
- Rejuvenation of 15 water springs.
- Construction of 150 nos. of Roof Top Rain Water Harvesting structures and development of Drip and Sprinkler method of Irrigation in 20,000 m² area.
- 22.5 lakh litres of rain water would be harvested through Roof Top Rain Water Harvesting measures.
- Construction of 200 nos. of low cost poly-houses.
- Plantation of 30,000 nos. of fruit trees and fodder plantation in 100 ha area.



Figure 6 : Stakeholder Consultation

- Harvesting of 900 kgs of high value vegetables, 30 Mt of fruits and ensuring fodder security for 800 households.
- Potential of earning net income per year from the individual activities to the tune of INR 9,250 (\$154) per year.
- Preparation of 20 nos. of Technical reports and organisation of National level multi stakeholder's consultation workshop.