

ADAPTATION FUND BOARD (UNFCC)

Climate Resilient Actions in Himalayan Region

2016-2021

800
small and
marginal
farming
families

300
Women
farmers

10
GPs

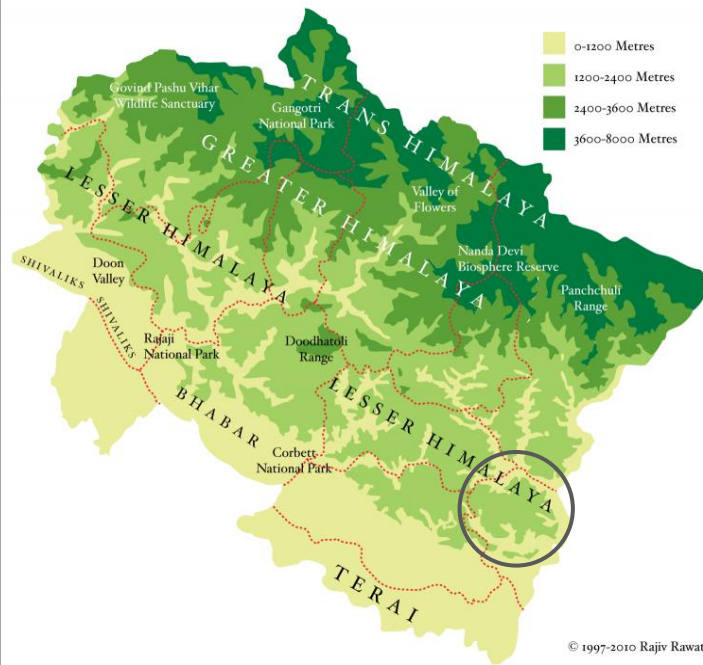
Climate Smart Actions and
Strategies in North-western
Himalayan Region For Sustainable
Livelihoods of Agriculture-
dependent Hill Communities

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Climate change vulnerability:

- Zone-I Western Himalayan agroclimatic region (Zone B – 1000-1500m) is climatically highly fragile and vulnerable
- Changing vegetative zone, increasing soil erosion, low productivity, drying springs
- Low per capita income and increasing migration
- Feminization of agriculture



Source: <http://uttarakhand.org/>

10 Gram Panchayat villages

Lohaghat, Pati, Champavat blocks

Champavat district

Uttarakhand state

Socio-Technical Model of Interventions

- Water resource development - Spring rejuvenation, rooftop rainwater harvesting
- Climate smart agriculture practices - polyhouse, horticulture, forestry, biodiversity conservation (seed landraces)
- Scientific interventions for livestock management, health services, improved breeding, feed practices and fodder development
- Ecological restoration and silvi-pasture development on degraded forest land
- Adoption of gender sensitive approach and promotion of SHGs
- Capacity building, creation of cadre of trained youth, knowledge dissemination
- Mobilization of communities for collective actions, formation and strengthening of various CBOs for post project sustainability

Guiding Principles

Climate change mitigation and adaptation

Multisectoral approach, Participation of communities

Context specific and local natural resource based planning

Inclusion, equity and democratic processes

Gender sensitive approach

1)	Participatory vulnerability assessment and preparation of annual adaptation plan	:	10 villages
2)	Low-cost bamboo polyhouses	:	252 families
3)	No. of families benefitting from horticulture and agroforestry promotion (no. of plants)	:	600 (60000)
4)	No. of springs rejuvenated (families benefitted)	:	17 (620)
5)	Units of Rooftop rainwater harvesting (capacity)	:	150 (2.25 MCM)
6)	No. of families with drip and sprinkler irrigation (area)	:	246 (2.02 ha)
7)	No. of families accessing livestock management services (no. of cattle benefitted)	:	800 (2266)
8)	Community Based Organizations (CBOs)	:	100+
8.1	No. of Van Panchayat strengthened (area)	:	13 (136 ha)
8.2	No. of users' group for Polyhouse, Dairy, Wadi (members)	:	61 (590)
8.3	Jal Samitis (members) *mainly women	:	15 (174)
8.4	Gram Jal Vayu Samiti (Male : Female members)	:	10 (58:62)
8.5	No. of seed bank (seed producing farmers)	:	3 (52)

- 1) **Net beneficiary families 800+ (4000+ population), 500+ women farmers**
- 2) **5.5 MCM Water augmentation, 136 ha of forest rejuvenation, 72 landraces of seeds**
- 3) **Productivity enhancement: 35% in agriculture, 25% in horticulture, 50% in milk production.**
- 4) **Net average annual income enhancement is Rs. 25000-35000/- per family**
- 5) **Strong community based organizations taking collective actions**
- 6) **Convergence with government schemes**



Impact

- Climate resilient hill farming communities
- High economic benefits with IRR up to 40%
- Diversification of income avenues
- Women centrality and reduction in women drudgery
- Reduction in distressed migration
- Collectivization and institutionalization of the developmental works
- Ecological suitability, specificity, and harmony
- Conservation of local seed biodiversity and sovereignty
- Increased livelihood, food security and self sufficiency

Policy Imperative

Scalable, replicable and sustainable model of "Climate change mitigation and adaptation" suitable for Indian Himalayan Region to achieve livelihood and food security for small and marginal farmers



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