VNV Advisory

CENTRAL HIMALAYAN ENVIRONMENT ASSOCIATION
CHEA

Himalaya Social Forestry

Expanding the Green Cover in Himalayan Region through Communities: Leading towards Ownership and Sustainability

Scenario

The Himalayan region occupies a special place among the mountain systems of the world. The massive mountain ranges of Himalayas (over 2500 km in length, between 80 and 300 km. wide and rising to over 800 m above sea level) produce a distinctive climate of their own and influence the climate of much of Asia. Over the past several decades there has been a great deal of concern about ecological degradation, deforestation, glacier shrinkage and disasters under the influence of global climatic change and the human miseries that they cause in these mountains. Himalayas are a global asset not only because of its rich biodiversity with high endemism and water resources, but also because of the cultural diversity and varieties of language that have evolved there.

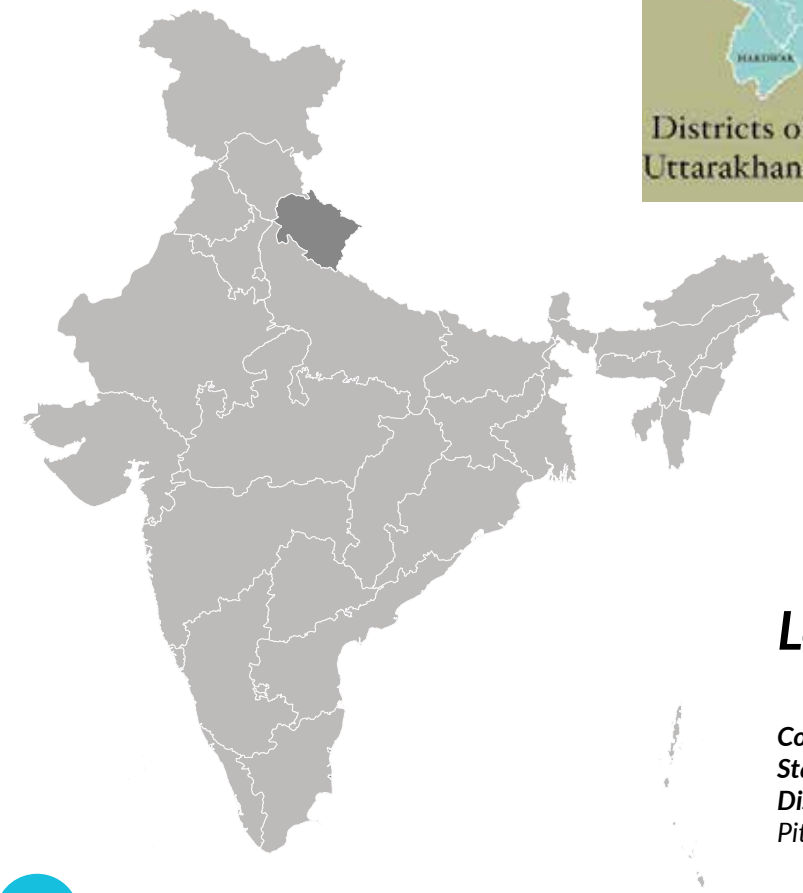
The scale and nature of present environmental problems in the Himalayan Regions are large, human populations continue to grow while many basic resources are depleted, polluted or mismanaged. In Indian Himalayan states most development decisions are based on conservative neoclassical analyses that are only loosely related, if at all, to protecting the environmental resources that are the basis of most wealth- producing systems. Strategies for sustainable development by combining ecological and economic considerations are a challenge and need to be addressed. With more area under ice and snow than any other in the world outside the polar caps, Himalayas are often in news for the shrinkage of glaciers due to global warming and increasing vulnerability of people in the events of weather extremes and consequent landslides and floods.

Mountains are at risk from the potentially negative effects of climate change because of their heavy reliance on forests and other natural resources. There are a number of ways in which forests could be affected by changes in climatic factors. Increased concentrations of carbon dioxide could in the short term raise plant productivity and improve water use efficiency. However, enhanced temperatures will also boost up evapo-transpiration rates. Ecological processes such as succession and migration could also be influenced by changes in temperature and moisture regimes. Climate change could also cause outbreaks of pests, fire and disease. In short, there could be sweeping disorder in the composition, distribution and productivity of forests. The ability to envisage exactly how forests will react to climate change is limited because of a lack of long term experimental data.

Agriculture and subsistence living in much of the Himalayas are forest based; each energy unit of agronomic production entails 6-10 energy units from forests as fodder (including tree leaves), forest floor litter and firewood. Because of deforestation and forest degradation the access to the forest resource is becoming difficult; women often walk down several miles to collect forest biomass.

The human drudgery is acute, and a serious constraint in woman participation in developing activities. Because of the difficult terrain huge efforts are required to raise tree plantations from nursery grown seedlings. For example, transport of seedlings from road heads to plantation sites as head loads is highly labor intensive work. That is why plantations raised are seldom more than a hectare and so. In a pilot study, it is successfully demonstrated that some of the tree species can be regenerated by direct sowing of seed/acorn. In addition Assistance to Natural Regeneration (ANR) is also an option to increase the vegetative cover in less cost.

Local communities depend on forest resources for subsistence living. They express that limited options for livelihood and declining productivity of agriculture threaten food security and induce migration. They have emphasized the need to equip local institutions with necessary capacities which will work for resource creation based on forest goods and services. They think that agriculture, fodder, livestock, and water availability are dependent on forests; hence a systemic intervention is needed to restore forests. Consultations further revealed the willingness of local people to engage in the initiatives which could improve their livelihoods. To address this problem, several initiatives have looked into reforesting degraded lands, and restoring productivity through a variety of measures. However, these programmes could not make significant impact because of several limitation caused by mountain-specificities such as remoteness, topographic fragility, inaccessibility. Evidently efforts required to revive forest resources need to be far greater that those of past.



Location:

Country: *India*
State: *Uttarakhand*
District(s): *Nainital, Almora & Pithoragarh*

Proposed Intervention

CHEA is already being engaged with Van Panchayats (Community Forests) in Uttarakhand along with communities towards conservation and management practices since last three decades. It is proposed to go for mass scale plantation/regeneration in mountain villages. To expand the green cover Van Panchayats (VPs), Common Village Land and Private Land will be taken up and it will be primarily taken up in deforested, degraded and wastelands in VPs and common village land whereas in private land it would be preferred in terraces and barren land. The method for increasing the green cover will be primarily the plantation of seedlings raised in nurseries, direct sowing of seed/acorn of selective species and ANR to have options and models.

Thus, 3 types of areas and 3 methods will be applied for increasing the area under forest tree species. The proposed intervention will be focused in Uttarakhand state along with selective areas of Himachal Pradesh. The selection criteria of above different areas would be based on vegetation type, need of local communities, their willingness towards the intervention, social inclusion and gender equity issues, resource scarcity and potential for expanding the green cover as well as conservation and management of tree resources. Based on our experiences various species are being identified for restoration and expanding green cover are *Quercus leucotrichophora*, *Myrica esculenta*, *Rhododenderon arboreum*, *Grewia optiva*, *Celtis australis*, *Morus alba*, *Bahunia variegate*, *Bamboo spp.*, *Alnus nepalensis*, *Manipuri oak*, *Wild Apricot*, *Chyura (Diploknema butyreacea)*, *Ritha*, *Amla*, *Tejpatta*, *etc.* between 1000-2500 m altitude.

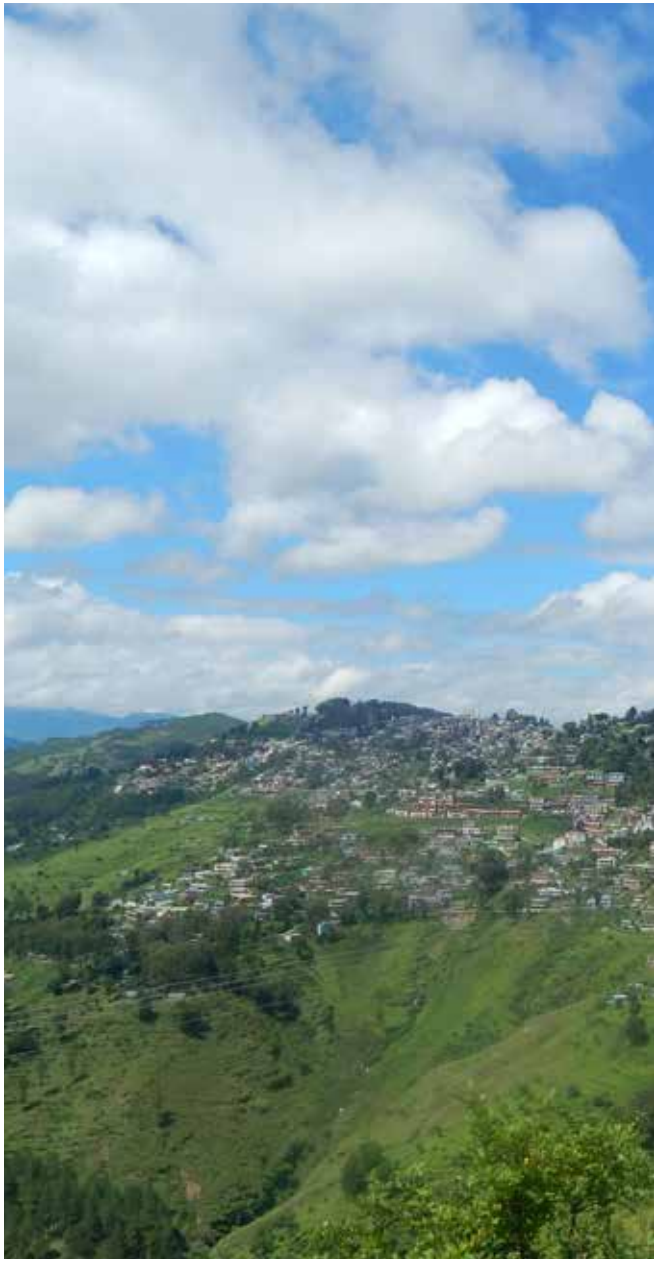
A cooperative and compact area approach will be followed for successful execution of programme. The execution will be ensured through Self Help Groups (SHGs), Joint Liability Groups (JLGs), Farmer Interest Groups (FIGs), etc. and Van Panchayats. The discussion with leading farmers and representatives will be made for creating better understanding and ownership among the beneficiaries.

Duration of the Project

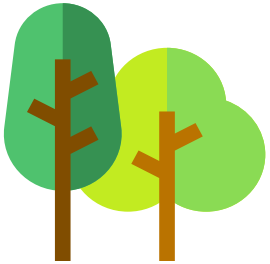
5 Year

Estimated Planting Rate

1250 hectares/year



Intended Outcomes



Over 6000 hectares covered with over 6 million trees which will act as carbon sinks, assisting in soil and water conservation in the area.

Greater involvement of women SHGs and VPs and the local communities as a whole in monitoring and management of planted trees.

Income generation activities promoted/ adopted among the households in the area through horticulture and livestock promotion.

Awareness and convergence of communities in the area towards one cause.

IMPLEMENTATION PARTNER: CHEA INDIA

CHEA- India founded in 1981, is one for the earliest societies founded in proper northern India with mountain environment as the focus of its concern. The lead of the oak tree is the emblem of CHEA. The oak forests are associated with water, humidity,biodiversity, in short with life, in the mountain of the state. It is the tree of the masses and is the lifeline of the village communities. In more ways than one, the emblem of CHEA embodies what the organization stands for “environment and livelihoods of people in the Himalayas”. Fulfillment of basic human needs, active participation of women, provision of and access to infrastructure services, human rights, democratic institutions and good governance, focus on youths, and participatory decision making on resource use are some of the area that concerns CHEA

VNV ADVISORY

VNV Advisory Services LLP has been at the forefront of working with climate change and livelihoods. Our decade-long experience has seen us develop low-carbon projects that support these communities in getting their basic needs while adapting to and mitigating the harsh impacts of climate change. We work in areas of clean cooking, social forestry, sustainable agriculture, rural energy access and many other related community based technologies. With support from over 40 NGOs and implementation partners, our work encompasses over 3 million rural households across the South Asian (India, Bangladesh, Nepal and Sri Lanka) region. We have also been able to engage with businesses to address issues of Social Responsibility, Environmental Sustainability and Carbon Neutrality.

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