

# Expanding the Oak Afforestation in Himalayan Region through Communities: Leading towards Ownership and Sustainability



## Project Implementation

The Himalayan Region along the northern border of India supports a variety of species in its forests which vary in species composition from east to west, low to high elevation. These forests have in the past and continue to play a key role in safeguarding the environment and have provided long-term ecological security to the sub-continent.

The scale and nature of current environmental problems in the Himalayan Regions are large, whilst human populations continue to grow exponentially. This results in depletion of natural resources, in addition to their pollution or mismanagement. The degradation of the Himalayan forests has been linked to environmental problems in the northern plains of India and Bangladesh, home to over half a billion people. Forest degradation has been held responsible for increased landslides and soil erosion leading to the damage of the Himalayan agro-economy, loss of livelihoods and out migration of the locals. Decline of these forests has also led to the drying up of numerous perennial springs. In order to counter this problem, initiatives such as reforestation with integrated renewal of degraded watersheds is being explored.

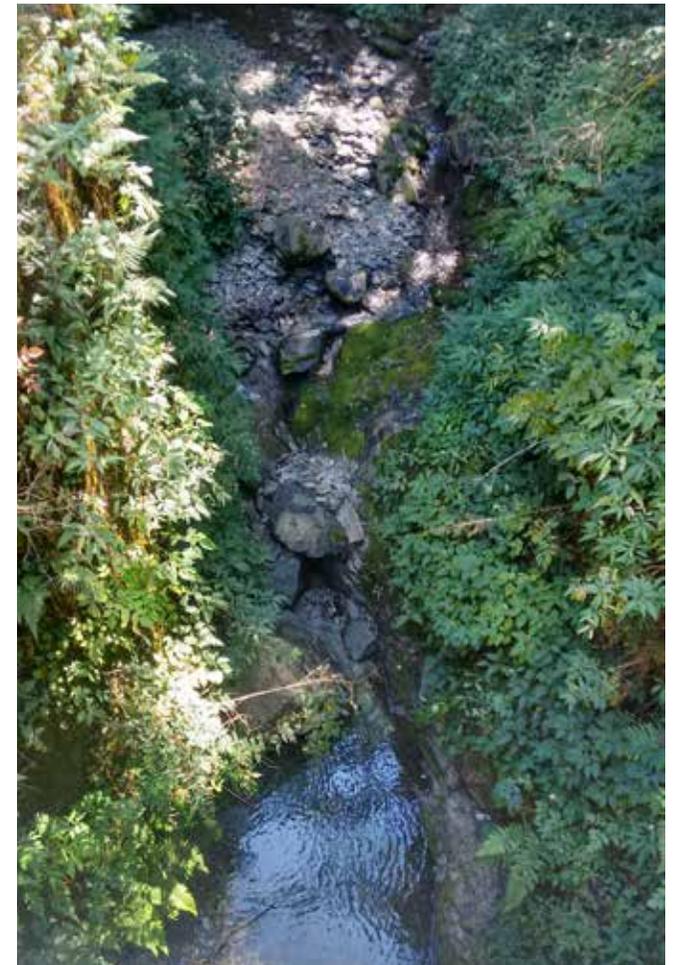
Strategies for sustainable development by combining ecological and economic considerations are a challenge and need to be addressed. With more area under ice and snow than any other in the world outside the polar caps, the Himalayas are often in the news for the shrinking of glaciers due to global warming and increasing vulnerability of people in the events of weather extremes and consequent landslides and floods.

There are five species found in the Kumaon Himalaya i.e. *Quercus leucotrichophora*, *Q.floribunda*, *Q.semicarpifolia*, *Q.lanuginosa* and *Q.glauca*. The Banjh Oak (*Quercus leucotrichophora*) is the most common broad leaf tree in the mid-elevation Central Himalaya in India, which is also being used in this project. VNV Advisory Services and its on-ground partners are exploring the reforestation and afforestation of oak in Uttarakhand in an attempt to revive the Kumaon ecosystem.

As part of this project, the team works with the "Van Panchayats" (VP or Village Forest Councils are unique community managed forest institutions. The first "Kumaon Panchayat Forest Rules" was issued In 1931 which enabled mountain communities to own and manage their own forests). Members of the community have formed Self-Help Groups or SHGs (small voluntary associations of individuals in the village/area) who have come together to contribute to the project and solve their common challenges.

CHEA- India founded in 1981, is one of 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 mountains 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 areas that concern CHEA.



## Project Objectives

---

To study the acorns collected from different regions and standardize the storage and sowing methods for the oak acorn. Including collecting data on the germination survival and growth in different sites.

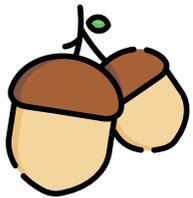
To encourage community (especially women SHGs & VPs) to facilitate in protection and management of sites.

To link communities with development programmes for livelihood improvement and resource mobilization.

To certify the project as a carbon reduction/offset project to sell as carbon credits. The sale of these credits will go towards project monitoring and maintenance.

## Women SHG's

---



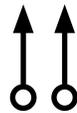
Collect acorns



**WOMEN SHG'S**



Sow acorns and maintain saplings



Compensated for the effort & encouraged to participate in conservation



## Species of Interest

---



Quercus floribunda



Quercus semicarpifolia



Quercus lanuginose

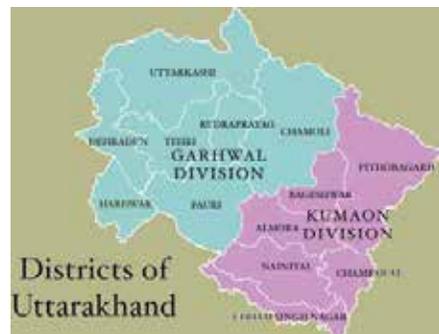


Quercus glauca



Banjh Oak

## Location & Key Focus Areas



**Country:** India  
**State:** Uttarakhand  
**Districts:** Nainital, Almora, Pithoragarh

Implementation Partner  
**CHEA (Central Himalayan Environment Association)**

Community involvement  
**Involving 100 Van Panchayats (VPs)**  
**120 Self-help Groups (SHGs)**  
**60-70% of stakeholders are women**

Duration of the Project

**30 Years**

Approx area covered  
**2,000 hectares across 3 districts**  
**Planting 12,50,000 oak seeds**

Estimated Sequestration (tonnes CO<sub>2</sub>e)

0-10 years	1,65,581 tCO <sub>2</sub>
20 years	900,115 tCO <sub>2</sub>
30 years	23,11,343 tCO <sub>2</sub>
<b>Total</b>	<b>3,377,039 tCO<sub>2</sub></b>



## Carbon Sinks

500 hectares covered with over 12 lakh banj oak seedlings who will soon act as carbon sinks, assisting in soil and water conservation in the area.



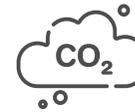
## Enhanced Capacity for Sustainable Forest Management

Better capacity for planning, managing and monitoring (MRV) forest resources



## Women Empowerment

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



## Carbon sequestered in trees and soil

Due to afforestation there will be an increase in carbon dioxide sequestered from the atmosphere



## Livelihood Benefits

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



## Enhancement of carbon stock through mitigation of Climate Change

Certification of projects will lead to the generation of carbon credits which once sold will provide funds needed to continue managing the plantation sites and providing livelihood.



## Knowledge Building

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

## SDGs addressed by the project

---





## VNV ADVISORY

VNV Advisory Services 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 4 million rural households and 50,000 hectares of forest areas under management across the South Asian (India, Bangladesh, Nepal, Laos, Myanmar and Sri Lanka) region. We have also been able to engage with businesses to address issues of Social Responsibility, Environmental Sustainability and Carbon Neutrality.





## Contact

41/1, Reyyan Towers,  
VNV Advisory,  
Church Street,  
Bangalore - 560001  
+91 80 4242 9916/9933  
contact@vnvadvisory.com

Value Network Ventures Advisory Services Pte. Ltd.  
10 Anson Road, #29-07 International Plaza,  
Singapore 079903

