

# **Ecological Restoration Using Indigenous Knowledge in Nepal**

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*The Resource Development Initiative Center (RDIC) is a grass-roots organization dedicated to community forestry using indigenous knowledge. Two major projects undertaken by the RDIC highlight ecological restoration using indigenous knowledge.*

Forestry is the most extensive land use system in Nepal. Forestry and agriculture combined account for 40 percent of the GDP. A famous Nepali proverb “Green forests are Nepal’s wealth” emphasizes the significance of the forest in Nepali life. However, several policy analyses and planning studies have strongly pointed out that the trend during the last 50 years has been one of serious environmental decline; and in order to avoid irreversible damages to the ecological as well as economic health of the country it is essential to reverse the trend and to direct it towards sustainable development and restore ecology.

All documented evidence indicates continuing deforestation trend in Nepal. No precise figures are readily available for the gross and net deforestation over time. Large areas have been deforested in the last 50 years. By 2003 forest cover had probably reached less than 27 percent, down from more than 40 per cent in the 1950s. This decline has caused a loss of many of the goods and ecological services provided by forests and have had a profound effect on rural communities, their livelihood and the nation as a whole. Supplies of building timbers and fuel wood have declined along with the availability of many non-timber forest products such as herbs and medicinal plants that are widely used.

Inevitably, forest loss as the most serious factor threatening sustainable agricultural productivity in Nepal. It is imperative to reduce the rate of deforestation through community participation. Considering that an important objective of Nepal is to increase the percentage of land effectively under forest cover even the reduced level of deforestation is abhorrent enough.

Ghartichap Project ( 5/85- 4/ 2001) - Ghartichap, a small village located east of Kathmandu, remains isolated from Kathmandu and the modern world. Ghartichap is not linked by road. Human transport is the only transport to this remote village. The Tamangs are the major ethnic community living in this area that depends on the forest and farm for their source of livelihood. They are mostly uneducated and do not have access to information.

Due to landslide, they have lost all the forest. The RDIC restored the lost forest with the use of indigenous knowledge. The RDIC through advocacy, education, and organizing

the local communities planted trees. The forest resource base has improved and can generate forest resources and non-timber forest products from which the communities can produce bamboo furniture and sell to the Kathmandu valley and generate cash income for their family. Estates put their family income to \$3000 annually.

Devighat Agro Forestry Project (1/ 2001- 2/2003) - Devighat is a region located in the eastern Nepal known mainly for its vegetables and mustard near the Mahendra National Highway was completely damaged threatening the ecology, and the support base for the people living in the area who relied on farming and forest for their livelihood.

With the use of indigenous knowledge, it was completely restored and now provides food and livelihood for the communities in the rural area. They sell vegetables to Kathmandu valley and Butwal and earn \$5000 annually from commercial crops.

Ecological restoration using indigenous knowledge in Nepal - indigenous people value land and forest, they worship land and forest as it conveys a strong and intimate relationship that binds the indigenous people with the forest and land. They grow with the land and forest that is exclusively managed by indigenous groups without external help.

Restoration through afforestation includes the regeneration of a previously degraded area and involves a local effort to protect the badly degraded area. Indigenous systems are geared towards protection and conservation.

Use indigenous knowledge and forest is their main source of livelihood. Subsistence farming and forest as their source of livelihood threatened. They use indigenous knowledge generated by internal initiatives within the local group/community such as: harvesting selected products, harvesting according to condition of the products, and limiting amount of products.

Local leaders are respected and often use social means of protecting forests and imposing sanctions for unauthorized use, even expulsion from the village.

Intensive afforestation activities have led to the protection of the forest. Regeneration of previously degraded areas through restoration has provided livelihood and income by diversifying to commercial farming. It has not only enhanced the environment but also provided income. The existence of groups with secured tenancy rights has not only boosted their confidence but also protected conserved and added more impetus to ecological restoration.