

# Mountain Forests in a Changing World

Realizing values, addressing challenges



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Agency for Development  
and Cooperation SDC



**INTERNATIONAL YEAR  
OF FORESTS • 2011**



# Climate change adaptation and mitigation through community-based sustainable management of forests in Nepal



Nepal's forests are critical to rural livelihoods for energy, compost-based farming, and marketable and subsistence timber and non-timber forest products, and provide critical ecosystem services. Through the introduction of community forestry, local people are organized to protect, manage, and benefit from forests that are otherwise unmanaged and prone to degradation and overuse. This has led to the substantial recovery of Nepal's forests over the last 20 years. Community forests now cover 1.25 million hectares, approximately 21% of Nepal's forest area, benefitting nearly 40% of the population.



General assembly of CFUG in Dolakha district, Nepal. Photo: Shambhu Charnakar



Forest in Kayarkhola watershed, Chitwan, Nepal. Photo: Sanjeeb Bhattarai

In 2009, the Asia Network for Sustainable Agriculture and Bioresources (ANSAB) and partners started a project to design and implement governance and payment systems for community forest management to reduce emissions from deforestation and degradation, through forest conservation, sustainable forest management and carbon stock enhancement (REDD+). The project, implemented in 10,266 ha of forests managed by 105 Community Forest User Groups, has identified drivers of deforestation and forest degradation, trained local communities to measure carbon stocks, and initiated direct and indirect carbon mitigation interventions. These include plantations, fire prevention, controlled grazing, and improved forest management practices, complemented by the adoption of bio-gas and improved cooking stoves and fodder production on private land. In 2011, the carbon stock of these community forests increased by 100,436 tons.

Communities have also developed conservation and adaptation activities with performance-based incentives from a forest carbon trust fund and payment mechanism. Encouraged by these results, ANSAB and international partners, including the United Nations Environment Programme and the Forest Stewardship Council's International Center, have developed a project to bundle forest carbon with other ecosystem services, such as tourism and hydrological services, and certify them at landscape level for enhanced benefits.

These experiences show that community-based, enterprise-oriented forest management is a vital component of local-level climate change adaptation and mitigation. The provision of economic incentives to local stewards helps reverse deforestation, enhances the stock of natural wealth for the sustained flow of ecosystem services, and strengthens the capacity of local communities to adapt to and mitigate climate change.

## Authors

Bhishma P. Subedi,  
Sanjeeb Bhattarai and  
Sudarshan Khanal,  
Asia Network for Sustainable  
Agriculture and Bioresources (ANSAB),  
Kathmandu, Nepal