

Key messages

1. Nepal's community forestry program has successfully demonstrated the benefits of forest conservation by strengthening biodiversity, contributing economically to local livelihoods, improving preparedness of climate change adaptation, and enhancing governance and sustainable management of forest resources. These are the same co-benefits that can be anticipated from Reducing Emissions from Deforestation and Forest Degradation (REDD+) activities in Nepal.
2. The value of these co-benefits of forest conservation and sustainable forest management to local communities is far greater than forest carbon payments alone. REDD+ activities should be designed to ensure communities can access those co-benefits.
3. To fully realize the co-benefits of REDD+ activities in Nepal, emphasis should be placed on technologies and methods for cost-effective measurement, reporting, and verification (MRV) as well as human and institutional capacity development at different levels. Sustainable financing will be required for REDD+ to become an attractive incentive for improved forest management.

Co-benefits of REDD+ Activities in Nepal

Background

Since the United Nations Framework Convention on Climate Change Convention of the Parties (COP) 16 in Cancun, promoting co-benefits and safeguards of REDD+ has risen sharply on the international climate change agenda. Many countries have shared their views about how social and environmental safeguards can be addressed under REDD+ and what measures need to be undertaken, including improved information systems and feedback mechanisms for different stakeholders.

Within REDD+, co-benefits arise from the maintenance or restoration of forest ecosystems that would otherwise have been degraded or lost. The co-benefits generated are well-established (Chhatre et al., 2012; Lee et al., 2011) and the associated key stakeholders are determined by the social, ecological, and institutional contexts in which REDD+ activities are implemented. The success of REDD+ to deliver co-benefits also depends on national policies, sustainable forest management approaches, and the location of forests that will benefit from REDD+ funding.

Nepal has already successfully demonstrated the potential of community engagement in forest resource management through its community forestry programs, begun in the 1970s. Community forestry was an effective decentralized response to local needs and institutions through adaptive forest management. Its success can be partly attributed to both realised and intangible benefits of forest conservation and sustainable forest management.

The scope for carbon payments in community forestry is a recent development. In the Nepalese context, carbon payments may be seen as another co-benefit of successful community forestry activities that reduce forest carbon emission and increase carbon stocks in forests. However, REDD+ can bring additional much-needed incentives to community forest users that address poverty and social justice issues as well. In other words, REDD+ provides triple dividends to the climate, community, and forests.

Highlights

- The success of REDD+ to deliver co-benefits also depends on national policies, sustainable forest management approaches and benefit sharing mechanism
- The higher the co-benefits from REDD+ activities, the greater will be its positive impacts.

Co-benefits of REDD+ activities are significant in rural Nepal and throughout the Hindu Kush Himalaya (HKH) where a large proportion of the population has limited livelihood options and depends on forest resources to make ends meet. Based on the experience of a pilot REDD+ project implemented by ICIMOD, the Asian Network for Sustainable Agriculture and Bioresources (ANSAB), and the Federation of Community Forest Users, Nepal (FECOFUN), we have learned the following co-benefits may be derived from REDD+ activities.

Key co-benefits of implementing REDD+ activities

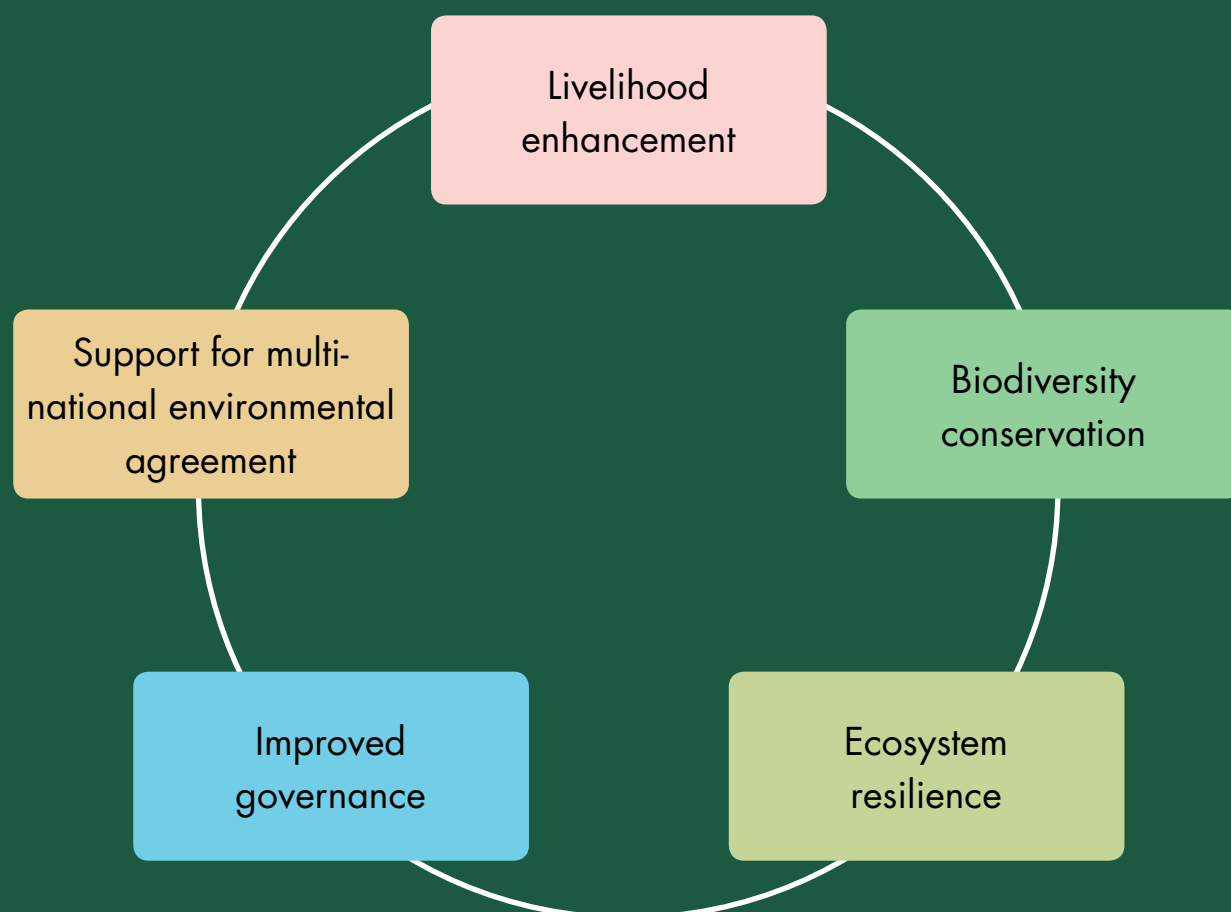
- A. **Enhancement of local livelihoods:** Through improved management of different forest types and forest resources, REDD+ activities can generate employment opportunities in forest-based industries, provide food and nutrients to local diets, enhance water quality, and provide wood fuel for meeting energy needs.
- B. **Increased value of biodiversity:** Substantial conservation of biodiversity and wildlife habitat can be anticipated. This translates into increased local and national income from, among other sources, wild flora and fauna.
- C. **Improved ecosystem services to people and the environment:** As the state of forests improves in Nepal, we can expect a corresponding rise in the

quantity and quality of ecosystem goods and services such as provisioning, regulation, cultural and supporting functions. These services will be key for strengthening climate change adaptation measures.

- D. **More resilient ecosystems for climate change adaptation:** With effective and efficient management of forests, local ecosystems will be less vulnerable to the adverse impacts of climate change. Ecosystem-based adaptation measures can enhance resilience of ecosystems that will mitigate climate change impact on people and ecosystems.
- E. **Improved governance, institutional setup, and policies for natural resource management at multiple levels:** Effective implementation of REDD+ activities requires a compliance process that is transparent and accountable and promotes an inclusive decision-making method vertically and horizontally across governmental scales. Benefit-sharing mechanisms should be organized and monitored accordingly.
- F. **Contributions to multinational environmental agreements:** Implementing REDD+ activities will also contribute to meeting the objectives of many international conventions and agreements such as the Aichi Targets and other provisions of Convention on Biological Diversity (CBD), Ramsar, Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and United Nations Convention to Combat Desertification (UNCCD).



Figure 1: Five co-benefits of implementing REDD+ activities



Co-benefits of REDD+ activities and their indicators

Co-benefit	Indicators	Examples from pilot projects
Livelihood enhancement	<ul style="list-style-type: none"> • Employment (forest and biodiversity based) • Food and nutrient supplement • Water availability and flow regulation • Wood energy 	<ul style="list-style-type: none"> • Revolving fund • Regular income from employment opportunities for women and poor • Improved cooking stoves and biogas; hydropower potential identified by CGUFs in Kayarkhola watershed
Increased biodiversity value	<ul style="list-style-type: none"> • Reduced loss of habitat • Increased number of species and their populations • Conservation of endangered species • Increased income from bio-prospecting 	<ul style="list-style-type: none"> • Increasing wildlife (wild boar, tiger, peacock, bat) • Control of illegal harvesting • Improved management of NTFP harvesting; wetland conservation, critical habitat corridors restored • Increased awareness among local people about the value of forest products and services
Enhanced ecosystem resilience against climate change	<ul style="list-style-type: none"> • Reduced vulnerability from fire, flood, pest infestation, landslides, and siltation 	<ul style="list-style-type: none"> • Fire line construction • Forest protection • Soil conservation through plantation
Improved governance, institutions, and policies	<ul style="list-style-type: none"> • Transparent and participatory decision making • Equitable access and benefit sharing 	<ul style="list-style-type: none"> • Inclusion of women, Dalits, and indigenous groups (e.g., Chepang) in decision making • Increased female leadership • Enhanced participation in project activities
Contribution to MEAs	<ul style="list-style-type: none"> • Aichi Targets and other provisions of CBD, Ramsar, CITES, UNCCD 	<ul style="list-style-type: none"> • Submissions to UNFCCC, CBD, UNCCD, etc. Sharing best practices

Recommendations

The following issues require serious attention for ensuring both carbon and non-carbon co-benefits from REDD+ activities in Nepal.

- **Technologies and methods:** Remote sensing and renewable energy technologies are valuable tools for REDD+ activities. Also, there is ongoing need for improved methods and guidelines (e.g., economic valuation of ecosystem services) to ensure that REDD+ benefits are garnered for local people and properly accounted for in reports to local and national governments.
- **Capacity development:** Environmental institutions and individuals at all levels require capacity building for making effective use of technologies and methods mentioned above.
- **Financing:** Sustainable funding sources and mechanisms are crucial for incentivising co-benefits so that REDD+ activities become effective and sustainable in the long run. Carbon markets alone will not be sufficient in developing countries. Dedicated funds will be required and, where

possible, a payment for ecosystem services (PES) approach can also be applied locally.

- **Sustainable forest management:** Community forest management should be based on optimising benefits from ecosystem services that include forest carbon, livelihoods, and environmental improvement.
- **Cross-sectoral planning and implementation:** Benefits from carbon payments and their co-benefits will require joint efforts at the district level consisting of different sectors (such as forestry, environment, energy, local development, and finance) in planning, implementing, and monitoring REDD+ activities.

References

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For Further Information

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