



FINANCE SOLUTION I: INTEGRATING BIODIVERSITY INTO COMMUNITY-BASED FORESTRY MANAGEMENT IN BIOLOGICAL CORRIDORS OF NEPAL

CONTEXT

Biodiversity conservation has been a high priority for Nepal, reflected in its [National Biodiversity Strategy and Action Plan \(NBSAP, 2014-2020\)](#). In the spirit of the Convention on Biological Diversity (CBD) and other relevant agreements, the government of Nepal enacted its NBSAP in 2014, with a long-term vision of conserving biodiversity for sound and resilient ecosystems and national prosperity. The document provided a strategic planning framework for the conservation and sustainable use of biodiversity and biological resources, to which Nepal is highly committed, to enhance local livelihoods, eco-friendly national development, and equitable sharing of the benefits associated with biological resources across society.

Most of the NBSAP targets were partially achieved, due to inadequate financial investment. According to the Sixth National Report submitted to the CBD in 2018, two-thirds of the 56 NBSAP targets were progressing at an insufficient rate. This is due to increasing direct drivers of biodiversity loss such as climate change, pollution,

exploitation, and land use conversion, along with poor sectoral integration and inadequate investment. During the NBSAP period, the total expenditure attributable to biodiversity-related activities was indeed US\$545 million (0.97% of the government budget), of which only US\$171 million at a 2014 constant price translated into programmatic results. This resulted in a financial gap of US\$502 million during the planned period, which represents less than 1.5% of the 2019 national income.¹

Closing the finance gap is necessary to achieve the national biodiversity vision. The Biodiversity Finance Initiative-Nepal (BIOFIN-Nepal), led by the United Nations Development Programme (UNDP), aims to reduce this investment gap by implementing sustainable and innovative finance solutions. In this regard, it worked with the Ministry of Forests and Environment (MoFE) in developing a biodiversity finance plan in 2023. Its elaboration followed a consultative process at the national and subnational levels, engaging the public and private sectors, civil society, and conservation partners. The plan was prepared based on learnings from a policy and institutional review, biodiversity

¹ Nepal's Biodiversity expenditure review, BIOFIN (2022)



expenditure review, and financial gap analysis of the country. The plan singled out eleven finance solutions to generate US\$26.7 million annually for biodiversity.

Biodiversity mainstreaming in forest user groups is one of the three solutions prioritized in partnership with the MoFE. BIOFIN-Nepal provides technical assistance to the MoFE in piloting the solutions, to ensure long-term and steady financial flows to biodiversity with the active participation of all relevant stakeholders (including the community forest user groups).

RATIONALE

Community engagement is a high priority in improving transboundary corridor connectivity. To facilitate wildlife movement, the government has prioritized forest restoration and ecological connectivity in critical areas connecting transboundary protected areas of Nepal. Seven biological corridors covering 2295 km² in the Terai region were selected² as they are rich in biological diversity, providing a home to twenty-two tigers³ and containing rare and protected

tree species. To engage local communities in forest restoration and management, the government handed over the forests in the area as community forests. The Forest Act (2019) recognizes forest user groups as autonomous institutions which can generate revenue by selling forest products and services, according to a management plan with annual programs that they must prepare. They can independently mobilize funds for forest conservation and community development.

The contribution of existing community-based forests management practices to biodiversity conservation is disputed. Community forest management has been linked in empirical studies with generally positive impacts on biodiversity: forest regeneration, increased species richness, improved wildlife habitat⁴. However, challenges exist: a review of the plans for community forests in biological corridors reveals little priority for conservation (no spatial plan to identify nationally protected plant and animal species, no mapping of biodiversity-rich areas, or management interventions targeting biodiversity conservation). Forest user groups

² Ministry of Forests and Soil Conservation 2015. Terai Arc Landscape Strategy and Action Plan 2015-2025, Nepal. Ministry of Forests and Soil Conservation, Singha Durbar, Kathmandu, Nepal

³ DNPWC and DFSC. (2018). Status of Tigers and Prey in Nepal. Department of National Parks and Wildlife Conservation & Department of Forests and Soil Conservation, Ministry of Forests and Environment, Kathmandu, Nepal

⁴ Luintel H, Bluffstone RA, Scheller RM (2018) The effects of the Nepal community forestry program on biodiversity conservation and carbon storage. PLoS ONE 13(6): e0199526. <https://doi.org/10.1371/journal.pone.0199526>

prioritize actions under sustainable forest management rather than conservation, as their plan's implementation depends on the income from forest resources such as timber: there is a trade-off between pure conservation goals and economic benefits. Ignoring other forest ecosystem services and favoring timber-yielding tree species tends to convert the mixed natural forest to a monoculture, posing risks to biodiversity.⁵ A sustainable management of forests needs to focus on all dimensions of sustainability: social acceptability, economic viability, and ecological sustainability.

The financial contribution of community forestry to biodiversity conservation is not fully accounted for. A pilot study conducted by the BIOFIN-Nepal (2020) estimated that the annual biodiversity-relevant expense of community forest user groups (including conservation and sustainable management actions) amounted to Rs 7,063.9 per hectare (about 50 USD), which is more than half (52.8 %) of the total annual expenditure. About one-third of the total expenditure is spent on forest restoration activities, followed by green economy and sustainable use, most of these activities contributing to biodiversity conservation. However, it is poorly acknowledged and often ignored due to poor accounting and reporting system within the Divisional Forests Office. It is also due to poor definition of what constitutes biodiversity conservation in community forestry.

The financial gap for implementing management plans is not known. According to the Forest Act (2019), forest user groups shall invest at least 25% of their income in forest management. However, management plans are poorly considered during investment decisions. The

financial needs and potential financial resources for implementation are often not assessed. As a result, the plans are poorly implemented due to inadequate financial resources.

EXPECTED RESULTS

This finance solution will be piloted in two transboundary biological corridors of the Sudurpaschim Province, (see map 1). BIOFIN, in collaboration with the Division Forests Offices, selected 50 forest user groups covering more than 2500 ha. BIOFIN will conduct a three-year pilot (2024 – 2027) to mainstream biodiversity and finance considerations.

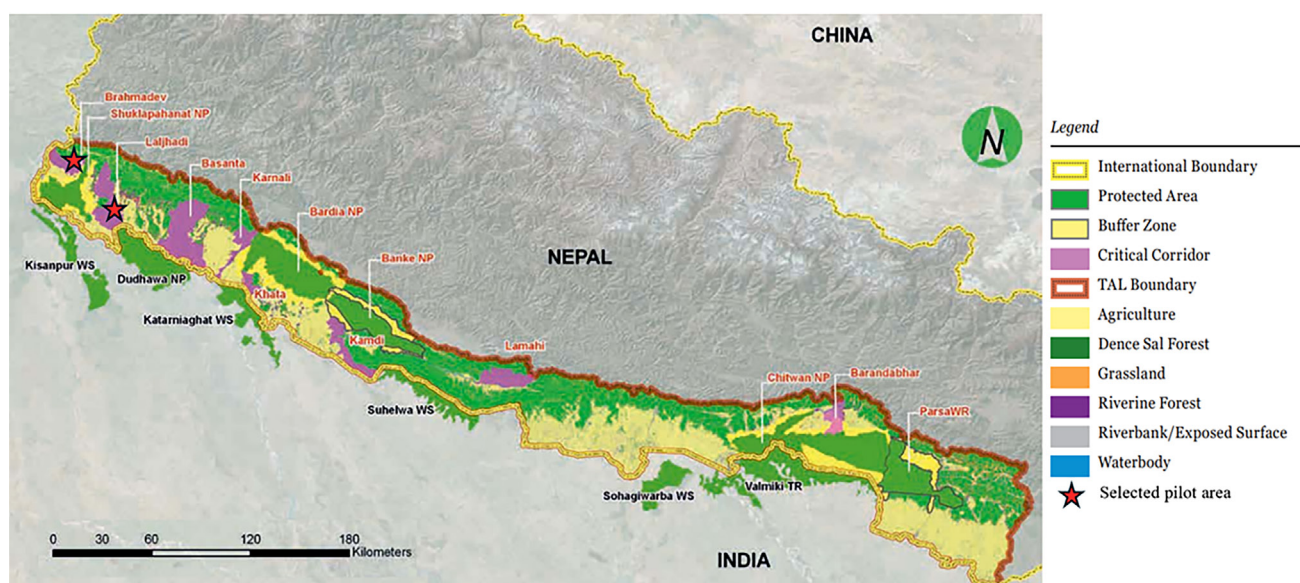
This finance solution aims to strengthen sustainable forest management by enhancing the efficacy of forest user groups in biodiversity conservation (figure 1) by

- (i) integrating biodiversity considerations in the management of community forests,
- (ii) leveraging finance for biodiversity
- (iii) sharing knowledge and strengthening the capacity of forest user groups/forest officials,
- (iv) engaging local communities to ensure their active and meaningful participation in the processes

The expected results (Box) include:

- (i) A biodiversity expenditure of forest user groups increased by 15% annually,
- (ii) Additional finance of US\$10,000 (US\$200 per CFUG) leveraged annually,
- (iii) 200 people's capacited on biodiversity mainstreaming,
- (iv) One extra biodiversity-related activity integrated and implemented.

Map 1: Location of the pilot projects in the Tarai Arc Landscape (adapted from WWF)



⁵ Shrestha, U. B., Shrestha, B. B., & Shrestha, S. (2010). Biodiversity conservation in community forests of Nepal: Rhetoric and reality. *International Journal of Biodiversity and Conservation*, 2(5), 98-104.

These results will be achieved through:

- Developing biodiversity-friendly forest management planning guidelines
- Preparing a taxonomy of finance solutions for community forestry, with implementation mechanisms
- Updating forest management plans to integrate at least one biodiversity objective
- Developing a tailored financing plan for each forest user group to address financial gaps
- Implementing at least one additional biodiversity-friendly intervention in forest user groups
- Providing technical support for forest user groups to implement their operational and finance plans
- Sharing lessons with the district and provincial forest officials.

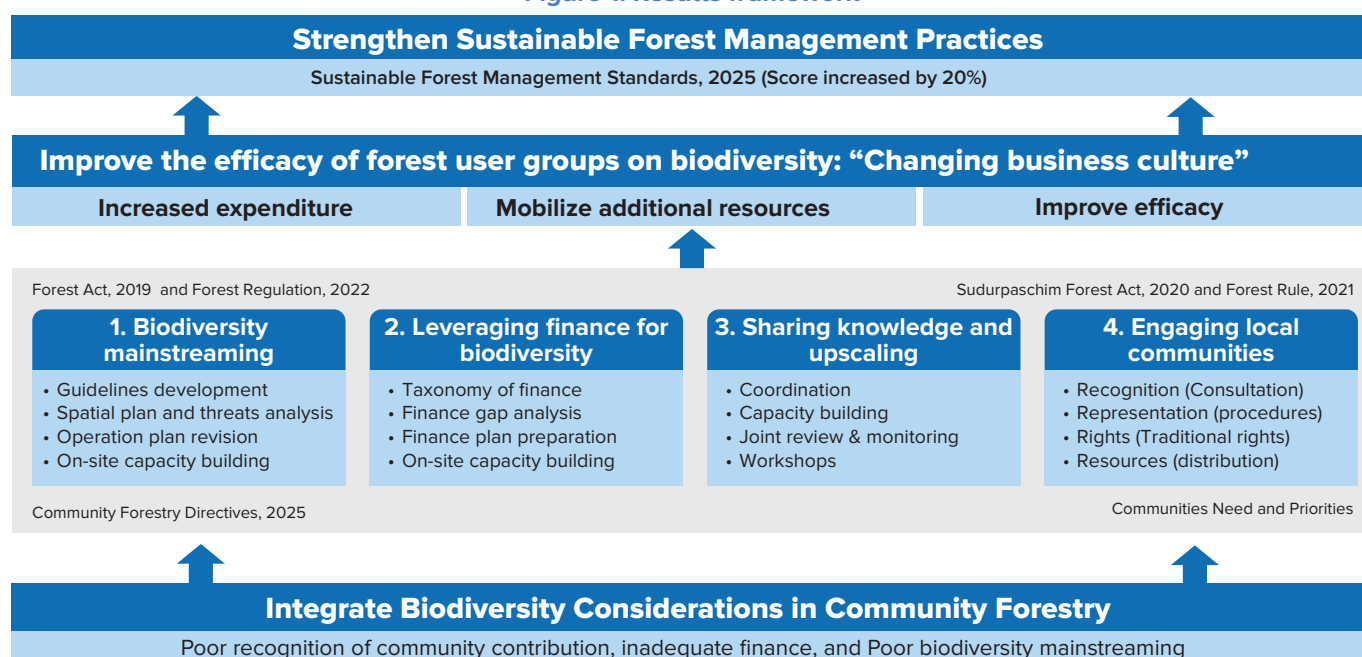
Integrating biodiversity considerations

Integrating biodiversity considerations into community forests focuses on strengthening the sustainable forests management practices to ensure a sustainable supply of ecosystem services. It involves strengthening sustainable forest management practices and equitable benefit-sharing, while protecting nationally protected plants and wildlife species, if present in the area, with active engagement of local communities.

The guidelines for biodiversity-friendly community forestry operational plan preparation, aligning with the federal and provincial forestry legislation will be prepared. These will be validated in the Sudurpaschim Province, with the aim to develop a shared vision on implementation. Three components are prioritized in the guidelines, which include: (a) taking stock of the current state of biodiversity in the community forest, (b) revising the operational plan following a result-based approach, and (c) developing a fully costed plan, with estimation of the likely costs and benefits.

- **Take stock of biodiversity within the community forests:** This involves (a) preparing a participatory spatial map of land covers or forest types within the community forests, including identifying biodiversity hotspots, if any; (b) identifying and prioritizing the different threats to biodiversity in the area; and (c) mapping the nationally protected wildlife and animal species present in the area, including their current threats.
- **Revise the operational/management plans of the forest user groups:** This involves preparing result-oriented community forestry operational plans, integrating different components and activities related to sustainable forest management, as proposed in the Community Forestry Directives, 2025. The revised plans will prioritize sustainable forest management, and have at least:
 - A zonation map of the community forestry, including management priorities
 - Specific actions for conserving nationally protected plants and animals, if any
 - A prioritization of ecosystem services provided by the community forest, and related actions
 - A comprehensive, 10-year, result-oriented operational plan in line with federal and provincial forest acts, with actions to address biodiversity threats
- **Provide support to forest user groups to implement and monitor their plans:** This involves preparing detailed annual action plans in line with the operational plan and building the forest user groups' capacity to implement their plan effectively:
 - Support forest user groups in preparing their annual plan in line with the operational plan

Figure 1: Results framework





- Provide members with training and learning exposures to implement plan
- Conduct annual reviews, monitor the annual plan implementation (incl. possible challenges)

Leveraging Finance for Biodiversity

Leveraging finance for biodiversity is important to reduce the financial gap and implement operational plans. A business approach to forest management will be promoted, where all income and expenses from the forests are fully accounted for, and finance solutions will be implemented to reduce the financial gap. This activity will be fully integrated in the forest user groups' operational plan preparation process. The finance plan preparation guideline document will be drafted and validated with the province-level forestry stakeholders

- **Estimate finance gap:** The Community forest user groups will estimate their finance gap, which is difference between projected income and estimated financial needs for the operational plan. This estimation will be validated with the executive members of the forest user groups.
- **Prepare a fully costed plan** for 10 years and estimate the financial needs for its implementation according to Forest Rule 2022. A detailed action plan that aligns with the activities proposed in the operational plan will be prepared. The associated budget will be estimated adopting the “zero-based budgeting method”. The executive committee members will estimate the likely expense for each activity based on their experience.

- **Estimate income from the community forests** for the next 10 years, based on the likely production of timber and ecosystem services from the community forests and other associated income, which include
 - (a) selling forest products,
 - (b) selling ecosystem services, such as tourism, carbon, and water,
 - (c) membership fees,
 - (d) fines and penalties (estimated based on past audit reports),
 - (e) likely voluntary labor contribution, and
 - (f) other sources.
- **Assess the finance gap:** With the estimated income and needs, the finance gap for implementing the plan will be calculated and validated with the executive committee members. Potential methods to address the financing gaps will be discussed.
- **Prepare finance plan:** The BIOFIN project has prepared a “taxonomy of finance solutions” for the forest user groups, which will be used to identify and prioritize finance solutions. It also Detailed guidelines for preparing finance plans for forest user groups are being drafted. They will require:
 - Prioritizing finance solutions, as decided by the forest user groups' general assemblies
 - Preparing a simple finance plan for the forest user groups, aiming to reduce the finance gap
 - Integrating the finance solutions into the operational plan to mobilize additional finance for its implementation

- **Provide support to implement the finance plans:**

This involves building the capacity of forest user groups on finance plan implementation through regular coaching and counselling services, providing logistics and stationery support for maintaining financial records, and conducting annual reviews, monitoring the resources leveraged for biodiversity

Knowledge sharing and upscaling

Knowledge sharing and upscaling are important for building the capacity of the stakeholders, working in collaboration with the Division and Sub-division Forest offices to replicate the practices in other community forests. It will be achieved through the following actions:

- Organizing periodic coordination meetings in pilot sites to share lessons with forest officials and user groups
- Training forest officials and leaders of the community forestry networks on plan revision approaches, especially on the finance plan preparation
- Conducting annual joint review meeting under the leadership of the Forest Directorate
- Preparing a lesson learned document, based on the pilot's experiences, for wider upscaling
- Finalizing guidelines based on the pilot exercises

Engaging local communities

The Community Forestry Directive 2025 requires that forest user group members, especially women, poor, and marginalized communities, be engaged in preparing and implementing plans. Their revision, and the associated finance plans preparation, will be carried out under the leadership of the executive committee of the forest user groups, with support from the Division and Sub-division Forest office. The

following activities will be carried out to ensure active and meaningful participation, building capacity for effective implementation, and knowledge sharing and dissemination:

- Obtaining the consent of forest user groups on the plan revision and finance plan preparation
- Preparing a detailed action plan with executive committee members as per the Community Forestry Directive 2025
- Preparing an operational plan fully complying with the Community Forestry Directive, with a series of consultation meetings with several stakeholders
- Preparing a zoning map, deciding management objectives and action plan based on participatory, consultative processes
- Working collaboratively with executive committee members in drafting the plan, following consultative and participatory processes
- Endorsing the operational and finance plan (from the general assembly of forest user groups)
- Building capacity building of forest user groups and executive committee members in implementing the plan
- Conducting an annual periodic review on implementation and building capacity accordingly
- Conducting a joint annual review with the Division forests office on lessons learned
- Ensuring that the traditional rights of the local communities are safeguarded during plan processes
- Mapping of local knowledge, innovation and practices of local communities and integrating in the plan
- Ensuring fair and equitable benefit sharing on forest resources





ROADMAP

Priority actions (2023 to 2027)

Year	Priority
2023	<ul style="list-style-type: none"> • Develop a finance proposal for implementation • Scoping visit to finalize the sites • Inception workshop
2024	<ul style="list-style-type: none"> • Prepare result-oriented community forestry plan preparation guidelines, with a finance needs assessment • Prepare a taxonomy of finance solutions for community forestry, with finance plan preparation guidelines
2025	<ul style="list-style-type: none"> • Revise 50 operational plans of forest user groups following the guidelines • Prepare finance plans following the guidelines, • Provide training and on-site coaching support to forest user groups, local communities • Share knowledge and orientation to Provincial and Divisional Forest Officers
2026	<ul style="list-style-type: none"> • Conduct on-site coaching support to forest user groups, local communities • Share lessons with provincial and federal forest stakeholders, forest user groups networks
2027	<ul style="list-style-type: none"> • Prepare the lesson learned documents from the piloting and revise the guidelines • Disseminate guidelines for wider replication, especially the plan preparation guidelines • Share lessons with provincial and federal forest stakeholders, forest user groups networks • Develop a roadmap for wider upscaling at the national level

Likely risks are the declining interest in community forestry due to a reduced dependency on forest resources, increasing migration of youth and limited participation in forest management activities. Furthermore, the community's motivation might be affected by a perception that there are too many guidelines. This finance solution will thus not re-invent a new wheel by developing entirely new guidelines but rather provide procedural guidelines to effectively implement existing forests acts and rules, especially the 2025 community forestry directives. The priority is to change the mindsets of local communities on forests management by developing a business culture of management while leveraging finance. All of these will strengthen sustainable forest management, with high priority on livelihoods benefits for forest-dependent communities, along with conservation of nationally protected plants and wild animals.

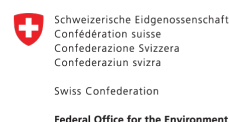
REPLICATION POTENTIALITIES

Currently, over 23,000 community forest user groups are managing 2.5 million ha of forest, which is more than one third of the country's forest area. The pilot project will support results-oriented community forestry, thereby increasing investment on sustainable forest management. Based on its learnings, the approach can be replicated in other community forests based on learnings from piloting. Furthermore, there is indeed opportunity for updating more than 7,000 operational (management) plans that need to be renewed. If the approach is replicated, it can thus lead to tremendous impact on biodiversity conservation, specifically on addressing the finance gap by leveraging funds and develop a business culture of management. A preliminary analysis by BIOFIN shows that the current community expenditure is nearly two times the MoFE's budget. Applying this approach is likely to increase expenditure by five folds, if users voluntary labour contribution are considered.



Photo credit: UNDP/Bijendra Basnyat (all photos)

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