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Agenda Item 10

EVALUATION OF THE SOCIOECONOMIC CO-BENEFITS OF GEF-FUNDED INTERVENTIONS

(Prepared by the Independent Evaluation Office)

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Abbreviations

AfDB	African Development Bank
CEO	Chief executive officer
DHS	Demographic and health survey
FSP	Full-size project
GEF	Global Environment Facility
FAO	Food and Agriculture Organization of the United Nations
IEO	Independent Evaluation Office
IFAD	International Fund for Agricultural Development
IFI	International financial institution
IUCN	International Union for Conservation of Nature
MSP	Medium-size project
NGO	Nongovernmental organization
SGP	Small Grants Programme
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
WWF	World Wildlife Fund

QUICK SCAN

1. **Definition**. The term co-benefits refers to the additional impacts of a policy or intervention beyond its primary objectives. In the context of natural resource protection and climate change adaptation, these may include improved incomes, livelihoods, health, and employment; greater gender equality; and enhanced access to essential services.

2. **Socioeconomic co-benefits are increasingly recognized as essential to the GEF's mandate,** because they help bridge global environmental objectives with local development needs, reinforcing the sustainability and effectiveness of interventions. As highlighted in the programmatic directions since GEF-5, and as noted by IEO evaluations, co-benefits such as improved livelihoods, gender equality, and access to services enhance community engagement, can strengthen local ownership, and reduce resistance to environmental governance.

3. **GEF-funded projects generally reflect one of two distinct approaches: conservationist approach or development oriented.** The former, often led by UN agencies or NGOs, prioritizes global environmental benefits, with socioeconomic outcomes regarded as secondary. The latter, more typical of projects led by international financial institutions (IFIs), places stronger emphasis on rural development and outcomes such as income generation and employment, while recognizing the importance of environmental protection. Projects following this second paradigm tend to focus more on productive and economic co-benefits, supported by the IFIs' ability to finance infrastructure and productive assets.

4. **This evaluation found substantial evidence that GEF-funded projects contributed to socioeconomic co-benefits alongside environmental and development outcomes**. These co-benefits are varied, with the most frequently observed being the strengthening of human and social capital. Geospatial analysis—linking project locations to geo-referenced household survey data—reveals a small but statistically significant positive correlation between the presence of GEF interventions and improvements in household income and asset indicators.

5. **The most consistently observed co-benefits were improvements in human and social capital.** Complementing this analysis, country case studies conducted in Chad, Mexico, and Nepal further substantiate the evidence on socioeconomic co-benefits. In terms of human capital, a common outcome was the acquisition or upgrading of skills related to environmentally sustainable agricultural and forestry practices—such as minimizing chemical use, conserving soil fertility, managing water resources, and protecting native plant species. In Chad, training sessions and tailored radio broadcasts raised awareness of shifting rainfall patterns, encouraging farmers to adapt farming calendars in response to new risks, including frequent flooding. In Mexico, the matching of traditional Indigenous forest management knowledge with modern tools—such as drones, satellite imagery, and artificial intelligence—reinvigorated youth engagement in

sustainable primary production. This integration also heightened awareness of new income opportunities, including eco-tourism and payment for ecosystem services.

6. In terms of social capital, projects helped revitalize grassroots organizations responsible for managing forests, vegetation, and freshwater resources. These efforts also empowered women and youth to express their needs and priorities in traditional decision-making fora. Moreover, the projects facilitated partnerships between local communities and universities, extension services, subnational governments, and public programs, supporting broader goals of natural resource management and climate resilience. In Chad, for example, projects supported grassroots organizations such as the *Comités Villageois de Surveillance* and the *Associations de Développement du Canton*, reinforcing their engagement in natural resource governance and improving coordination with local administrations. These groups not only helped manage protected areas but engaged in the selection and monitoring of project-funded activities. In Nepal, projects partnered with community forestry groups, federations, and school clubs, generating a network of shared environmental responsibility. In Mexico, community-level governance of natural resources was enhanced through the formal recognition of Areas Voluntarily Designated for Conservation.

7. Regarding economic production and income generation, several co-benefits were observed. These included positive spillover effects on soil fertility and agricultural yields, as well as opportunities for income diversification—such as ecotourism, and the sustainable use of timber and non-timber forest products. Additional co-benefits in health and nutrition were also reported. However, the evidence in these domains remains mostly anecdotal, owing to limited data collection at the project level.

8. **High-quality project design is a critical enabler of co-benefits**. While attention to socioeconomic outcomes has increased since GEF-5, many projects still rely on general assumptions rather than clearly articulated theories of change. Though this evolution reflects greater awareness of the importance of co-benefits—as incentives for communities to engage in resource protection—many designs lack a clearly defined sequence of actions required to generate them. The pathways through which specific interventions are expected to deliver co-benefits are often not explicitly laid out.

9. **Project designs tend to overlook potential short-term adverse effects of conservation activities** that may reduce community incentives for cooperation. These include restricted access to forest or fishery resources, or crop losses due to wildlife. Such impacts can be mitigated, if identified early, and addressed proactively. It is essential, however, to communicate these risks to communities and jointly identify appropriate responses.

10. **Strengthening existing groups, institutions, and community-led initiatives has proven to be an effective strategy for fostering co-benefits**. Most GEF projects focus on reinforcing initiatives already underway—often launched by NGOs, international cooperation partners, or

public agencies. This approach is pragmatic, given the typical project duration in communities is limited to two or three years, with modest funding. Efforts to plan interventions jointly with local actors—such as municipalities, district-level governments, or university outreach programs—can significantly enhance the generation of co-benefits.

11. **Sustaining and scaling co-benefits past project closure requires continued support and institutional anchoring**. While a single project phase may trigger the emergence of co-benefits, it is rarely sufficient for their consolidation. One major constraint to sustainability is the brief duration of project engagement, which often leaves insufficient time to provide sustained technical or financial assistance. Even in IFI-led projects, the profitability and long-term viability of cooperatives or enterprises have not received adequate attention. Many of these initiatives remain disconnected from market systems and, in some cases, reliant on external aid rather than moving toward market-based sustainability.

12. **Sustainability can be improved through better coordination in the GEF portfolio at the country level**. Opportunities for synergy among projects could include: (i) concurrent GEF projects reinforcing each other in the same geographic area; (ii) one project building on the outcomes of a previous one; or (iii) external partners scaling up the results of GEF initiatives. These forms of coordination could help extend project impact and ensure continuity beyond individual funding cycles. However, such efforts require a deliberate and collaborative strategy—one that has not been consistently implemented.

13. The GEF's limited in-country presence constrains its capacity to facilitate ongoing coordination and sustain co-benefit outcomes. While lead agencies and national executing partners play this role, they have not done so systematically, and no single entity is explicitly tasked with this responsibility. Operational focal points, in particular, could convene stakeholders and promote inter-project coordination. For instance, they could support regular learning exchanges among project teams or organize knowledge-sharing platforms. However, such arrangements are not consistently operationalized.

14. **Monitoring socioeconomic co-benefits is essential for project managers and stakeholders alike. Until recently, this has received little attention during project design and implementation**. As a result, there is a risk that the full scope of impacts generated by GEF projects may be underappreciated by donors and partners. Merely counting the number of beneficiaries—as is currently done—fails to capture the scale and depth of these outcomes. In 2024, the GEF presented a paper to its Council (GEF/C.66/12) proposing an expanded toolkit for assessing co-benefits. If consistently applied by lead and executing agencies, these tools could enable more robust measurement and provide clearer insights into how GEF interventions contribute to development objectives.

RECOMMENDATIONS

15. **Recommendation 1. Clearly define pathways for generating socioeconomic co-benefits in project design, while identifying potential risks and mitigation measures.** The GEF Secretariat should set clear standards requiring project proposals to explicitly articulate the expected co-benefits within the project's theory of change. Proposals should also anticipate potential negative impacts, outline compensatory strategies, and define measures to ensure equitable distribution—paying particular attention to gender equality and inclusion of marginalized or low-income groups—as part of the quality assurance process. This is particularly important when the co-benefits serve as key incentives for natural resource conservation.

16. **Recommendation 2. Promote the sustainability of co-benefits by strengthening country portfolio coordination, with a central role for the operational focal point and key national stakeholders.** In line with the 2022 GEF Country Engagement Strategy, the GEF Secretariat should empower and require the country operational focal points to convene regular exchanges—such as an annual workshop— with GEF agencies, executing agencies, and other partners. These fora would serve to identify implementation challenges, share good practices, and highlight innovative approaches that enhance both global environmental benefits and socioeconomic co-benefits. Such coordination would also support the consolidation and scaling of results through better sequencing and synergy between GEF-funded and other development initiatives. The GEF Secretariat should explore further opportunities for deeper country engagement, to capture and manage knowledge from portfolio implementation.

17. **Recommendation 3. Track co-benefits during project implementation and at completion**. The GEF Secretariat should provide guidance to the agencies and partners on indicators and methods to assess the nature, scale and reach of co-benefits, and track and report on the follow-up done by projects and agencies.

I. INTRODUCTION

1. BACKGROUND

1. The Global Environment Facility (GEF) addresses global environmental concerns related to biodiversity, climate change, international waters, land degradation, chemicals and waste. Since its inception in 1991, the GEF has provided over $26 billion in grants and mobilized an estimated $149 billion in co-financing, through national and regional projects spread over 160 countries. However, little analysis is available on the socioeconomic co-benefits that accrue due to environmental interventions.[1] The topic has gained interest within the GEF in the past three replenishments and further attention in very recent years. A Council paper was produced in 2023 by the GEF Scientific and Technical Advisory Panel (STAP) on the Integration of Co-Benefits in GEF Project Design (GEF/STAP/C.64/Inf.03). The GEF Secretariat presented to its Council in February 2024 a paper on monitoring and measuring the socioeconomic co-benefits of GEF investments (GEF/C.66/12). This evaluation presents an independent assessment by the Independent Evaluation Office (IEO) of the design and results of GEF-funded interventions as it pertains to the topic of co-benefits.[2]

2. The term co-benefits refers to additional positive impacts of a policy or intervention, beyond its primary objectives. In the case of natural resource protection and climate change adaptation, co-benefits can include improved incomes, livelihoods, health, employment, gender equality, market development, and better access to services.[3] A distinction is often made between:

(a) *Prerequisite co-benefits:* Local benefits to be achieved to realize the desired global benefits and ensure their durability. Examples include livelihood benefits that engage local communities in biodiversity conservation.

(b) *Incidental co-benefits:* Environmental and socioeconomic benefits that are not critical to achieving the desired global benefits but could help increase the overall impact of the intended investment. Examples include reduced freshwater pollution and the consequent human health benefits, or improved air quality and associated health benefits arising from transitioning to renewable energy.

[1] The Independent Evaluation Office (IEO) of the GEF conducted a pilot case study in 2019 in Uganda. https://www.gefieo.org/sites/default/files/documents/evaluations/vfm-2019-forest-management.pdf In the same year, IEO produced an internal review of co-benefits in the chemicals and waste focal area: N. Hadjimichael and G. Batra, "A Study on the Health Co-Benefits of GEF Chemicals and Waste Focal Area" (IEO, mimeo, 2019).
[2] This evaluation was included in the document FY 2025 IEO Work Program and Budget, GEF/E/C. 67/05. Initially planned for presentation to the Council of December 2024, it will be presented to the Council of June 2025, as the case study in Mexico was conducted in early 2025, at the request of the Government.
[3] See also (GEF/STAP/C.64/Inf.03).

3. **In the early 1970s, socioeconomic aspects started to be considered in environmental decision making**, driven by the need to balance environmental decisions with sustainable development and social responsibility. The concept of co-benefits began to gain attention in the 1990s, as it was recognized for its potential to enhance understanding of the economic value of environmental interventions (Bisello et al. 2017; see also table 1).[4] The 1992 United Nations Conference on Environment and Development played a pivotal role in recognizing sustainable development, which balances economic, social, and environmental factors. This laid the groundwork for integrating co-benefits into climate actions (Roxas et al. 2023), combating land degradation, conserving biodiversity and reducing pollution from harmful chemical substance and waste. Over the past 15 years, the term has become increasingly prominent in scientific literature, particularly in discussions that aim to reconcile environmental and developmental goals. Notably, the reports from the Intergovernmental Panel on Climate Change (IPCC) have highlighted co-benefits as a central theme in their findings (IPCC 2007, 2014a, 2014b).[5]

4. **The concept of socioeconomic co-benefits in relation to biodiversity, land degradation, environmental, and climate change projects or policies has evolved** over time, primarily as a strategy to address multiple goals simultaneously. This is often referred to as a "win-win" approach (Mayrhofer and Gupta 2016), as it helps to avoid trade-offs between developmental and environmental issues. This approach has been particularly relevant in emerging economies, where it has facilitated vertical and horizontal linkages between global, national, and local objectives (Sethi 2020; Mayrhoer and Gupta 2016). The co-benefits approach has been reinforced through various international climate actions, such as the Clean Development Mechanism, Nationally Appropriate Mitigation Actions, and the Paris Agreement. These frameworks support the idea of achieving both development and climate benefits through single policies (Roxas et al. 2023). The concept has been particularly emphasized in the context of reducing greenhouse gas emissions, where co-benefits include improved air quality and public health (Scovronick et al. 2021; Kim et al. 2020).

5. **The generation of co-benefits depends on how projects are implemented and the local context**. From the perspective of individual actors, such as households or communities, there may be perceived “disbenefits” or negative (unintended) effects associated with initiatives aimed at achieving global environmental benefits. For example, when an area—like a forest, river, or marine fishery—is designated as a protected zone, those who previously accessed it for resources

[4] Seminal contributions were already present in the World Commission on Environment and Development, *Our Common Future* (Oxford: Oxford University Press, 1987), known as the Brundtland Report, and even earlier in Donella H. Meadows, Dennis L. Meadows, Jørgen Randers, and William W. Behrens, *The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind*. (New York: Universe Books, 1972).

[5] The IPCC (2014b, p. 14) defines co-benefits as "the positive effects that a policy or measure aimed at one objective might have on other objectives, irrespective of the net effect on overall social welfare." For instance, urban policies targeting transport, energy, or waste management can yield multiple co-benefits, including improved public health and reduced environmental impacts (De Oliveira et al. 2015).

like fuelwood, game, nontimber forest products, water, or fishing may lose access for a certain period. This represents an immediate "disbenefit" to them linked to project implementation, rather than a co-benefit, and it can diminish the incentive for collaboration and support. These short-term detrimental effects should be identified early in the project design phase to address these trade-offs effectively. Despite its potential, the co-benefit approach faces challenges in policy discourses and development aid, particularly in quantifying and integrating these benefits into decision-making frameworks[6] and ensuring the sustainability of project outcomes.

6. In summary, the concept of socioeconomic co-benefits has evolved from a theoretical idea to a practical policy tool, with significant contributions from systems approaches, quantitative methods, and regional case studies. However, challenges remain in fully integrating these benefits into policy-making processes.

Table 1: Key milestones in the development of the concept of socioeconomic co-benefits

Period	Key developments
1990s	Emergence of the co-benefits concept in climate policy discussions
2000s	Adoption of system approaches to identify and realize co-benefits
Post 2015	Integration of co-benefits into the Paris Agreement and the Sustainable Development Goals (SDGs)
Ongoing	Challenges in comprehensive understanding and policy integration

Source: Synthesis of this evaluation from the literature (2025).

2. EVOLUTION OF CO-BENEFITS IN THE GEF

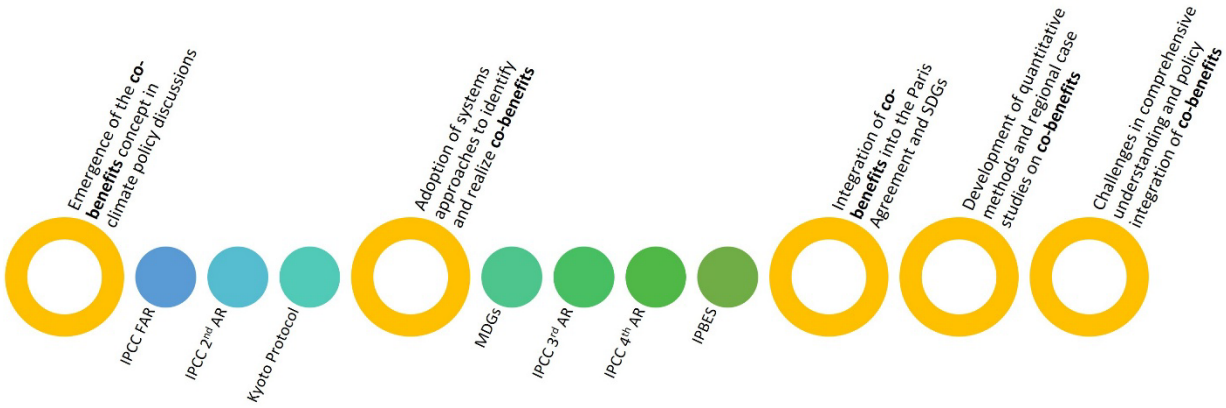
7. Important international developments concerning co-benefits have influenced the GEF replenishments from GEF-4 to GEF-8 (figure 1). These developments have shaped strategic frameworks and other key documents related to the international environmental conventions[7] for which the GEF serves as a financial mechanism, thereby influencing its programmatic directions. An analysis of the GEF programmatic direction from the 4th replenishment (2006) to the 8th replenishment (2022) demonstrates the evolving consideration of co-benefits in the proposed project interventions aimed at achieving the mandated global environmental benefits. The GEF-4 replenishment includes several paragraphs highlighting various benefits beyond environmental improvements, such as social, economic, health, and livelihood enhancements.

8. In the GEF-5 programmatic directions, the (implicit) socioeconomic co-benefits can be inferred from the proposed interventions in its five focal areas, and the Sustainable Forest

[6] S.M. Karim, S. Thompson, and P. Williams, "Co-benefits of Low Carbon Policies in the Built Environment: An Investigation into the Adoption of Co-benefits by Australian Local Government," *Procedia Engineering* 180 (2017).
[7] Convention on Biological Diversity (CBD), United Nations Framework Convention on Climate Change (UNFCCC), Stockholm Convention on Persistent Organic Pollutants, UN Convention to Combat Desertification (UNCCD), Minamata Convention on Mercury, and the Biodiversity Beyond National Jurisdiction (BBNJ) Agreement; the Global Framework in Chemicals.

Management (SFM)/REDD-Plus.[8] The replenishment document highlights the significance of integrated approaches, such as systems approaches, which address multiple focal areas simultaneously. Additionally, it emphasizes that involving the private sector in GEF activities can result in further co-benefits, including increased investment, innovation, and the scaling up of successful environmental practices.

Figure 1: Historical transect on the notion of co-benefits in the literature and at the GEF



Source: Evaluation team elaboration (2025).

Note: MDGs = Millennium Development Goals; IPBES = Intergovernmental Science-Policy Platform on Biodiversity and Ecosystems Services.

9. The programmatic directions of the 6th replenishment[9] of the GEF explicitly mention co-benefits and synergies resulting from GEF-funded interventions. This replenishment introduced the concept of Integrated Approaches, highlighting the potential for synergies and co-benefits in projects that address both CO2 and mercury emission reductions. For example, GEF projects within the climate change mitigation portfolio that focus on energy efficiency could lead to co-benefits such as enhanced energy security, poverty alleviation, and increased productivity. Similarly, renewable energy projects may yield co-benefits, such as improved livelihoods through job creation.

10. The programmatic directions of the 7th replenishment mention co-benefits in the context of the Impact Programs that focus on nature-positive and net-zero pathways.[10] The programmatic directions highlight the co-benefits of the International Treaty on Plant Genetic Resources for food and agriculture, which stem from the sustainable use of plant and animal

[8] REDD-Plus stands for "Reducing Emissions from Deforestation and Forest Degradation, plus the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks."
[9] https://www.thegef.org/council-meeting-documents/gef-6-programming-directions-0
[10] "More complex programs and sets of child projects will tend to offer more entries for development links due to multi-sectoral approach, multi-stakeholder engagements and platforms, and potential for delivering socioeconomic co-benefits (pg 6) and enhance sustainability of investments."

genetic resources. The document also emphasizes co-benefits for human well-being, health of ecosystems, and water security that arise from fostering a supportive environment for land degradation neutrality. The Impact Programs on Food Systems, Land Use, and Restoration; Sustainable Forest Management; and Sustainable Cities are expected to deliver several socioeconomic benefits, including: a) sustainable food systems enhancing food security, economic resilience, and productivity; b) integrated urban planning, reducing costs and improving efficiency in urban infrastructure; c) improved waste management and reducing greenhouse gas emissions; and d) sustainable forest management, supporting economic development and local livelihoods.

11. The programmatic directions of the 8th replenishment of the GEF emphasize the importance of co-benefits related to the GEF focal areas. The proposed 11 integrated programs aim to address significant drivers of environmental degradation and deliver co-benefits aligned with the GEF's objectives across the focal areas.

12. **Tracking socioeconomic co-benefits**. The GEF sets the objective of "better measuring co-benefits improving human well-being" as one of the five action areas of the GEF-8 Results Measurement Framework (RMF). In a paper presented to the Council in February 2024 (GEF/C.66/12), the GEF Secretariat identified a set of measures, including more detailed treatment of co-benefits at project design, requiring systematic narratives on co-benefits in project reporting, using geospatial analysis combined with socioeconomic surveys, and establishing standard indicators for co-benefits and for certain categories of end clients.[11]

[11] The measures included: (i) identifying a small number of standard indicators that would provide an aggregate view of the GEF's contribution to socioeconomic co-benefits; (ii) assessing the feasibility of relying on geospatial analyses linked to population data; (iii) better capturing and monitoring the results of GEF financing for indigenous peoples and local communities (IPLCs), civil society, and youth (this may include the development of standard indicators or custom ones specific to projects and programs); (iv) leveraging the value of qualitative and narrative reporting to demonstrate the value of context-specific socioeconomic results; and (v) continuing to review projects and programs to ensure appropriate consideration of socioeconomic co-benefits during the design stage.

II. OBJECTIVES AND METHODOLOGY

13. **The objectives of this evaluation** are to: (i) analyze the evolution of GEF approaches to environmental and socioeconomic co-benefits; (ii) examine cases of co-benefits, identifying their effects and key stakeholders and beneficiaries, as well as the factors that promote or hinder the generation of co-benefits; and (iii) provide evidence-based recommendations to the GEF, implementing agencies, country focal points, and other key stakeholders to improve the design and effectiveness of the implementation of current and future GEF-funded operations.

14. **The evaluation portfolio** includes GEF-funded projects, from GEF-4 through GEF-7 and GEF-8, approved by the GEF Council through June 2024. This allows for a review of the historical progress in integrating co-benefits in the design of GEF-funded portfolio projects, in line with the evolution already outlined. In terms of observable co-benefits, most of the attention has been given to projects funded under GEF-5, GEF-6, and GEF-7.

15. **The evaluation questions** include the following: (i) How has the integration of socioeconomic co-benefits evolved in the GEF-funded project design? (ii) What is the evidence of the co-benefits achieved by GEF-funded projects? (iii) What are the main factors influencing the sustainability of the co-benefits and how in turn this affects the expected environmental benefits? and (iv) How are the GEF partnership and its operational arrangements conducive to generating co-benefits? More detailed questions and their mapping against selected OECD DAC[12] criteria are presented in table 2.[13]

Table 2: Key evaluation questions

Standard evaluation criterion of reference	Key questions
Relevance	1. To what extent are socioeconomic co-benefits discussed at project design? Is there a dedicated analysis? Are the co-benefits captured in the theory of change? Are they captured in the project results framework? 2. What economic co-benefits are contemplated at design? 3. Is there specific attention to certain categories of end beneficiaries (e.g., women, indigenous people, persons with disability, other marginalized groups)?
Effectiveness	1. What type of co-benefits have been observed during implementation? Are they consistent with the expectations at design? Have any adverse effects been observed? What evidence is there of actual outreach to certain categories of beneficiaries (as above)? 2. What are the factors that explain the higher/lower achievements in generating co-benefits?

[12] Organisation for Economic Co-operation and Development, Development Assistance Committee.
[13] https://www.oecd.org/en/topics/sub-issues/development-co-operation-evaluation-and-effectiveness/evaluation-criteria.html

Efficiency	1. How do the projects examined by this evaluation compare with the GEF portfolio in terms of implementation timeliness? 2. What factors affected project efficiency and the generation of co-benefits? 3. Are knowledge management arrangements supporting efficient project delivery?
Sustainability	1. What are the factors supporting the sustainability of co-benefits and what are the main threats related to: (i) institutional and policy factors; (ii) economic viability factors; and (iii) local capacity and community engagement factors? 2. Are the arrangements for project implementation and the role of the lead agencies and executing agencies favoring the sustainability of co-benefits? 3. Are socioeconomic co-benefits supporting the sustainability of environmental benefits?

Source: Evaluation team elaboration (2025).

16. **Conceptual framework**. Figure 2 presents a graphic scheme of how co-benefits may be generated by or interact with an environmental conservation intervention. On the left and middle side of the figure, the entry point is a conservation intervention (for instance, a project or policy initiative). The prerequisite co-benefits (green arrow, marked with an "A") provide incentives to individuals, communities, local governments, or other stakeholders to support the intended goals of a project (for example, an income-sharing scheme for a protected area that is also managed as a recreational area). The positive sign (+) shows that prerequisite co-benefits are expected to reinforce the intervention.

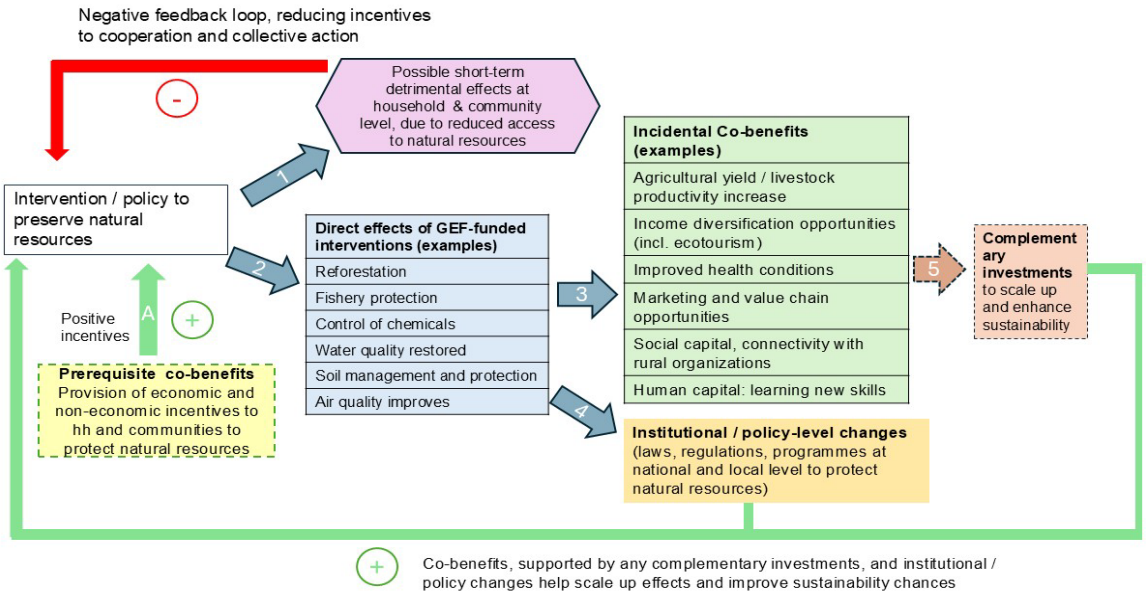
17. Arrow 1 shows that, once the project is implemented, there may be short-term detrimental effects of the project or policy on individuals' or communities' welfare. For instance, a project that regulates access to a forest or a fishery could reduce access to resources, such as fuelwood or nontimber forest products, or opportunities to catch fish. Participating households or communities may no longer support the activities.

18. Arrow 2, on the other hand, points to the expected direct effects of the project, which may include protection of natural resources and/or reduction in the use of pollutants. In turn, these direct effects lead to (incidental) co-benefits (arrow 3), which may include economic and financial benefits through increased income, diversification of income sources, better access to markets, improvements in health conditions, and/or better knowledge (e.g., enhanced agroforestry management techniques), as well as improved social capital (e.g., stronger rural organizations, influence over the decision making of local governments).

19. Arrow 4 points to changes to the policy and regulatory environments, which may also be fostered by the environmental conservation intervention and lead to further support for the intended result of the interventions. Individual and community-level co-benefits, as well as policy and institutional changes, have a positive feedback loop with the implementation of the intervention and its intended objectives, as shown by the green arrow pointing backward.

20. Finally, arrow 5 shows that complementary investments (for example, from governmental funds or international cooperation) can help consolidate or scale up the co-benefits generated by the intervention. This is important, as co-benefits may be incipient at project completion and further investment may be required to scale and improve sustainability. In turn, consolidation and better sustainability prospects would have a positive feedback loop (green backward pointing arrow at the bottom of the figure). In summary, co-benefits are not only an additional benefit from the project, they also support the sustainability of environmental benefits.

Figure 2: Conceptual scheme of co-benefits in environmental conservation interventions



Source: Evaluation team elaboration (2024).

1. DATA SOURCES

21. This evaluation triangulates the findings from: (i) a review of the GEF project portfolio database available from the GEF Portal; (ii) a review of seven thematic evaluations conducted during GEF-8;[14] (iii) quantitative analysis from geospatial analysis, matched with data from socioeconomic, demographic, and health surveys (conducted in collaboration with the Department of Applied Science, College of William and Mary) from 11 countries (Bangladesh, Botswana, Cambodia, Chad, Costa Rica, Ecuador, India , Laos, Mexico, Nepal, and Viet Nam) covering 111 projects; and (iv) country case-study missions to three countries—Chad, Mexico, and Nepal. The country case studies involved in-person and remote interviews with key

[14] Evaluation of GEF Support to Sustainable Forest Management (2022); Evaluation of GEF Support to Dryland Countries (2023); Evaluation of Community-Based Approaches at the GEF (2023); Evaluation of GEF's Approaches and Interventions in Water Security (2023); Evaluation on Chemical and Waste Focal Area (2024); Evaluation of the Global Wildlife Program (2024); and Evaluation of the GEF Program in the Pacific Small Island Developing States (2024).

stakeholders (national and local government, GEF Agencies, project staff, civil society, and grassroots organizations), as well as field visits to project sites and extensive interviews and focus group discussions with community members.

22. For the quantitative analysis, a database of GEF projects with field-based activities was developed by first identifying a subset of countries in which (a) the GEF had ongoing in-situ projects, and (b) previous third-party household surveys had been conducted, providing information on health and income-related outcomes. Thus, 111 projects were selected for the evaluation portfolio, with a total value of GEF financing of $533 million (a mean of $4.8 million per project, largest grant of $39.5 million, and smallest grant of $0.4 million; table 3).[15]

23. To assess the co-benefits of GEF-funded interventions, propensity score matching was used to designate control areas for matching with project intervention sites, creating "synthetic twins" with similar baseline conditions to estimate the impact of the intervention. This method isolated intervention effects while addressing spatial variation. Autoregressive time-series models[16] tracked changes in indicators, such as nighttime lights,[17] over time, measuring impacts during and after project implementation.

24. **Country case studies.** The purpose of the country case studies was to triangulate findings from the quantitative analysis and the preliminary desk review of the evaluation portfolio, through discussion with the main stakeholders and field visits, which allowed for ground truthing and better understanding of the contextual factors affecting the main results. The country case studies used mostly qualitative techniques, such as key informant interviews based on semi-structured questionnaires and checklists, and focus group discussions, field observations, and asset verification. The three countries—Chad, Mexico, and Nepal—were selected to represent three macro-regions and diverse ecological and socioeconomic contexts. The selection of the countries was informed by the early findings of the quantitative analysis. Within the countries, projects were chosen taking into account the following considerations: (i) inclusion of projects funded from the 5th replenishment of the GEF (GEF-5: 2010–2014) to the 8th replenishment (GEF-8: 2022–2026); (ii) representation of different thematic focus; (iii) different stages of implementation (some projects that were only at the formulation phase were included as well); and (iv) diversity of lead agencies (to the extent possible).

[15] In terms of financing, the top three countries (Viet Nam, Mexico, and India) represented 48.5 percent ($276 million) of all project funding received. Viet Nam and Mexico had the first and second largest number of projects funded by the GEF in this group of projects. A range of agencies have been responsible for implementing the projects assessed (Annex B, table B.3): UNDP, the World Bank, and FAO represented the largest implementing partners with 33.8 percent, 27.2 percent, and 16.5 percent of total funding, respectively.

[16] An autoregressive model is a statistical technique used in time-series analysis that uses past data to predict future values of the variable being modeled.

[17] Nighttime lights are used in economic studies as a proxy for economic activity (see chapter 4).

25. This led to a total of 33 projects (Annex D), of which 7 were in Chad, 9 in Mexico, and 17 in Nepal, with 9 projects visited in the field (3 in each country).[18] These 33 projects collectively received $184.6 million in GEF financing. Four projects are in the chief executive officer (CEO) endorsement stage (all from GEF-8), while 16 projects are ongoing and 13 have been completed. Six projects in Nepal and three projects in Chad were funded by the Least Developed Countries Fund (LDCF), the rest by the GEF Trust Fund.

26. **Constraints and mitigating approaches.** As for all evaluations, there were limitations in the evidence available. For the quantitative analysis, there was: (i) limited geographic and chronological overlap between GEF-funded project sites and demographic and health survey (DHS) locations; (ii) spatial imprecision in project georeferencing, leading to challenges in mapping project sites; and (iii) satellite data constraints, such as cloud cover interference or poorer resolution due to change in gradient. To mitigate these limitations, triangulation across diverse data sources and methods ensured robustness. Results were expressed probabilistically to account for uncertainties, highlighting ranges rather than absolute values. For the country case studies, a key limitation was the paucity of rigorous data on the co-benefits associated with the GEF-funded interventions. Again, triangulation with other data sources (desk review, interviews, the quantitative analysis) was instrumental to developing robust findings.

III. RELEVANCE OF PROJECT DESIGN IN SUPPORTING SOCIOECONOMIC CO-BENEFITS

27. This chapter examines whether co-benefits have been considered at the project design stage. It assesses the types of co-benefits contemplated, the expected pathways to generating co-benefits, and project design's attention to social inclusion (i.e., co-benefits accruing to disadvantaged groups). The analysis draws on three country case studies—Chad, Mexico, and Nepal.

1. PROJECT CONTEXTS IN CASE STUDY COUNTRIES[19]

28. Nepal, Chad, and Mexico face severe environmental challenges, including deforestation, land degradation, and climate-induced disasters, such as floods and drought. Socioeconomic struggles, conflicts, and migration further destabilize communities, while biodiversity loss and unsustainable land use threaten ecosystems and agricultural sustainability. In Nepal, climate vulnerability is a pressing concern, with increasing risks of floods, droughts, and landslides,

[18] A larger number of projects was visited in Nepal, in connection with a concomitant evaluation on nature-based solutions being carried out in that country. One of the projects in Chad was visited by a team member during a previous collaboration with another international agency.

[19] The information in this section is drawn from the evaluation's country case study notes. It includes references to GEF project design documents, material from the implementing agencies, and checks with other sources, such as World Bank databases.

particularly in high mountain catchments and watersheds. Biodiversity loss is also significant due to deforestation, habitat fragmentation, and poaching, which threaten wildlife and ecosystem stability. Land degradation caused by soil erosion, overgrazing, and deforestation continues to impact watersheds in the Himalayan foothills (Churia region) and mid-hill regions. Institutional weaknesses, including limited coordination among government agencies and the absence of robust policies, further hinder sustainable land and resource management. In peri-urban areas, particularly in Kathmandu Valley, rapid and unplanned expansion contributes to environmental degradation, increasing flooding risks and reducing green spaces.

29. Chad faces severe environmental and socioeconomic challenges. At least since the 1990s, desertification and land degradation have significantly affected agriculture and livelihoods. The drying of Lake Chad and erratic rainfall patterns have exacerbated food insecurity, alternating between droughts and floods and making water availability unreliable. In the past five years, however, abundant rainfall and flooding have affected the central and southwestern parts of the country, with casualties and serious crop losses. The country's fragile security situation, fueled by conflicts, migration, and resource competition, further deepens economic instability, particularly in rural communities. The Lake, Hadjer Lamis, and N'Djamena regions are highly vulnerable to climate risks, insecurity, and land conflicts. In these areas, armed groups restrict fishing and agricultural activities, worsening food insecurity. The presence of Nigerian refugees around Lake Chad adds pressure to already scarce resources.

30. Mexico struggles with deforestation and habitat loss due to land conversion for agriculture, logging, and urban expansion, which threaten ecosystems in the Mayan jungle and the state of Oaxaca. Climate change exacerbates these challenges, with increased droughts, wildfires, and erratic rainfall patterns affecting biodiversity and agricultural productivity. Sustainability issues in key industries, such as the agave-mezcal sector, contribute to environmental degradation, by driving deforestation and unsustainable land use. Human-wildlife conflict has intensified as natural habitats contract, leading to greater interactions between communities and species like jaguars and wolves. Socioeconomic inequality further complicates conservation efforts, as indigenous and rural communities often lack the financial resources and institutional support needed for sustainable resource management.

31. **In most cases, the GEF-financed projects reviewed were providing further support or adding value to already existing initiatives supported by a nongovernmental organization (NGO), a public program, or a development agency.** As depicted in figure 3, many communities had pre-existing activities, including those that generate socioeconomic benefits, before the advent of the GEF-funded projects. GEF-funded initiatives supported them and provided further technical guidance, financing, or other forms of support. For instance:

(a) The United Nations Development Programme (UNDP), through its 7th Operational Phase (OP-7) Small Grants Programme in Mexico (GEF ID 10504), supported a wooden handicraft initiative in an indigenous community in Capulálpam de Méndez, Sierra

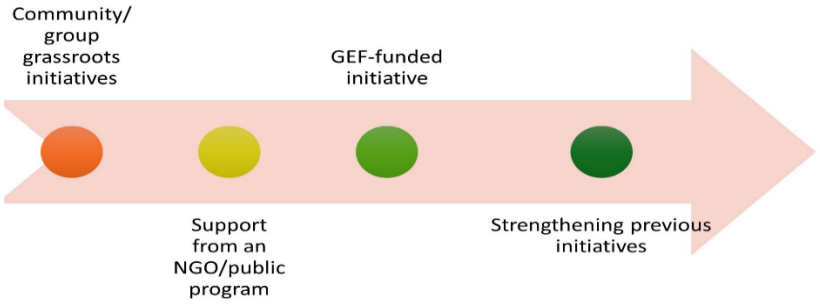
Norte of Oaxaca. This initiative had already been started with the help of the Green Forest Alliance. However, with GEF funding, UNDP was able to provide further technical advice for improving the design of handicrafts.

(b) Through the Sustainable Productive Landscapes project (GEF ID 9555), the World Bank supported an indigenous community in Ixtepeji (Oaxaca, Mexico) by helping obtain certification of sustainable forest management. The community had already run economic activities for decades—such as sustainable extraction of timber and nontimber products (resin, mushrooms), ecotourism initiatives, and bottling of spring water—with profits distributed to community members. With certification, it is expected that the community may be able to receive higher prices for the products of existing activities and also access payment for environmental services schemes.

(c) The Restoring Ecological Corridors in the Mayo-Kebbi Quest, Chad, to Support Multiple Land and Forests Benefits project (RECONNECT; GEF ID 9417, International Union for Conservation of Nature) provided local grassroots groups with further training and a motor pirogue, enhancing their capacity to patrol Lake Léré and curb illegal fishing as well as broaden their activities (e.g., emergency rescue services).

(d) A United Nations Environment Programme (UNEP) project (Catalysing Ecosystem Restoration for Climate Resilient Natural Capital and Rural Livelihoods in Degraded Forests and Rangelands of Nepal; GEF ID 5203) supported local road-head traders in Salyan district with machines and training for cleaning, grading, and partly processing nontimber forest products (gathered and by local people in the mountains from government forests, community forests, or farmland and sold in raw form to the traders) to ensure that they bring in higher prices.

Figure 3: Sequence of activities in communities visited



Source: Evaluation team elaboration (2025).

32. The country case studies have led to the identification of **two broad types of GEF-funded interventions**:

(a) **Projects centered on the protection of natural resources, where secondary socioeconomic benefits (co-benefits) were also contemplated.** This was typically observed in the case of projects led by United Nations agencies, NGOs, and conservation organizations.

(b) **Projects where socioeconomic benefits (income or asset increase, job creation) were the primary entry point.** A GEF grant then helped include a component on natural resource protection or climate change adaptation. This was observed in projects led by an international financial institution (IFI), such as the World Bank, the African Development Bank (AfDB), or the International Fund for Agricultural Development (IFAD).

33. An example of the former type in Mexico is the project From Conflict to Coexistence, Safeguarding Wildlife Corridors in Mexico for Sustainable Development (GEF ID 11156), implemented by the World Wildlife Fund (WWF). In this project, the conceptual link between conservation and economic co-benefits is considered but implicitly. The project considers financial incentives for coexistence with predators (livestock insurance schemes to mitigate human-wildlife conflict) and rewards to communities who implement preventive measures.[20] Also in Mexico, the project Promoting Sustainability in the Agave-Mezcal Value Chain though Restoration and Integrated Management of Biocultural Landscapes in Oaxaca (GEF ID 10869), led by the United Nations Environment Programme, foresees a revolving Trust Fund for Sustainable Mezcal in Oaxaca to support marginalized or cash-poor agave farmers transitioning to more sustainable, though potentially costlier, production methods.

34. Another example of this type is the RECONNECT project in Chad, which builds upon previous initiatives on forestry practices and management of agro-sylvo-pastoral systems (aiming at reducing greenhouse gas emissions and protecting corridors for seasonal wildlife migration). It involves intensive consultation with and training of existing grassroots organizations as well as support to sustainable income-generating activities and the restoration of fertility and productivity of degraded soils.

35. In Nepal, the WWF-led Integrated Landscape Management to Secure Nepal's Protected Areas and Critical Corridors project (GEF ID 9437) seeks to address challenges to wildlife and landscape conservation resulting from unsustainable use of forest, infrastructure development, and land degradation in buffer zones and wildlife corridors around Banke and Bardiya national parks, within the Terai Arc Landscape. This project builds on the work of Nepal's Department of National Parks and Wildlife Conservation and previous work of WWF and other conservation organizations as well as community-based organizations. The project area faced threats resulting

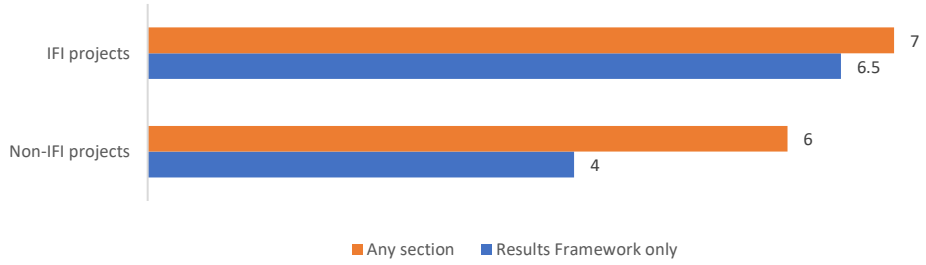
[20] Additionally, the project promotes "wildlife-based economies" (Outcome 2.2), providing incentives for honey production and other conservation-compatible activities.

in biodiversity loss; deforestation; degradation of forests, grasslands, and riparian areas; land degradation; and land-use-related carbon emissions.

36. Regarding **the second type**, where the entry point is to increase food security, improve livelihoods, and enhance resilience, one example is the project Building Resilience for Food Security and Nutrition in Chad's Rural Communities, led by the AfDB (GEF ID 9050).[21] The topic of food security is central to its rationale. The design explicitly links environmental objectives such as restoring degraded lands and protecting biodiversity to improved local food production. The theory of change includes small-scale irrigation, crop diversification, cereal banks, and training to improve food security in Chad's Sahelian regions. Another example, from Mexico, is the Sustainable Productive Landscapes project coordinated by the Ministry of Environment and Natural Resources with the World Bank as the lead agency. Here the entry point is rural development (both agricultural production and small-medium enterprise), while directing attention to biodiversity and sustainable management of natural resources (forests and soil).

37. **Projects implemented by IFIs were more explicit in identifying co-benefits at design.** Design documents of projects under the responsibility of IFIs typically included more references to socioeconomic co-benefits. As shown in figure 4, the median frequency of categories of socioeconomic co-benefits mentioned at project design was higher for IFI-led projects, compared with other agencies. Although from the GEF's perspective, the financing is for global environmental benefits. from the IFIs' perspective, the co-benefits are in the fact the primary benefits of a project, particularly when financed through IFI's own resources.

Figure 4: Median number of socioeconomic co-benefit categories mentioned in project design (Chad, Mexico, Nepal), by implementing agency type



Source: Evaluation elaboration from GEF Portal data (January 2025).

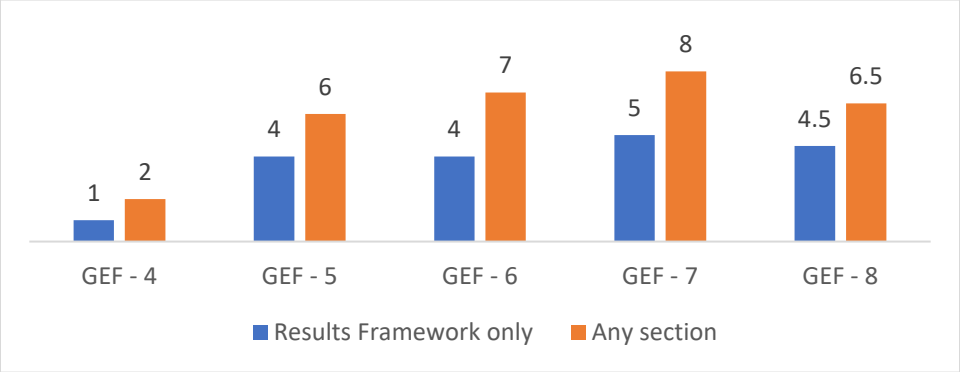
2. INCLUSION OF CO-BENEFITS IN PROJECT DESIGN

38. **Most project designs mention socioeconomic co-benefits and, historically, the attention to co-benefits at design has increased since GEF-5**. A first document review done on 111 projects in 11 countries suggested that 94 percent of the project designs did mention co-benefits. The

[21] Building Resilience for Food Security and Nutrition in Chad's Rural Communities _ GEF. Retrieved from https://www.thegef.org/projects-operations/projects/9050

three more in-depth country case studies in Chad, Mexico, and Nepal corroborated this assessment and validated the same through stakeholder interviews. Of the 33 projects considered in the three case studies, the design of almost all projects mentioned socioeconomic benefits in their results frameworks or theory of change.[22] Using the median number of co-benefit categories mentioned at design as a simple indicator of attention to the topic, a clear increase is visible (figure 5) from GEF-4 (one or two quotes in the results framework or in any document section) to GEF-5 and through GEF-8 (four quotes or more).[23]

Figure 5: Median number of socioeconomic co-benefit categories mentioned in project design documents for projects in case study countries (Chad, Mexico, Nepal), by replenishment period

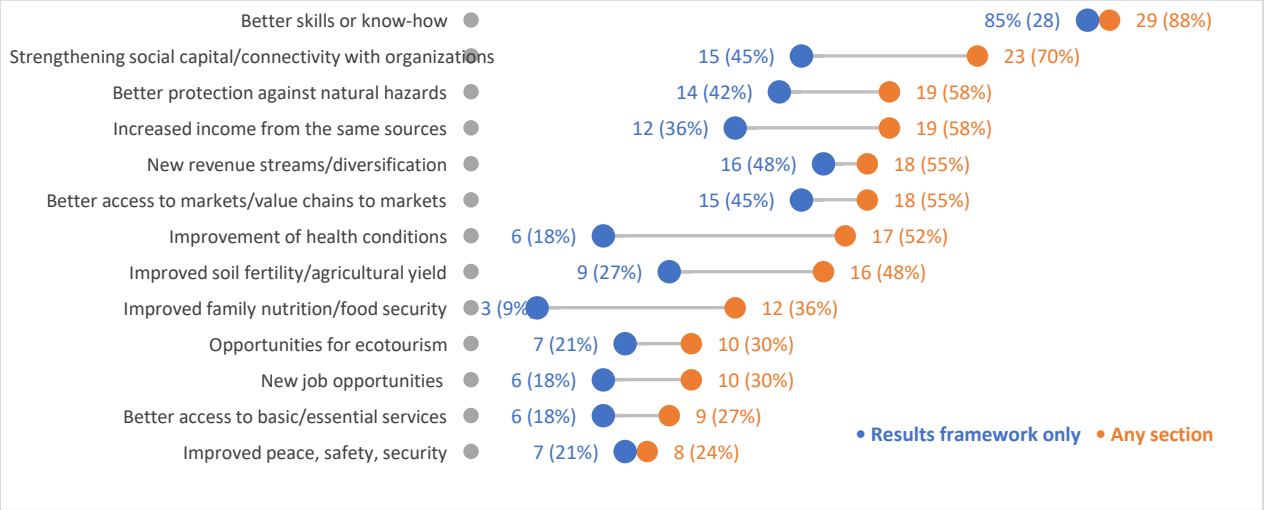


Source: Evaluation team elaboration from GEF Portal data (January 2025).

39. **The socioeconomic co-benefits identified at design are diverse, with human capital reflected in most project designs.** The most frequently mentioned socioeconomic co-benefit category is "better skills (know-how)," a form of human capital growth referenced by 88 percent of the projects (figure 6). Also frequently mentioned were social capital strengthening, new revenues streams/diversification of income sources, and better access to markets. In contrast, socioeconomic co-benefits related to peace, safety, or security are the least common, appearing in only eight projects. Some co-benefits were commonly mentioned in the design documents overall but were not included in the project results framework. As an example, while improved family nutrition/food security is mentioned by 12 of 33 projects, only a quarter of these include this co-benefit in their results frameworks. Opportunities for ecotourism were rare in the project designs of Chad (mostly due to the prevailing security issues, including conflict and natural disaster risks) and Nepal, but more explicitly considered in Mexico.

[22] The exception is an enabling activity in Nepal from GEF-4 (National Adaptation Programme of Action to Climate Change, GEF ID 3412), lacking a results framework entirely. To be noted, the CEO endorsement templates for projects for at least GEF-7 and GEF-8 include a dedicated section on socio-economic benefits.
[23] The GEF-8 programming period was still ongoing at the time of this evaluation.

Figure 6: Number and percentage of project designs in country case studies (Chad, Mexico, Nepal) mentioning socioeconomic co-benefits, by category of co-benefit



Source: Evaluation elaboration from GEF Portal data (January 2025).

40. **The general expectation at project design was that environmental interventions would cascade into income generation and environmental resilience would help secure socioeconomic stability**. In Mexico, across the portfolio of projects reviewed, resilience-building measures emphasized hydrological services, integrated pest management, and biodiversity conservation to protect agricultural productivity and rural livelihoods. There was also attention to market access. As an example, in a project led by Conservation International (Maintaining and Increasing Carbon Stocks in Agro-silvopastoral Systems in Rural Communities of the Selva Zoque - Sumidero Canyon Complex as a Climate Change Mitigation Strategy, GEF ID 5751), the co-benefits identified at design included access to the carbon credit market and payments for ecosystem services for the conservation of tropical forests in Chiapas. In the case of the World Bank's Sustainable Productive Landscapes project, the envisaged co-benefits included both technical support and financial services, such as guarantees and state-supported financial credit schemes, allowing small producers to benefit from sustainable agriculture, agroforestry, and ecosystem services, and to better access markets and value chains.

41. Projects in Chad tended to focus more on land restoration as a pathway to combat desertification, improve soil fertility, and sustain local food systems. As an illustration, the IFAD-led and cofinanced Enhancing the Resilience of the Agricultural Ecosystems project (PARSAT; GEF ID 5376) defined the co-benefits as: (i) securing against climate risks, and (ii) enhancing production and supporting the economic activities of rural households. The ongoing IFAD-led Strengthening the Resilience of Smallholder Farmers and Ecosystems to the Effects of Climate Change (STRADAP; GEF ID 11550), based on women and youth entrepreneurship, identifies co-benefits as: (i) strengthened enabling environment for climate resilience within the agro-sylvo-

pastoral and fisheries value chains and (ii) climate-resilient livelihoods and employment opportunities for rural youth.

42. Nepal's resilience strategies included afforestation with drought- and water-tolerant species and urban greening to regulate temperatures and enhance biodiversity, particularly in rapidly growing urban centers. For instance, the Ecosystem-Based Adaptation for Climate-resilient Development in the Kathmandu Valley, Nepal project (GEF ID 8009, UNEP) implicitly assumed that planting trees would help reduce erosion and control soil temperature, thus enhancing land productivity.

43. **Few projects have explicitly analyzed the risk of "disbenefits" in the short run, which is important when assessing incentives for the communities to cooperate with environmental protection or restoration**. While environmental protection is often regarded as beneficial from a societal perspective, from the point of view of individuals, households, and communities, the short-run socioeconomic effects may be negative, and local actors may face disincentives to cooperating with these projects. The GEF has a Policy on Environmental and Social Safeguards,[24] however, its application requires dedicated analysis and concrete project design features.

44. In most projects, this aspect is considered only implicitly and without clear measures to address the problem. However, a few projects identified either alternative livelihoods or opportunities to build an income stream from the natural resources to be protected. Examples of these were: the RECONNECT project led by the International Union for Conservation of Nature (IUCN) in Chad and, in Mexico, the Wildlife Corridors project led by WWF and the UNEP-led Agave-Mezcal project. However, diversifying into alternative income-generating activities or generating win-win solutions (e.g., various forms of ecotourism) may require specific business skills or financing instruments, calling for the intervention of other agencies (for technical assistance or financial services) and this aspect was not always clearly articulated in the design.

45. **While designs attempt to identify the likely co-benefits, the pathways to achieve co-benefits are not specified precisely, particularly in the case of projects with conservation as an entry point**. For example, in Mexico, the Securing Benefits for the Well-Being of Local Communities and the Ecosystems of the Maya Forest project (GEF ID 11274, IUCN), the Conservation International-led project Conservation and Sustainable Use of Biological Diversity in Priority Landscapes of Oaxaca and Chiapas (better known as Sustainable Landscapes; GEF ID 9445), and the Wildlife Corridors project do not make it clear in their design through which partnership the expected socioeconomic co-benefits (e.g., income-generating activities, new job opportunities) would be promoted. These projects do not provide investment funds; it is somehow assumed that economic activities will emerge spontaneously or that local government agencies will intervene to stimulate such initiatives.

[24] https://www.thegef.org/sites/default/files/documents/gef_environmental_social_safeguards_policy.pdf

46. Similarly, across the projects reviewed in Nepal, designs tend to present in general terms the creation of co-benefits, such as improved soil fertility, better skills, and social capital. In Nepal, GEF-funded project designs usually make implicit reference to socioeconomic co-benefits, as they are framed primarily around the environmental objectives; however, in one project—the IUCN-led Restoring the Degraded Watershed and Livelihoods of Lakhandei River Basin through Sustainable Land Management project (GEF ID 10469)—socioeconomic benefits are central. Elsewhere, these benefits are conceived as emerging as the byproduct of ecosystem restoration, biodiversity conservation, or other environmental interventions (e.g., nontimber forest product processing, leaf-plate making).

47. On the other hand, examples of project design that have identified more explicitly the causal pathways to co-benefits are, in Chad, the AfDB-cofinanced Building Resilience project and, in Mexico, the World Bank's Sustainable Productive Landscapes project. Their designs include schemes to support income-generating activities or micro and small enterprises. These are IFI-led projects, with socioeconomic development as their first entry point. In Nepal, the WWF-led Integrated Landscape Management project included some initiatives to support livestock and organic inputs.

48. **Project designs do not discuss the tracking of co-benefits and the indicators to be used**. Ideally, some quantitative indicators could be contemplated for income or food security (e.g., anthropometric measurements for children below five years, or markers for household diet diversification). However, even some qualitative monitoring (e.g., descriptors of revenue diversifications or of changes in cropping patterns, soil fertility, new skills generated, improved governance of community-level organizations and local assemblies) would be useful to track co-benefits. There is limited attention to tracking such co-benefits in the project designs, which were prepared before the 2024 GEF working paper on measuring co-benefits (GEF/C.66/12). There were partial exceptions in the case of some IFIs (IFAD, World Bank), which are due to the corporate requirements of these organizations. An example of how co-benefits could have been considered in a theory of change at project design is presented as a reference in Annex A, along with examples of engagement and communication pathways as well as measurement and tracking opportunities.

3. PROVISIONS FOR SOCIOECONOMIC INCLUSION IN PROJECT DESIGN

49. **Specific groups were targeted in some projects to achieve socioeconomic outcomes.** Attention to socioeconomic inclusion at design was stronger in Chad and Mexico than in Nepal. In the former, the assessed projects had an explicit intention to engage with special categories of end users—such as women, youth, and indigenous people—through a variety of targeted instruments, designed to ensure their participation and benefit from the projects (table 3). Examples of instruments used across the examined projects include:

(a) **Stakeholder engagement plans,** outlining how the projects would consult and engage different groups over time, using culturally appropriate methods and language adaptations. For example, in Mexico's Agave-Mezcal project, measures to ensure inclusion involve, inter alia, a gender action plan and minimum quotas for women's participation in training, technical assistance, and leadership roles.

(b) **Local decision-making bodies**, which encourage or mandate representation from women, youth, pastoralists, and/or other underrepresented groups. Among others, Chad's Local Development and Adaptation Project (ALBIA; GEF ID 10315, World Bank) requires women's participation in sustainable natural resources management committees.

(c) **Capacity-building and training activities** on topics such as conservation, ecotourism, or agricultural skills, designed to empower historically marginalized groups. The IFAD-led STRADAP project in Chad foresees the setup of incubators, accelerators, or "agribusiness hubs," to provide young entrepreneurs with tailored coaching on business development. Another example was in Mexico (UNDP-led Small Grants Programme), where young students from the Union of Forestry Producer Communities from indigenous groups Zapotecos-Chinantecos in the la Sierra Juarez were engaged in community management activities, focusing on information technology.

(d) **Targeted financial incentives** such as matching grants or direct project funding to support income-generating activities. In Mexico's Sustainable Productive Landscapes project, implemented by the World Bank,[25] funding criteria reward proposals that demonstrate women's active participation (e.g., as subproject managers, owners, or board members).

(e) Establishment of **complaints and feedback mechanisms** for anyone to raise concerns about exclusion, environmental harm, or social impacts. In Mexico's Sustainable Productive Landscapes project, a grievance redress mechanism was planned to address and resolve any indigenous community concerns in a culturally sensitive manner.

[25] Sustainable Productive Landscapes _ GEF. Retrieved from https://www.thegef.org/projects-operations/projects/9555

Table 3: Relevance - Examples of projects' provisions for special end users

Project	Selected examples
Sustainable Productive Landscapes (Mexico; GEF ID 9555, World Bank)	***Women*** • Funding criteria reward proposals with active female participation • Workshops on governance, leadership, and business skills are tailored for women-led organizations or committees • Indicator requires at least 30% female representation in leadership roles ***Youth*** • Training in agribusiness, marketing, and digital tools • Innovation networks (e.g., demonstration plots, farmer field schools) • Encourages youth participation in local governance and producer organizations ***Indigenous people*** • Due to its focus, the project triggers the World Bank's Indigenous Peoples Policy (OP 4.10) • Includes an Indigenous Peoples Planning Framework (IPPF) with culturally adapted engagement strategies • Plans tailored technical assistance and a grievance redress mechanism for indigenous communities
Agave-Mezcal (Mexico; GEF ID 10869, UNEP)	***Women*** • Gender action plan with quotas for women's participation in training, technical assistance, and leadership roles • Prioritizes women-led nurseries or cooperatives when allocating small grants or microloans
ALBIA (Chad; GEF ID 10315, World Bank)	***Women*** • Targets women as up to 50% of beneficiaries in capacity building, improved livelihoods, and decision-making processes • "Female wildlife squads" and outreach for women's training in conservation and climate-smart agriculture ***Indigenous people*** • Establishes local community management committees around protected areas (e.g., Ouadi Rimé–Ouadi Achim Reserve) that include nomadic, pastoral, and other vulnerable communities
STRADAP (Chad; GEF ID 11550, IFAD)	***Youth*** • Plans to establish incubators, accelerators, or "agribusiness hubs" for young entrepreneurs • Aims to support 5,000 youths in launching or expanding green micro-enterprises through coaching and climate information services

Source: Evaluation team elaboration (2025).

50. By contrast, in Nepal the identification of specific beneficiaries was not always clear and detailed for most of the project designs. Projects broadly reach out to resource-dependent communities, mostly in rural areas, in vicinities of national parks, or along vulnerable watersheds or riverbanks. At the same time, projects are generally not nuanced about groups within this

population segment—women, indigenous groups, Dalits,[26] and some particular minorities (e.g., fisherfolk). Indigenous peoples, local communities, and women are scarcely mentioned in the projects' designs, especially with regard to stakeholder engagement.

51. **Challenges from the project preparation and implementation cycle.** By the time projects start implementation, some three to four years may have typically elapsed from the original proposal preparation. That means that changes to the contexts may have taken place. The lead and executing agencies may face challenges in adapting to the new institutional or legal setting (as observed in Mexico and Nepal) and sometimes ground-level changes (e.g., massive floods in Chad, when the project design was only concerned about drought). Retrofitting the design to such changes (e.g., reducing the geographic scope or the number of communities or cooperatives supported) may introduce further delays or alter the original objectives. This is not an issue specific to socioeconomic benefits but certainly affects the timelines of activities supporting them.

Key takeaway findings

- Most GEF-funded projects built upon pre-existing activities (NGOs, public programs, other development agencies) and community-level dynamism, adding technical support, training, and exposure to good environmental practices.
- Two main typologies of interventions were identified: (i) projects focused on natural resource protection, often led by conservation NGOs, and (ii) projects centered on socioeconomic benefits, mainly led by IFIs, with environmental components financed by the GEF.
- Attention to socioeconomic co-benefits at design has increased since GEF-5, with socioeconomic co-benefits now widely acknowledged in project designs. Key co-benefits include skill development, social capital strengthening, income diversification, and improved market access.
- The pathways to generate co-benefits were not always well articulated: many conservation-focused projects lacked clear strategies for linking environmental goals with economic gains. Short-term negative effects linked to conservation, as well as compensatory measures, were not well explored at design. There was limited attention to the tracking and measurement of socioeconomic co-benefits. More attention to this aspect has emerged in recent projects.
- Inclusion considerations varied: in Chad and Mexico, projects deliberately engaged women and indigenous groups (in some cases also the youth), while Nepal's projects were less explicit in targeting marginalized groups.
- A generic challenge for projects is the time elapsed between original proposal preparation and start-up of activities (typically three to five years), which exposed the project to a risk of change in political, policy, or local agroecological context.

[26] Dalits mean literally a downtrodden people; they consist of a social class considered "lowest" in Hindu caste hierarchy.

IV. EFFECTIVENESS IN GENERATING SOCIOECONOMIC CO-BENEFITS

52. This chapter examines the extent to which the socioeconomic co-benefits (expected and unforeseen) have been achieved, what type of co-benefits are "visible," and the explanatory factors. First, it presents evidence from the quantitative geospatial analysis, including the matching of satellite imagery with socioeconomic surveys. It then shows more qualitative evidence from recent IEO evaluations and from the country case studies in Chad, Mexico, and Nepal.

1. REVIEW OF GEOSPATIAL ANALYSIS OF PRIMARY ENVIRONMENTAL PROJECT BENEFITS

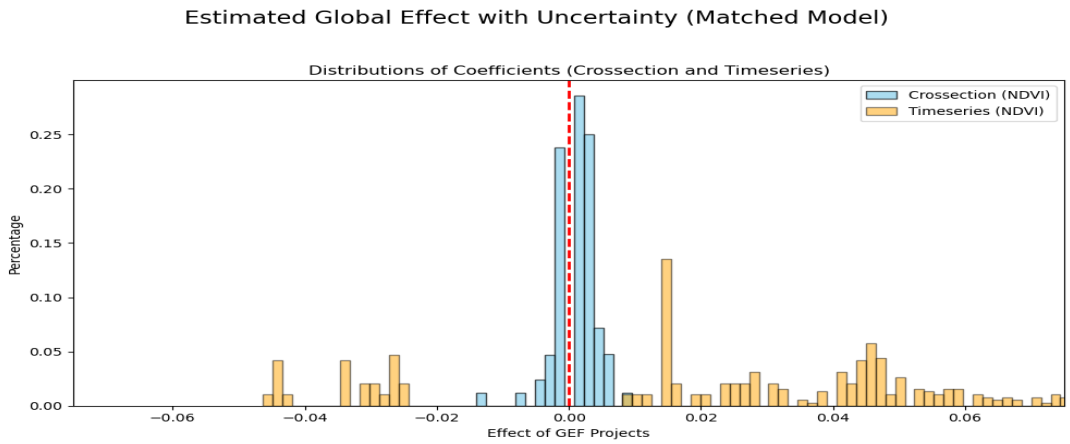
53. This section briefly presents evidence from geospatial analysis in 11 countries (see chapter 2 on methodology) on vegetation cover, which can be considered as a proxy indicator of some of the direct benefits of GEF-funded interventions.

54. **Evidence from the analysis suggests that, overall, GEF activities are associated with a small but statistically significant improvements in vegetative cover.** For each geometric location at which a GEF project activity was known to have occurred, the satellite-derived information was disaggregated to create time-series information on vegetative health from the Normalized Difference Vegetation Index (NDVI).[27] In the pooled analysis across all countries studied, GEF projects generally exhibited positive correlation with vegetation indicators. The cross-sectional model reported an average mean association of +0.001, and the time-series model reported +0.024, both statistically significant at the 0.05 level (figure 7).

55. At the country level, estimates of the impact of GEF project activities on NDVI in Cambodia, Costa Rica, India, and Nepal were consistently positive. Using the global mean of NDVI (0.387) in 2000 as a baseline from which to compare effect sizes, positive effect estimates ranged from less than 1 percent (Costa Rica) to approximately 12 percent (Nepal, time series). In Mexico, negative association was found between the presence of GEF-funded interventions and NDVI trends. However, this finding needs to be interpreted carefully, given the broad problem of deforestation in the country, while the GEF-funded projects have had localized effects to preserve vegetation. This more prudent interpretation is supported by the evaluation's observations in the field, as further discussed in the remainder of the report.

[27] NDVI is an indicator of health and density of vegetation cover. It can take values between +1 (dense vegetation) and -1 (water surface).

Figure 7: Results of cross-sectional versus time-series models for estimating NDVI



Source: Quantitative analysis of this evaluation (2024).

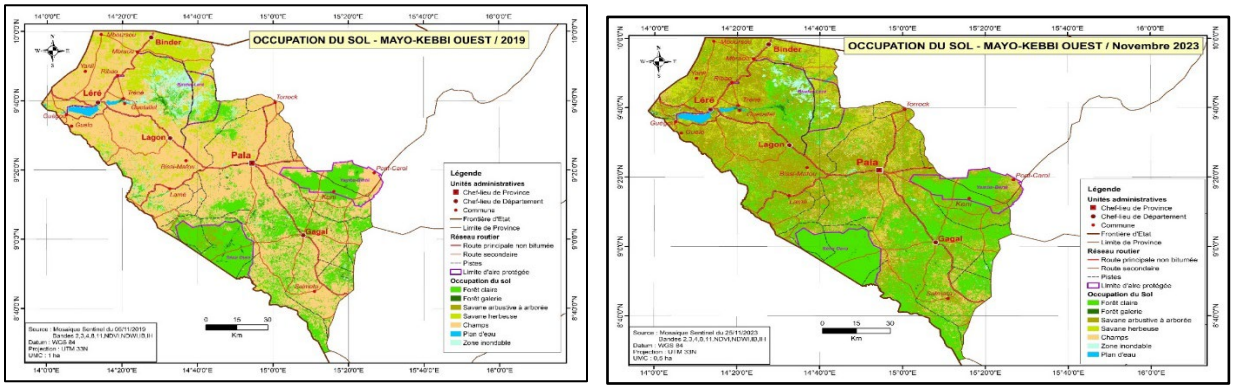
Note: Orange bars represent estimates from an autoregressive time-series model; blue bars represent results from a propensity-score-matching cross-sectional model.

56. **Few of the GEF-funded projects reviewed have analyzed geospatial data to monitor vegetation cover**. Most projects have not developed a comprehensive analysis of the vegetation cover, even when the individual initiatives are geolocalized. An exception is the RECONNECT project in Chad. From 2019 to 2023, the project contributed to the creation of the 3 ecological corridors, 51 community forests, and 25 forest blocks. According to the terminal evaluation, vegetation increased from 305,611.06 hectares to 968,486.45 and CO2 sequestration increased from 12,637,464.1 tons to 29,484,547.8 tons over the entire project intervention area. However, there were differences in the evolution between different types of forest (map 1).[28]

[28] Gallery forest declined from 14,676.3 ha to 4,015.54 ha in 2023, open forests increased from 14,746.46 ha to 447,624.65 ha, and wooded and shrubby savannahs increased from 276,188.3 ha to 516,846.26 ha in 2023. Source: Unité De Gestion-Projet Reconnect, "Restauration des corridors écologiques du Mayo-Kebbi Ouest au Tchad en appui aux multiples avantages fonciers et forestiers (RECONNECT), Rapport Final du Projet, IUCN (2024).

Map 1

The RECONNECT area before and after the project



Source: Final report of RECONNECT project (2023).

2. REVIEW OF QUANTITATIVE ANALYSIS OF PROJECT CO-BENEFITS

57. **Nighttime light can be a first crude indicator of economic co-benefits.** Nighttime light, as observed from satellite imagery, has been used in the economic literature as a proxy for economic activity and local GDP in rural areas of developing countries.[29] An important caveat is that nighttime light depends on the availability of an electricity grid. Thus, indicators of nighttime light may be influenced by the presence/absence of rural electrification programs that may not be connected to the specific project to be assessed.

58. **Data suggest weak correlation between the presence of GEF-funded activities and nighttime lights in project areas.** At the global scale, evidence suggests a small but statistically significant (alpha = 0.05), positive impact of GEF-funded activities on nighttime lights. This finding is grounded in time-series models, which estimated a consistently positive signal across nearly all countries. However, the results from the cross-sectional models were much more variable and tended to be in the neutral or negative direction. This suggests that GEF-funded activities tend to increase the rate of nighttime light growth relative to baseline conditions, but not relative to neighboring areas. Again, findings need to be interpreted carefully, given the caveat on the confounding effects of exogenous electrification programs.[30]

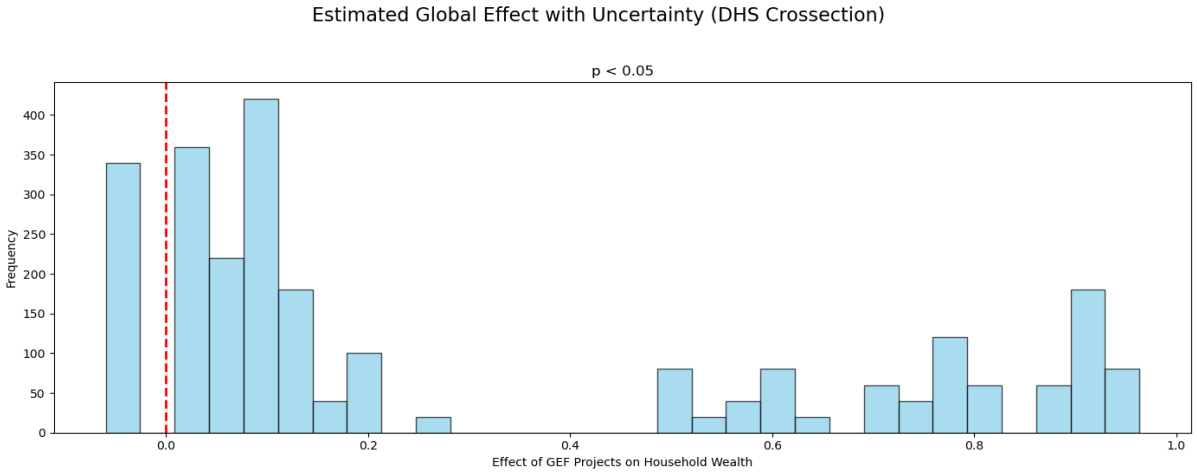
[29] For a comprehensive discussion of opportunities and limitations, see: Douglas Addison and Benjamin Stewart, "Nighttime Lights Revisited: The Use of Nighttime Lights Data as a Proxy for Economic Variables," Policy Research Working Paper No. 7496 (World Bank, Washington, 2015).

[30] Interestingly, a pilot case study carried out by IEO in 2019 in Uganda found that the presence of GEF-funded projects had no significant correlation with nighttime lights. The study highlighted issues with data quality and exogenous factors, a caveat that applies to this evaluation as well.

3. EVIDENCE FROM THE MATCHING OF PROJECT GEOREFERENCING WITH EXISTING SOCIOECONOMIC SURVEYS

59. **GEF-funded activities are positively associated with increases in household wealth.** Previous in-situ demographic and health surveys, which solicited information on household wealth, have been used in four countries where survey coverage overlapped with GEF-funded activities (Bangladesh, Chad, India, and Nepal). Cross-sectional analysis in the four countries shows that, at the .05 significance level, there was significant association between GEF-funded activities and household wealth indicators (average mean of 0.144; figure 8). In this case, the finding is relatively robust to the uncertainty in the data, with the majority of models agreeing that the impact of the GEF is in the positive direction.[31]

Figure 8: Effect of GEF projects on household wealth, estimated from quasi-observational propensity score analysis implemented under conditions of uncertainty



Source: Quantitative analysis from geospatial analysis of this evaluation (2024).

Note: The height of each bar represents the number of models which estimated a given effect on household wealth.

4. EVIDENCE ON CO-BENEFITS FROM RECENT IEO EVALUATIONS

60. During the GEF-8 cycle, seven evaluations (see chapter 2) have provided some evidence of socioeconomic co-benefits. **Key findings from these evaluations are that the co-benefits can be quite diversified, beyond the intended objectives at design**. These evaluations agree that natural resource conservation opened opportunities to improve incomes as well as diversify income sources. For instance, the evaluation on sustainable forest management found that about

[31] Note that it is challenging to match the GEF-funded projects with the available household surveys, chronologically and geographically.

55 percent of the evaluated projects reported increases in income, while 52 percent noted improvements in community empowerment. In the Congo Basin, through social responsibility contracts negotiated between concessionaires and local communities, $15.1 million was channeled into community-led infrastructure, services, and local economic opportunities. The evaluation cautions that the effects were uneven, due to weak transparency of local governance.

61. The evaluation on community-based approaches found that, in Madagascar, the communities involved in mangrove restoration were able to sustain their economic activities, such as selling crabs and fish, after the project's closure, due to well-established market linkages. In Indonesia's Citarum project, environmental restoration was coupled with grants for alternative livelihoods, supporting activities such as handicrafts and palm sugar production, which continued beyond the project period, due to effective market integration. The evaluation on chemicals and waste found that projects often generated new economic opportunities, particularly in the waste management and recycling sectors. The evaluation of Pacific Small Island Developing States programs noted that training delivered to local communities helped integrate environmental management with economic development, particularly in the fisheries, ecotourism, and waste management sectors.

62. Another benefit, albeit less frequently mentioned, was that of improved food security. This was noted by the evaluation on water security: improved access to clean water helped enhance agricultural productivity and reduce vulnerability to droughts and erratic rainfall. Eventually, this led to better food security and nutritional outcomes. The evaluation on GEF support to dryland countries noted that GEF-funded initiatives helped improve land productivity through sustainable agriculture, agroforestry, and climate-adaptive farming techniques, enabling farmers to increase yields and stabilize household incomes.

63. Expected health benefits were mainly mentioned in the evaluation on chemicals and waste. A specific case was that of the efforts to phase out dental amalgam and mercury-containing skin-lightening products, expected to decrease mercury exposure, thereby enhancing the health of vulnerable groups, such as pregnant women and children.[32]

64. Another common co-benefit cited was the strengthening of community-level governance on natural resources. The evaluation of community-based approaches reviewed the Small-Scale Rural Infrastructure and Disaster Preparedness project in Lao PDR, which strengthened local governance by enhancing community participation in decision making regarding infrastructure and disaster preparedness, increasing cohesion and awareness of environmental challenges. Similarly, improved governance was observed in Côte d'Ivoire, where the establishment of village conservation groups and a participatory park management committee reduced poaching and agricultural encroachment, while strengthening relationships between communities and

[32] Similar conclusions were reached by an IEO internal review of co-benefits of projects in the chemical and waste focal area: N. Hadjimichael and G. Batra (2019), op.cit.

authorities. The evaluation on water security mentions the creation of participatory management structures that empower local populations to take control of water resources. The evaluation on GEF support to dryland countries illustrated examples of improved governance structures for land management and pastures, which helped enhance coordination among the main stakeholders (e.g., farmers, livestock herders, water point users), leading to more inclusive decision making.

65. Only the evaluation on sustainable forest management documented adverse effects. While many projects addressed local livelihood needs through job creation, skills development, and economic diversification, others had inadvertently led to negative socioeconomic consequences (e.g., by displacing traditional land uses), or even caused social conflict, due to inadequate compensation mechanisms or poor planning.

66. Two common points emerged from these evaluations, which will be further discussed in the next chapters of this report: (i) there was limited "hard" evidence on the co-benefits, due to the absence of dedicated indicators in project reporting, leading to a clear risk of under-appreciating the co-benefits achieved; (ii) there were recurrent sustainability risks, due to limited arrangements made to secure financial support (particularly for infrastructure maintenance), and little capacity building done on market access, thus restricting the benefits of agricultural productivity increases.

5. EVIDENCE ON CO-BENEFITS FROM THIS EVALUATION'S COUNTRY CASE STUDIES

67. Overall, the three **country case studies confirm that GEF interventions have contributed to generating diverse co-benefits, often extending beyond the expectations at design**. Even if the evidence is predominantly qualitative, it shows abundant examples where conservation of natural resources is combined with household- and community-level welfare, creating opportunities for mutual positive incentives. The strengthening of human capital and social capital emerge as examples of co-benefits, as well as drivers to generate other (economic) co-benefits.

68. Two qualifications are in order. First, there are few examples where the projects have attempted to quantify the co-benefits and terminal evaluations have given limited attention to this aspect. Review of the available documentation, interviews, and field visits suggest that there is a risk of underreporting the socioeconomic benefits of GEF-funded projects. Second, the results achieved are not due exclusively to the GEF-funded interventions. The projects examined by this evaluation have been implemented in areas where other projects have been active in the past and other projects are taking place at present. Thus, GEF-funded interventions have provided a contribution, often adding value to existing dynamics, rather than generating them ex nihilo.

69. **Human capital improvement is the most often observed co-benefit**. Among the most easily observable co-benefits are increased capacity and skills in natural resource management,

also leading to better understanding of what needs to be done to improve resilience to climate risks. Members of communities, groups, enterprises, and cooperatives assisted by the projects have acquired better knowledge and technical skills. Some examples include the following:

(a) *More accurate fact-based interpretation of weather patterns*. The UNDP-led Community-based Climate Risk Management in Chad project (GEF ID 8001) supported local radio networks that broadcast regular programs on weather in the local vernacular, advising on the timing for sowing and applying fertilizer and other inputs. Radio programs are based on data from the national meteorological agency, aggregated from weather stations (UNDP had supported the construction of some of these stations, with GEF funding) and provide warning on the risk of flooding. Interviews with communities showed that farmers better appreciate the risk of losing their rice harvest to flooding if they continue to grow paddy during the rainy season, as per tradition. They now consider changing their cropping calendar and patterns.

(b) Specific technical skills such as *the production of organic inputs and low-chemical crop management techniques.* This was one of the initiatives supported by the Sustainable Productive Landscapes project in Mexico, led by the World Bank. Building upon initiatives of the Oaxaca state Secretariats for Agriculture and for Environment, local farmer groups were trained in techniques, such as preparation of composting, bokashi, vermiculture, and other organic fertilizers, to be applied to milpa[33] and vegetables and were provided with equipment (containers, digestors). This was done in collaboration with local universities and extension centers and led to some activism and advocacy, beyond the individual farmer enterprises. In Chad, the IFAD-led PARSAT project, through the farmer field school approach, tested and disseminated approaches to integrated soil fertility management, including the use of animal manure, as well as a biological herbicide based on natron. This also led to initiatives with local schools, where children participate in demonstrations on managing crops and soil in a more sustainable manner.

(c) In Nepal, the WWF-led Integrated Landscape Management project promoted the preparation of organic pesticides and fertilizers, as well as improved goat shed preparation for healthier rearing and protection from wildlife attacks. The UNEP-led Climate Resilient Natural Capital project built skills for constructing low-cost check dams and conservation ponds and for planting beneficial trees. Some training activities also covered the gathering of nontimber forest products, such as butter tree fruits, Sichuan pepper, and turmeric, as income-generating activities. However, skill enhancement was generally geared to conservation objectives, rather than building a skills repertoire required for diverse subsistence livelihoods.

[33] Traditional agricultural system in Mesoamerica based on maize, beans, and squash.

(d) *Combining traditional technology with contemporary technology*. An example is in the Mexico GEF-7 initiatives under the Small Grants Programme, led by UNDP. As observed in Calpulálpam de Mendez (Oaxaca, Mexico), a partnership with the Universidad de la Sierra Juárez helped university students from several indigenous communities to use computer science, drones, and satellite imagery to build a database for monitoring soil, water, vegetation, and local wild fauna. Combined with traditional community mapping, this helped promote better understanding of natural resource trends. Students from the communities were able to address traditional assemblies and explain their work. Furthermore, training kits and instructional games were designed to disseminate knowledge on the local flora and fauna through schools, creating a multiplier effect.

(e) *Training of local tour guides to enhance ecotourism services.* This was the case for the Conservation International-led Sustainable Landscapes project in Mexico. Members of local environmental tour cooperatives and enterprises were provided with training on the lagoon ecosystem (Lagunas de Chacahua, Oaxaca), local vegetation, fauna, opportunities for new itineraries, and environmental safety standards. This led to broadening the ecotourism experiences offered to tourists, with richer environmental content (information on the evolution of the microclimate, wildlife, and ecosystem vulnerability). Again, this can generate a multiplier effect, as visitors become better informed.

70. **The strengthening of social capital is another co-benefit identified by most projects and a pathway of change for local communities**. Empirically, this can be identified as (i) the strengthening of ties within a community or group and improving its governance on natural resources, and (ii) creating and reinforcing relationships with external entities, such as other communities, local governments, local universities, technical support agencies, or public programs. There are elements of these in most projects. For instance, the IUCN-RECONNECT project in Chad supported existing grassroots organizations, such as the *Comités Villageois de Surveillance*, the *Instances Locales d'Orientation et de Décision,* and the *Associations de Développement du Canton*. These are now active in advocating for support to local initiatives from municipal, cantonal, and subprefecture governments on natural resource conservation (vegetation, freshwater). They are also members of the committees that take decisions on project-financed initiatives to preserve local vegetation and promote income-generating activities.

71. Also in Chad, the PARSAT project evaluation[34] noted an increase in competition for fodder resources in recent years between the communities of farmers (supported by the project) and

[34] FIDA (Bureau indépendant de l'évaluation du Fonds international de développement agricole), Évaluation de la performance du Projet d'Amélioration de la Résilience des Systèmes Agricoles au Tchad (PARSAT; Rome, 2023.)

the communities of pastoralists in the process of settling on the same territory, leading to cases of violent confrontation. In some villages, the project helped improve relationships between farmers and pastoralists by establishing contractual agreements (e.g., farmers taking livestock for fattening), although the evidence did not allow for generalization of this finding to the whole project area.

72. In Mexico, under the World Bank-led Sustainable Productive Landscapes project, indigenous community organizations were supported to improve their governance system and obtain certification of sustainable forest management. These communities are now engaging in planning an expanded range of economic activities to diversify revenue sources (e.g., ecotourism, payment for environmental services). Interestingly, more and more initiatives are led by younger community members, who are better educated. Similarly, the work done by the Conservation International-led Sustainable Landscapes project in certifying Areas Voluntarily Designated for Conservation in the Sierra Sur and coastal area of Oaxaca was the result of a thorough consultation with community members, where the leaders had to facilitate several meetings with hundreds or even thousands of participants to arrive at common understanding and decision. This was challenging but eventually reinvigorated the bonding of community members. On the other hand, under the same project, while there were some advances in having coffee-producing cooperatives adopt good soil management practices, there was little progress in strengthening cooperative governance, such as in *Cafetaleros Unidos de la Costa*.

73. In Nepal, projects built upon and mobilized existing social networks, groups, associations, and cooperatives. One example of this was the Integrated Landscape Management project, which engaged a variety of local user groups and networks working in community forestry and the national park's buffer zone as well as students via school ecotourism clubs. The project also promoted multistakeholder groups, such as a federation of community forestry user groups, in planning and monitoring project-related activities.

74. **In the area of economic production and income generation, the projects (particularly those led by IFIs) have supported promising opportunities. Some of these opportunities are yet to be realized and little quantitative evidence is available**. Below are some pathways identified to the generation of economic benefits:

(a) *Increases in agricultural productivity and revenues*. Under the World Bank-led Sustainable Productive Landscapes project (Mexico), biofertilizer production and application are estimated to have helped: increase maize yields (from 0.8 ton/ha traditional yield to 1.2 tons/ha with bio-fertilizers); reduce tomato production costs by 48 percent; and improve carrot production (yields raised from 60 kg/bed to 120 kg/bed, irrigation reduced from 32 to 19 applications, and growing time shortened

from 125 to 76 days).[35] Also in Mexico, the midterm review of the OP-7 Small Grants Programme noted, in Chiapas, an increase in cacao's farmgate price from about 57 pesos/kg to 90–130 pesos/kg, owing to better processing and marketing, producing higher farmers' profits.

(b) In Chad, according to field observations, under the RECONNECT project, income-generating activities such as beekeeping, fishing and basic food processing have seen improvements. Under traditional beekeeping, honey production per beehive per season was 7–8 kg. With the improved beehives and the restoration of local vegetation (better pollination), this is now 8–10 kg. Additionally, better pollination improves honey quality with an option to sell at 5,000 CFA franc/kg against 3,500 CFA franc/kg for average quality. An important qualification is that, by admission of the project team, the scale of activities (i.e., 370 micro-initiatives) is still very small and much remains to be done to access markets and integrate with value chains. Also in Chad, the impact assessment available for the PARSAT project estimated crop yield increases for sorghum, sesame, and groundnuts at 67 percent, 47 percent, and 87 percent, respectively, thanks to improved soil and crop management practices.

(c) In Nepal, where projects were led by NGOs and UN agencies, income-generating activities—such as processing and market linkage for nontimber forest products (UNEP-led Climate Resilient Natural Capital project), and ecotourism and leaf-plate making (WWF-led Integrated Landscape Management project)—are at an earlier stage.

(d) *Diversification towards new streams of revenues.* Examples of these have been in Mexico, including supporting artisanal handicraft with forest wood wastes (Small Grants Programme) and **ecotourism** activities (e.g., in the lagoons of Chacahua under the Conservation International-led Sustainable Landscapes project). Note that, among case study countries, ecotourism initiatives were concentrated in Mexico. This may reflect the more advanced status of the industry in the country, and better transportation infrastructure and security conditions (at least in the state of Oaxaca).

(e) *Setting the opportunities for possible future income increases.* This item is singled out because the evaluation observed cases in which the enabling environment has been set but further investments are necessary to bring these conditions to fruition. One example is the certification of conservation areas in Mexico under the Sustainable Landscapes project, opening the door to sustainable forests through ecotourism, if eco-responsible investments are made. Another example, from the UNDP-led Climate Risk Management project in Chad, is the creation of demand for investment in off-

[35] Note that some of these changes may be linked to changes in the varieties grown, as indicated in field interviews.

season irrigated agriculture, which can help improve livelihoods. However, UNDP cannot provide capital for investments and follow-up by another cooperation agency (such as an IFI) is required.

(f) *Supporting marketing and insertion in value chains.* This was not a strong focus of the projects, and it is not a traditional priority for conservation-focused interventions. In Chad, the PARSAT project's evaluation noted that, while there were gains in farm production, weak market integration hindered sustainable income gains. In Mexico, under the Small Grants Programme, some elements of marketing support existed in the form of participation in handicraft fairs. Also in Mexico, the Sustainable Landscapes project provided technical support to ecotourism enterprises but did not help coffee cooperatives enhance their marketing strategies, such as in *Cafetaleros Unidos de la Costa,* Oaxaca. The guarantee schemes, provided under World Bank-led Sustainable Productive Landscapes, helped small and medium local enterprises access credit from public supported financial enterprises but did not create strong incentives to seek funding from commercial banks.

75. **Evidence of health and nutrition co-benefits is less detailed, indirect, and not robust, due to lack of dedicated tracking.** In the available evaluations, the reported nutrition improvements (e.g., diversified diets in Chad's PARSAT project or improved price stability in the OP-6 Small Grants Programme in Mexico) are based on interviews and perceptions rather than quantitative methods, limiting the ability to assess the projects' economic co-benefits. Regarding health, in Mexico and Nepal, water quality improvements (less sediments) have been mentioned as a result of reduction of soil erosion. Also in Mexico, the claim of reduced exposure to chemicals, thanks to the use of biofertilizers, is plausible, but there are no objective corroborating measurements. In project documentation, there are also claims that the introduction of energy-efficient stoves or solar-based cooking/drying, as seen in projects like RECONNECT (Chad) or Mexico OP-7 Small Grants Programme, could lead to less open-fire cooking, thus reducing smoke and pollution but no data or estimates are available on the size of the effect.

6. EVIDENCE OF ADVERSE EFFECTS

76. Limited information is available on adverse socioeconomic effects of projects. In Chad, reports on projects under the leadership of the AfDB, UNDP, and the World Bank do not provide relevant information. In the case of the PARSAT project, its independent evaluation mentions issues of conflicts between farmers and pastoralists, which some communities are trying to address (a risk that had received insufficient attention at design). In the case of the RECONNECT project, the abandonment of agricultural land for the conservation of ecological corridors is likely to have caused a reduction in the revenues of farms that encroached areas protected for wildlife seasonal migration (although no estimate is available). For this reason, the RECONNECT project seeks to promote alternative sources of revenue in the relevant area, Mayo Kebbi West

(medicinal plants, fruits, pollination and honey production, fuelwood, restoration of soil fertility). It is plausible to expect similar issues around the protected areas supported by other agencies (notably the World Bank ALBIA project).

77. The Nepal case study did not present major cases of adverse socioeconomic effects for the GEF-supported projects under the responsibility of the FAO, IUCN, UNDP, UNEP, and WWF. However, in the project areas visited, there is some stress on local farmers and the general population due to conservation results. For instance, in Salyan, monkeys and wild boar, whose numbers have increased in recent years, damage crops and thereby become a threat to local people and livelihoods. In Banke, Bardiya, and Kailali districts, there are frequent instances of wildlife attacks on domestic animals, crop depredation, and sometimes fatal wildlife attack on humans. Effort is ongoing from the UNEP-led Climate Resilient Natural Capital project to reduce wildlife attacks on livestock and crop damage.

78. In Mexico, the mission did not observe major cases of detrimental effects of the same types as in Chad and Nepal. In the case of the Areas Voluntarily Designated for Conservation, such as the one visited in Santa María Huatulco (Oaxaca), the promotion of ecotourism and conservation practices may have trade-off effects by restricting pre-existing economic activities, such as conventional agriculture and livestock, raising the need for compensatory measures.

7. SOCIOECONOMIC CO-BENEFITS AND SOCIAL INCLUSION

79. **Consistent with observations made at project design, this evaluation found more attention at implementation to marginalized groups in the projects in Chad and Mexico and less in Nepal.** In Chad, the attention was to gender equality and smallholders; in Mexico, there was special attention to indigenous communities (Mixtecos, Chinantecos, Zapotecos) in Oaxaca, while attention to gender equality varied within and between projects. Attention to the youth was low, overall, with a few exceptions observed in Mexico. **Differences in focus on specific marginalized groups were due to the lead agency, its corporate mission, and its capacity and experience**. The above intertwined with cultural, social, and systemic norms and barriers on the ground.

80. As noted, in Mexico, the UNDP-led Small Grants Programme (cohorts of GEF OP-6 and GEF OP-7) operated primarily within **indigenous territories**, integrating culturally relevant practices (e.g., the milpa system or community-based forestry), and promoting local ownership. The mission's field visit also suggested that in the state of Oaxaca, the interventions of the World Bank-led Sustainable Productive Landscapes project and the Conservation International-led Sustainable Landscapes project focused on indigenous communities. While a significant share of the population in Oaxaca self-defines as indigenous, the World Bank project made a specific effort to reach this population. According to figures provided by the project coordination, 60 percent of the end users of this World Bank project would self-define as indigenous, against 43 percent of the population in Oaxaca in general.

81. **In the case of gender equality, although this was an objective of most projects, progress was made with varying degrees of success**. The PARSAT project in Chad exceeded its target, with women outnumbering men in farmer field schools. However, despite high rates of participation, women often remained absent from technical or field roles, as noted by the PARSAT evaluation. Also in Chad, according to the terminal evaluation of the RECONNECT project, rates of women's participation varied across areas: while some local governance bodies saw up to 50 percent female participation, others fell as low as 15 percent (noting that participation alone does not necessarily equate with empowerment). Additionally, the midterm review had emphasized the lack of a gender focal point.

82. In Mexico, both the OP-6 and OP-7 cohorts of the Small Grants Programme saw significant and growing female inclusion, gradually moving beyond token numeric participation to active engagement in project design, decision making, and leadership. Although showing improvements in women's inclusion, the terminal evaluation for the Mexico Carbon Stocks project led by Conservation International and the NGO AMBIO[36] noted concerns about local community technicians acting as gatekeepers, limiting the participation of women.

83. As to the **youth**, there was less specific focus across the projects, in part also due to objective constraints, in communities (e.g., Mexico) with high rates of emigration where the number of young people was limited, and in part due to limited imagination on how to make initiatives more palatable for younger generations. In Mexico, with GEF funding, the World Bank-led Sustainable Productive Landscapes project and the UNDP-led Small Grants Programme dedicated some attention to leadership by young people in indigenous communities (e.g., environmental certification, "horizon scanning" for new sources of revenues). The OP-7 Small Grants Programme also engaged in activities to bring information technology, computer science, and drone technology to university students from indigenous communities. In the Conservation International-led Conservation and Sustainable Use of Biodiversity in Oaxaca and Chiapas project, ecotourism generates income but with disparities, as experienced guides received more attention than younger or female members of ecotourism cooperatives.

84. Very little information is available on interventions for people with disabilities. The terminal evaluation of the OP-6 Small Grants Programme for Mexico (GEF ID 9167) mentions a case of support of a cooperative for people with hearing/speech disabilities, with little detail.

8. INNOVATIONS SUPPORTING SOCIOECONOMIC CO-BENEFITS

85. **Rather than cutting-edge type of innovations, this evaluation finds examples of improved practices and imaginative solutions at the local level, which are pertinent to the context.** In the portfolio reviewed, there are few examples of cutting-edge technologies or

[36] Maintaining and Increasing Carbon Stocks in Agro-silvopastoral Systems in Rural Communities of the Selva Zoque - Sumidero Canyon Complex as a Climate Change Mitigation Strategy. _ GEF. Retrieved from https://www.thegef.org/projects-operations/projects/5751

introduction of practices and approaches that are novel in absolute terms. The evaluation more frequently observed the following features, which contributed to the co-benefits: (i) support for eco-friendlier agricultural practices that are known elsewhere but were rarely adopted in the project area before project interventions (e.g., bio-fertilizers); (ii) revival of ancestral practices to manage vegetation (conservation of autochthonous plant varieties in Chad); (iii) introduction of new services, such as the diversification of ecotourism offers under Conservation International's Sustainable Landscapes project (Mexico); (iv) inputs from professional designers to "refresh" traditional handicraft practices (Mexico, Small Grants Programme), and (v) application of modern technology (computer science, drones, web-connected photo-traps) to track the evolution of natural resources, forest cover and canopy, soil, biodiversity, fauna and water), which is perhaps the closest case to technological innovation, under the Mexico Small Grants Programme.

86. Projects that have been able to support more imaginative solutions are those that have broadened their partnerships with civil society, universities, research and extension stations, and private entities and have paid attention to market demand.

Key takeaway findings

- As a first marker of co-benefits, matching of GEF-funded projects with household wealth survey data suggests that there was positive correlation between the presence of a GEF-funded intervention and improvement in household welfare indicators.
- Earlier IEO evaluations and the three country case studies confirm that GEF-funded projects generate diverse socioeconomic co-benefits that often surpass initial expectations. While these benefits are well-documented qualitatively, there is limited quantification, leading to the risk of under-recognition.
- A key co-benefit is human capital development. Examples include having a more accurate, fact-based representation of climate change effects, acquiring specific skills (e.g., biofertilizers, crop management) and combining traditional approaches to natural resource conservation and new information technology applications.
- Strengthened social capital is another major co-benefit, notably the strengthening of bonds and governance mechanisms in communities and reinforcing ties with external entities to improve natural resource management. As well as being co-benefits in and of themselves, human and social capital are "engines" that generate additional co-benefits by driving changes in people's perspective, values, and commitment to preserve natural resources.
- As to economic co-benefits, these have been realized by some projects (with special attention in IFI-led projects), while other projects have created the enabling environment (certification of protected areas, certification of forest sustainability) to generate them, with further investments required.
- Health and nutrition co-benefits remain under-documented. Conservation efforts occasionally led to unintended socioeconomic drawbacks, such as reduced farm revenues in Chad due to land conservation, and increased human-wildlife conflict in Nepal.

- In Chad and Mexico, projects were more effective in engaging marginalized groups—including indigenous communities and women—than in Nepal, although results varied within and between projects. Youth engagement was uneven and received lower attention overall.
- Innovation supporting co-benefits primarily involved adapting existing technologies rather than introducing groundbreaking solutions (e.g., application of biofertilizers, revival of ancestral agricultural practices, diversification of ecotourism services, and integration of technology in environmental monitoring). Projects that formed partnerships with civil society, universities, and private stakeholders demonstrated the most imaginative solutions.

V. EFFICIENCY AND IMPLICATIONS FOR CO-BENEFITS

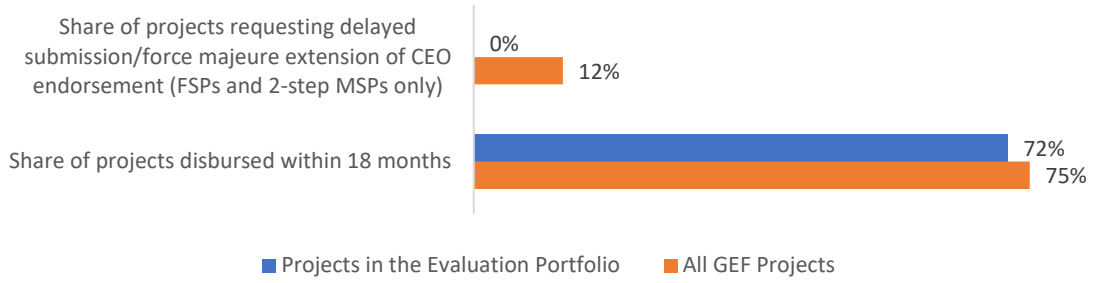
87. The purpose of this chapter is to highlight the factors affecting efficiency and, in turn, explain how efficiency can affect socioeconomic co-benefits. The chapter starts with an overview of efficiency indicators used in the reports of the GEF Secretariat (ref. GEF-8 Results Measurement Framework, GEF/C.62/Inf.12/Rev.01) and IEO. These indicators can be considered as proxies for efficiency at specific stages of a project cycle. Thereafter, drawing from interviews and country visits, the chapter identifies selected drivers of project efficiency. Finally, the chapter discusses knowledge management as a factor that can affect efficiency, as well as the generation of co-benefits.

1. EFFICIENCY AND SOCIOECONOMIC OUTCOMES

88. **According to standard efficiency indicators, the projects considered in the country case studies perform in line with the rest of the GEF portfolio, except timeliness in producing midterm reports**. The analysis in this chapter compared the projects selected in the country case studies against a broader cohort of GEF-funded projects that were approved between 2008 and 2023, covering GEF-4 to GEF-8.

89. **In the country case studies, the share of projects with first disbursements made 18 months after CEO endorsement is comparable with other GEF-funded projects.** A majority (72 percent) of projects in the evaluation portfolio received their first disbursement within 18 months of CEO endorsement or approval, which is nearly identical to the share in the broader GEF portfolio (73 percent; figure 9). In addition, none of the projects in the evaluation portfolio submitted a notification of delayed submission or a request for extension before CEO endorsement or approval, compared with 12 percent in the rest of the GEF portfolio.

Figure 9: Share of projects by metrics of efficiency at the design and early implementation stages

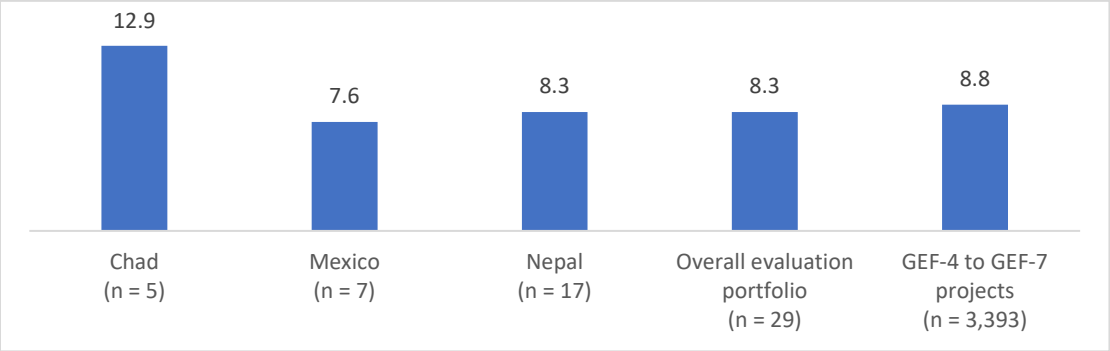


Source: Evaluation elaboration based on data from the GEF Portal (2025).

90. Figure 10 shows that the median time from CEO endorsement to first disbursement is slightly lower in the evaluation portfolio (8.3 months) than in the GEF portfolio overall (8.8 months). However, country-level differences exist. Projects in Chad tend to experience

significantly longer delays, with a median time of 12.9 months, whereas projects in Mexico have a shorter median time of 7.6 months.

Figure 10: Median time from CEO endorsement/approval to first disbursement, in months



Source: Evaluation elaboration based on data from the GEF Portal (2025).

91. **The projects considered in the country case studies experienced more delays in submitting midterm reviews compared to the GEF overall portfolio, reflecting implementation bottlenecks**. Time between the endorsement of a project by the GEF's CEO and submission of its midterm review (MTR) is another indicator identified in the GEF-8 Results Framework to measure speed of operations. This indicator captures how quickly new projects are moving from the early stage of implementation to reaching midterm review, which is mandatory for all full-size projects (FSPs). Only 39 percent of FSPs in the evaluation portfolio submitted their MTR within four years of CEO endorsement or approval, compared to approximately 50 percent of all GEF projects (figure 11). Additionally, 27 percent of FSPs in the evaluation portfolio lack a reported MTR date (against 18 percent for GEF overall). These data are likely to reflect slow implementation issues.[37]

Figure 11: Share of projects where midterm review was submitted within four years

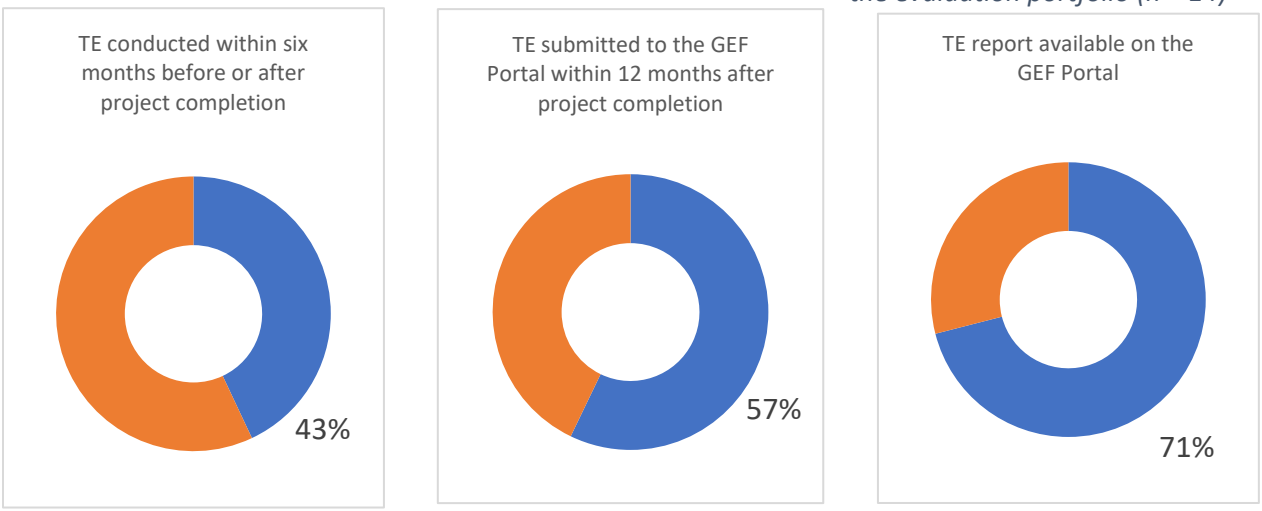
Source: Evaluation elaboration based on data from the GEF Portal (2025).

92. **About half of the terminal evaluations were in compliance with GEF requirements.** In the evaluation portfolio, out of 14 completed projects, only 43 percent had a terminal evaluation conducted within six months before or after project completion (figure 12) and 57 percent of them submitted their terminal evaluations within 12 months after project completion. However,

[37] This analysis considers only completed FSPs and those at least four years old, ensuring comparability across project cohorts.

direct comparisons with the wider GEF portfolio are challenging due to missing data. A considerable number of GEF projects outside the evaluation portfolio lack completion or terminal evaluation dates.[38] In terms of availability of terminal evaluations on the GEF Portal, 29 percent of completed projects in the evaluation portfolio are missing their terminal evaluations, even though they had been completed at least 12 months earlier. The share is slightly lower among completed projects in the overall GEF portfolio (23 percent).

Figure 12: Measures of timeliness and availability of terminal evaluations among completed projects in the evaluation portfolio (n = 14)



Source: Evaluation elaboration based on data from the GEF Portal (2025).

93. **Multiple cases of delays and slow implementation were observed during the country visits, which also affect socioeconomic co-benefits.** For instance, in the case of the Conservation International-led Sustainable Landscapes project in Mexico, the project design encompassed a vast geographic area and a large number of cooperatives to be supported (ecotourism, coffee production, fishery, and others) with limited financial resources and little presence of the lead or the executing agency in the territory. This caused delays and downward revisions of the number of grassroots organizations supported and budget allocated to project subcomponents. Similar considerations were identified by the MTR of the IUCN-led RECONNECT project in Chad: ambitiously planned on an expansive territory, the project had limited staff availability and presence in the field, and it took time to establish cooperative relationships with local governments and grassroots organizations. Also in Chad, the World-Bank led ALBIA project experienced initial delays due to design complexity, such as having two NGOs as executing agencies, and 10 ministries in the steering committee. And finally, in Chad, the AfDB-led Building Resilience project experienced delays in using GEF funding, due to a long, drawn-out interaction with the GEF on the funding eligibility of certain activities.

[38] Additionally, some projects report terminal evaluations occurring and/or terminal evaluation reports being submitted years before project completion, raising concerns about potential data entry errors.

94. However, there were cases where delays depended on situations mostly out of the control of the lead agency and the GEF, such as changes in financial allocation from governmental agencies or changes in attribution of responsibilities under a newly elected government. In the case of the Sustainable Productive Landscapes project led by the World Bank, the implementation was delayed for two years, due to the Government's freezing of several trust funds, which required a change in the national agency responsibility for the disbursement of project financing.

2. IMPACT OF KNOWLEDGE MANAGEMENT ARRANGEMENTS ON EFFICIENCY

95. This evaluation found that knowledge management had significant implications for efficiency. Limited exchanges and transfer of knowledge caused delays in implementation, because those in charge of designing and implementing projects had to learn or start afresh (advancing by trial and error), rather than drawing from established experience. Four levels of knowledge management are considered here.

96. **First, exchanging knowledge, either traditional or acquired technical knowledge, between groups and communities assisted by the projects**. Promising practices were adopted by some projects—for example, the UNDP-led Small Grants Programme organizing annual fairs and exchanges of experience and practices between representatives of the communities and associations at state or sub-state level, or the World Bank's Sustainable Productive Landscapes project building some communities of practice among producers of bio-fertilizers. However, this was not done systematically across the portfolio.

97. **Second, monitoring and evaluation done at the project level**. When it comes to socioeconomic co-benefits, this has been an area of limited emphasis thus far. For corporate reporting purposes, individual projects need to report to the GEF the number of persons considered to have experienced improvements in co-benefits (see, for example, Implementation of GEF-8 Result Measurement Framework; GEF/C.62/Inf.12/Rev.01). This leaves out more precise characterization of the co-benefits (type of benefit, size, characteristics of the main beneficiaries). The Council paper prepared by the GEF in 2024 on tracking and measuring co-benefits (GEF/C.66/12) commits to giving more attention to these aspects in the future.

98. **Third, taking stock of and sharing successful and less successful experiences**. Most ongoing projects have invested in websites that provide useful descriptive information on the main project characteristics and sometimes on the geographic location of project sites. There is less information of an analytical nature on successful cases (and the explanatory conditions and factors) as well as cases of failure. Terminal evaluations provide some inputs, but they are produced after closure, while making some information available in a closer-to-real-time manner could benefit other projects.

99. **Fourth, exchanging knowledge and experiences between GEF-funded projects in the same country.** As interviews with representatives from governments and lead agencies show, this has been limited. There have been no systematic exchanges between projects funded by the GEF. Some informal and ad hoc exchanges are reported between a few project coordinators who happen to know each other. However, there is no regular meeting between GEF-funded project representatives built upon a structured agenda of common interests, experiences, and problems. During interviews, project coordinators report very similar implementation problems (e.g., navigating through the intricacies of institutions and norms at the national and local level, dealing with procurement and financial management requirements, and finding qualified specialists in specific thematic areas). The absence of a managed system to exchange and learn across project experiences implies that newly appointed project coordinators need to start afresh, with loss of time, information, and know-how, thus also challenging the consolidation of results, as further discussed in the next chapter.[39]

Key takeaway findings

- According to standard efficiency indicators, the projects considered in the country case studies perform in line with the rest of the GEF portfolio, except the delays in submitting midterm reviews, indicating delays in implementation.
- The majority of projects examined experienced delays, often due to the intricacies of national and local systems, the number of public institutions involved, overly ambitious geographic scope relative to limited implementation resources, time required to set up working relationships with national and local institutions, changes in governments, and sometimes unforeseeable policy changes. The consequence of these was a reduction in the effective time available to support the generation of co-benefits.
- Knowledge management affects project implementation and the generation of co-benefits. The evaluation notes, overall, little coordination at the field, project, and country portfolio levels for sharing successful practices and challenges among projects. This risks information loss and the need to begin afresh when a new project starts or a new project coordinator joins, adding up to start-up and implementation delays.

[39] To partially address this shortcoming, some agencies´ representatives reckoned that, at least, an annual meeting at national level with the participation of all GEF-funded projects implementers/coordinators could be organized.

VI. SUSTAINABILITY OF SOCIOECONOMIC CO-BENEFITS

100. This chapter concerns the likelihood that co-benefits will be sustained after the end of project-based support. While sustainability can be fully assessed after project closure, this chapter discusses key sustainability factors, which influence the continuation of streams of co-benefits in the years to come. The main groups of factors considered here are: (i) ownership and collective action taken by communities on the ground and the role played by local institutions; (ii) economic factors, such as profitability and access to markets; (iii) policy and institutional factors; and (iv) factors related to the project cycle and portfolio management at the country level.

1. OWNERSHIP AND COLLECTIVE ACTION TAKEN BY COMMUNITIES

101. Across the three country case studies, **the communities and groups assisted by the projects display strong commitment to continue the activities after closure**. Within the communities, the projects have helped members envision positive synergy between natural resource conservation and productive activities. For example, in the Sierra Norte of Oaxaca, the World Bank-led Sustainable Productive Landscapes project and the UNDP Small Grants Programme have engaged with the leaders of indigenous communities. These communities were already aware of the importance of protecting natural resources and had engaged over the course of decades in eco-friendly economic activities. The projects have improved awareness of new opportunities for sustainable source of revenues, for example, carbon sequestration markets, payment for environmental services, and additional nontimber forest products such as pine tree resin.

102. Another example is the RECONNECT project in Chad, which provided training and equipment to traditional grassroots organizations (*Comités Villageois de Surveillance, Instances Locales d'orientation et de Décision, and the Associations de Développement du Canton*) that were involved in the protection of vegetation or fisheries or the prevention of bushfires. During field interviews, representatives of these organizations have proudly stated that they existed before the project and will continue to be present and operate well after the closure of the project. The RECONNECT project also engaged local grassroots organizations as well as municipalities and representatives from local technical agencies in the selection of initiatives to be funded, a form of collaboration between civil society and public organizations. Echoing these points, the evaluation of the IFAD-led PARSAT project in Chad states that the improved livelihoods and natural resource protection seemed more likely to continue where village committees "owned" the interventions and where local leadership was strong (e.g., community leaders intervening to mediate conflicts between farmers and pastoralists).

103. In Nepal, communities generally "owned" the project-supported activities. However, sustainability of co-benefits will depend on the nature of local institutions. The co-benefits are more likely to be sustained where local institutions are legally and socially grounded, and less so

when local institutions are created instrumentally by the project and their existence is transitory (e.g., soil conservation groups which have no clear legal basis and incentives, nor support structure beyond the project life cycle).

2. ECONOMIC FACTORS: ENTERPRISE PROFITABILITY AND ACCESS TO MARKETS

104. **In general, helping ensure enterprise profitability has not been a major area of attention across the projects.** In Mexico, for example, the ecotourism and cash crop cooperatives interviewed have benefited from technical support in diversifying their offer of products. However, the way in which they monitor the quantity and quality of output, prices, revenues, and costs is still basic, with no effective profit monitoring (e.g., *Lagunas de Chacahua* ecotourism cooperative, Oaxaca). In Chad (e.g., the RECONNECT project), economic activities such as honey production are not connected to markets (there is no labelling of product nor proper packaging, as honey is sold in empty soft-drink bottles). On a positive note, in Nepal, there are simple activities, such as cow-shed improvement and nontimber forest product processing and marketing, that are affordable, produce private benefits to participating households, and are more likely to continue after project closure.

105. According to their terminal evaluations, a recurring concern in Mexico's OP-6 Small Grants Programme and the Carbon Stocks project was the uncertain or volatile nature of the niche product market (e.g., organic honey, ecotourism, carbon credits). Without stable buyers or adequate pricing, communities may struggle to obtain an economic return that is commensurate with their effort. Also in Mexico, under the World Bank-led Sustainable Productive Landscapes project, a future threat is the difficulty of successfully marketing the organic products in markets that still prefer cheaper vegetables from traditional methods.

106. There is a limit to what can be accomplished within a single project phase. A longer-term vision is often required, but not yet articulated, for product development and access to markets and value chains, to ensure economic viability. Another threat to long-term sustainability is growing dependence on external support and international aid, when the activities could be profitable. Some examples of this risk were documented during the mission, such as a wood processing plant in Oaxaca (Mexico) with a differentiated range of products and a well-established retail system that continues to seek grants and subsidized credit from international cooperation and public programs, rather than fully competing in a market system (*Industrializadora Los Bosques de Pueblos Mancomunados)*. Another case was that of coffee/cacao producer cooperatives established four decades ago that expect continued support from public programs, rather than working on measures to enhance profitability.

3. SUPPORTING INSTITUTIONS

107. **Rather than changing policies or introducing new policies, projects mostly worked incrementally by putting policies into action.** In the projects reviewed, the focus was often on

embedding environmental or climate-adaptation priorities into existing development plans or sector strategies rather than generating new legislation. In Mexico, policy-related activities under the Carbon Stocks project focused on helping public agencies in charge of protected areas to coordinate their work at the local level. The Conservation International-led Sustainable Landscapes project (Mexico) made two important achievements: (i) the registration of Areas Voluntarily Designated for Conservation covering 120,000 ha to be managed by communities that can redistribute profit to their members; and (ii) the approval of a state-level Ecological Territorial Masterplan, a first step to support public conservation of natural areas and regulate development activities in these areas. Although the Masterplan is legally binding, its observance in such a large and socio-culturally diverse territory will be challenging, particularly in relation to ecologically unsustainable productive practices, such as logging and urbanization. The Masterplan is expected to serve as a tool for the resolution of socio-environmental conflicts.

108. In Chad, the PARSAT project informed the preparation of the national climate adaptation strategy by funding national-level consultations, workshops, and stakeholder meetings, with a focus on agro-sylvo-pastoral practices (table 4). However, its main achievements involved strengthening local NGOs and community committees dedicated to water and soil infrastructure management. Sometimes policy gaps are rooted in deep political agendas: in Chad, the RECONNECT project helped integrate natural resource management into cantonal development plans. However, the province of Mayo-Kebbi West, where it operates, lacks a land use plan, which makes it difficult to enforce protected-area status when farmers try to encroach for growing cereals. Also in Chad, the ALBIA project had to work on the updating of Law 14/98 on the sustainable management of natural resources, as the original formulation would not leave space for the envisaged socioeconomic development activities.

109. An interesting observation comes from the Nepal case study: interventions made directly through national agencies—such as national parks, forestry authorities, or local governments—present a mixed case of sustainability. The national parks and forestry authorities operated as top-down bureaucratic structures, and the chance of continuing work depends upon higher authorities' willingness to internalize the interventions. Local governments, on the other hand, had budget allocation powers of their own and may be able to fund and support some of the required interventions beyond the project.

Table 4: Policy and institutional interventions of GEF-funded projects to bolster sustainability

Project	Policy/institutional focus
PARSAT **(Chad; GEF ID 5376, IFAD)**	• Contributed to the consultation on Chad's national climate adaptation strategy • Enhanced capacities of local NGOs on farmer field schools and literacy/nutrition trainings • Formed village committees for managing soil and water conservation structure, but received limited support
RECONNECT **(Chad; GEF ID 9417, IUCN)**	• Supported nine cantons in the province of Mayo-Kebbi Ouest in the revision of their local development plans • Provided training to grassroots organizations and logistical support to local decision-making bodies
ALBIA **(Chad; GEF ID 10315, World Bank)**	• Revised and updated legislation on sustainable natural resource management
SGP OP-6 **(Mexico; GEF ID 9167, UNDP)**	• Supported the designation of 900 hectares of fishing refuges in Campeche
SGP OP-7 **(Mexico; GEF ID 10504, UNDP)**	• Updated local norms within ejidos or indigenous communities (e.g., on milpa systems, forest use, or dune restoration) • Focus on community-led and local-level initiatives
Carbon Stocks **(Mexico; GEF ID 5751, Conservation International/ AMBIO)**	• Trained local protected-area agency staff on sustainable forest management • Training results rely on staff continuity of government partners
Sustainable Landscapes **(Mexico; GEF ID 9445, Conservation International)**	• Registration of Areas Voluntarily Designated for Conservation • Preparation of an Ecological Territorial Masterplan for Oaxaca

Source: Evaluation team elaboration (2025).

4. PROJECT CYCLE AND PORTFOLIO MANAGEMENT ARRANGEMENTS AS FACTORS OF SUSTAINABILITY

110. **In general, a threat to sustainability is the short duration of project support.** While on paper a project duration may be slated for up to five years, activities in a given community typically do not last more than two or three years. This is due to slow implementation during the first years (as noted in chapter 5 on efficiency). The consequence is that projects close when the

co-benefits are just emerging and no consolidation strategy has yet been enacted. The case studies suggest that opportunities exist for longer-term sustainability, but are not pursued systematically. These include:

(a) Intentional sequencing between projects funded by the GEF (e.g., a new project focusing on ecotourism can build upon the previous registration of protected areas)

(b) Sequencing between a GEF-funded project and an intervention funded by other international agencies (so the GEF-funded pilot can be scaled up and expanded)

(c) Synergies between GEF-funded projects and national or local programs that foster small-scale private investment (e.g., guarantee schemes to facilitate access to credit).

111. **In many projects examined, the co-benefits are at an initial phase and there is need for further consolidation**. As noted in the examples above, in many cases co-benefits have appeared towards the end of a project life cycle and are in need of consolidation. There are also cases in which the conditions for generating co-benefits have been set but the co-benefits may not be achieved if there is no follow-up. For example, in the case of the Climate Risks Management project in Chad, the end users now have better information on climate change effects (thanks to weather stations and radio programs). They want to invest more on irrigated crops during the dry season (when floods recede and do not damage crops) and are interested in growing sugarcane instead of rice during the rainy season (unlike rice, sugarcane has a longer growing season and can survive the flood period). However, this change in cropping seasonality requires investments (wells, pumps, stone barriers) which UNDP cannot finance (as it is not part of its mandate and business model) but other international organizations (e.g., the AfDB, FAO, IFAD, the World Bank, and others) could be able to support. This calls for concerted action between the GEF, the lead agencies, and the national government's focal point to provide follow-up support.

112. In Mexico, the Conservation International-led Sustainable Landscapes project successfully helped indigenous communities register six Areas Voluntarily Designated for Conservation (*Áreas Destinadas Voluntariamente a la Conservación*). In addition to protecting theses area from deforestation and housing construction, the registration opens opportunities for investment in ecotourism, whereby local business can thrive while conserving the forest cover. However, as pointed out by local key informants and staff from regulatory agencies, financial and technical support from public institutions and international agencies will be crucial to ensure that financing is provided to local enterprises on affordable terms and that the investments follow stringent environmental standards.

113. **There were no systematic arrangements to promote sequencing and synergy between GEF-funded projects and initiatives funded by development cooperation**. The GEF has not provided such guidance, given that it has no in-country presence and, at least in the three country case studies, it conducted very few country-level interactions or project visits during

implementation.[40] Similarly, the governmental operational focal point did not organize regular (e.g., annual) meetings of coordinators of ongoing projects funded by the GEF, around a structured agenda of common interests and issues. As argued by several project coordinators and staff members, this could have helped identify and address common implementation problems, share knowledge, and devise opportunities for the consolidation of project results and co-benefits. The 2022 Country Engagement Strategy of the GEF aims to promote a stronger role for national partners. If concrete actions are put in place, they could also help realize the synergies that are needed for the continuation of co-benefits.

Key takeaway findings

- Grassroots motivation and engagement at the community and grassroots levels support the post-project continuation of initiatives where natural resource conservation aligns with co-benefits.
- Enterprise profitability and market access have not been primary focal areas. Many economic activities remain disconnected from markets, lacking branding, quality control, and financial planning. In some cases, enterprises have become reliant on external aid rather than working towards full market integration.
- Projects have mostly worked within existing policy frameworks and sought to strengthen local institutions and integrate environmental priorities into development plans. While some progress was made, political turnover and shifting government priorities may undermine these efforts.
- A common issue across projects is the short duration of support in individual communities, groups, or cooperatives, which often ends before co-benefits are fully consolidated. Many projects lack a strategy to ensure follow-up support.
- The absence of the GEF during implementation, as well as lack of clarity on the precise role of the government, did not support project consolidation. GEF-funded projects could offer mutual support. Interventions by other agencies can also help consolidate project gains but this needs to be coordinated. No systematic arrangements for this were observed.
- According to several stakeholders, structured exchanges between project coordinators at the country level, facilitated by the operational focal point, could have contributed to enhancing learning between projects, synergy between GEF-funded projects, opportunities to receive further support from other international cooperation agencies, and long-term sustainability prospects. However, these were not undertaken systematically.

[40] Subregional events, such as expanded constituency workshops, bring together stakeholders from governments, civil society, development partners, and international organizations. However, they are not focused on a specific country portfolio.

VII. CONCLUSIONS AND RECOMMENDATIONS

1. CONCLUSIONS

114. Co-benefits are defined as additional impacts of a policy or intervention, beyond its primary objectives. In the case of natural resource protection and climate change adaptation, co-benefits can include, among others, improved incomes, livelihoods, health, and employment; gender equality; market development; and better access to services.

115. **Two distinct project paradigms can be identified in GEF-funded projects: projects that are rooted in a conservationist approach, and other projects aligned with a rural sustainable development paradigm**. The conservationist approach, commonly associated with projects led by UN agencies or NGOs, prioritizes global environmental benefits, with socioeconomic co-benefits treated as secondary. In contrast, the rural sustainable development paradigm, typically represented by projects led by IFIs, places greater emphasis on socioeconomic outcomes, such as income generation and job creation, while recognizing the importance of natural resource protection. Projects under this second paradigm demonstrate stronger focus on production and economic co-benefits, supported by the IFIs' capacity to finance infrastructure and productive asset investments.

116. **This evaluation finds ample evidence that GEF-funded projects are associated with socioeconomic co-benefits, where environmental and development outcomes are achieved together and mutually reinforcing.** The co-benefits are diverse, with the most common being the strengthening of human and social capital. Economic co-benefits typically emerge by the time of project completion. Geospatial analysis—matching project-site coordinates with geolocalized household surveys—reveals a small but positive and statistically significant correlation between the presence of GEF-funded interventions and improvements in household income and asset indicators.

117. Complementing the above analysis, the evaluation conducted country case studies in Chad, Mexico, and Nepal, which corroborated the evidence on socioeconomic co-benefits. The most frequently observed outcomes across all three countries were the strengthening of human capital and social capital. In terms of human capital, a common result was the upgrading or learning of new skills in environmentally sustainable agricultural and forest management practices—such as reducing chemical inputs, preserving soil fertility, managing water resources, and protecting and restoring native plant species. In Chad, training sessions and dedicated radio programs increased farmers' awareness of changes in seasonal rain patterns and the need to adapt their crop calendars to cope with emerging risks, such as widespread flooding. In Mexico, the integration of traditional indigenous community knowledge on forest management with modern tools, such as drone technology, satellite imagery, and artificial intelligence, revitalized local youth interest in primary production activities, including sustainable logging and non-timber forest products. This integration also improved awareness of new income generation

opportunities, such as eco-tourism, payment for environmental services schemes, and carbon sequestration.

118. In terms of social capital, project engagement with communities in Chad, Mexico, and Nepal helped reinvigorate existing grassroots organizations in charge of protecting forests, local vegetation, and freshwater resources. These efforts also empowered women and youth to voice their needs and interests in traditional assemblies. Additionally, the projects helped forge partnerships between local communities and universities, extension centers, local governments, and public programs, supporting efforts in natural resource conservation and climate change adaptation.

119. With respect to economic production and income generation, several co-benefits were observed, including positive spillover effects on soil fertility and agricultural productivity, as well as opportunities for income diversification (e.g., ecotourism, sustainable timber and nontimber forest products). Other socioeconomic co-benefits, such as improvements in health and nutrition, were also reported. However, evidence in these areas remains largely anecdotal, as limited data collection has been conducted by the projects to date.

120. **The quality of project design is a key enabling factor for generating co-benefits.** Despite growing attention to socioeconomic co-benefits in project cohorts since GEF-5, many project designs are based more on assumptions or general intentions than on a clearly articulated pathway for achieving them. While the evolution in design reflects increased awareness of co-benefits, as a motivation and as an incentive for households and communities to take collective action to protect natural resources, many projects still lack a defined chain or sequence of actions and initiatives to deliver them. A robust conceptualization of how specific interventions would lead to co-benefits is not always explicit at design.

121. **Project designs do not always identify short-term detrimental effects of natural resource conservation that may reduce incentives for individuals and communities to cooperate**. Common examples include restrictions on access to forests or fisheries, or crop damages caused by wildlife. Such detrimental effects can be effectively managed if they are identified early and addressed proactively. It is important, however, to inform the communities of these potential impacts and identify solutions jointly.

122. **Supporting existing groups, local initiatives, local institutions, and communities is an effective way to generate co-benefits**. Rather than creating initiatives ex nihilo, most GEF-funded projects focus on enhancing and strengthening the quality of existing efforts, often initiated by previous NGO projects, international cooperation agencies, or public programs. This is a realistic approach, considering that the typical project support window in communities is often not longer than two or three years, with limited financial resources. Projects' efforts to plan activities in a participatory manner with local communities, as well as with public-sector actors such as

municipal, subdistrict, and subprefecture administrations, or a university extension program, can lead to the creation of increased co-benefits.

123. **At the time of project closure, co-benefits are often still in their early stages and geographically limited. They require continued support and further consolidation to reach scale.** While a single project phase can catalyze the emergence of co-benefits, it is generally insufficient to sustain or expand them. A key constraint to sustainability is the short duration of project support to a given community, enterprise, or initiative, leaving little time to provide technical guidance or financial support to ensure continued benefit flows. The profitability of cooperatives, enterprises, and other productive initiatives has not received strong attention by the projects, even in those led by IFIs. Many of these economic activities remain disconnected from markets and value chains, and in some cases, enterprises or cooperatives have become reliant on external aid rather than pursuing long-term, market-based sustainability.

124. **The sustainability of co-benefits is also hindered by incomplete coordination in managing the GEF portfolio at the country level.** Opportunities for synergy across projects are not systematically pursued. Potential synergies include: (i) two (or more) GEF-funded projects operating concurrently in the same area and reinforcing each other; (ii) a GEF-funded project building on and supporting communities assisted by a previous GEF-funded project; and (iii) a project funded by an external agency scaling up the results of a previously GEF-funded project. These types of coordination could extend the duration of support and build upon the achievements beyond a single project phase. However, such synergies require a deliberate and coordinated strategy among development partners-an approach, which was not consistently observed.

125. The GEF's lack of country presence limits its ability to effectively support ongoing engagement and coordination to sustain co-benefit streams. While lead agencies and the national executing agencies could support the synergy opportunities outlined above, such efforts are not being widely undertaken, and no entity is clearly assigned responsibility for doing so. The GEF's 2022 Country Engagement Strategy aims to strengthen collaboration between the GEF and its national partners, granting countries a more prominent role in decision making. National governments—and particularly the operational focal points—hold the convening power to promote coordination in support of sustained co-benefits. For example, they could promote knowledge sharing and collaboration across projects through regular workshops or among GEF-funded project teams. However, such coordination mechanisms are not consistently implemented.

126. **Tracking socioeconomic co-benefits is an important enabler for project managers and end users.** Until recently, limited attention was given to this aspect during project design and implementation. As a result, there is a risk that donors and partners might undervalue the full range of results and impacts generated by GEF-funded projects. Simply estimating the number of beneficiaries receiving co-benefits, as is done at present, does not capture the breadth or

depth of project achievements. In 2024, the GEF presented to its Council a paper on monitoring co-benefits (GEF/C.66/12), which proposes a broader set of approaches and tools for assessing these co-benefits. If consistently adopted by lead and executing agencies in countries, these tools could enable more accurate measurement of co-benefits and provide a clearer understanding of the impacts of GEF-funded interventions on development.

2. RECOMMENDATIONS

127. **Recommendation 1. Clearly define the pathways to generating socioeconomic co-benefits in project design, while identifying potential risks and mitigation measures.** As appropriate, the GEF Secretariat should set standards and require project proposals to explicitly articulate the expected co-benefits in the project's theory of change, also anticipating potential negative impacts and the compensatory strategies, and define measures to ensure equitable distribution—such as gender equality and inclusion of marginalized or low-income groups—as part of the quality assurance process. This is particularly important when the co-benefits serve as key incentives for natural resource conservation.

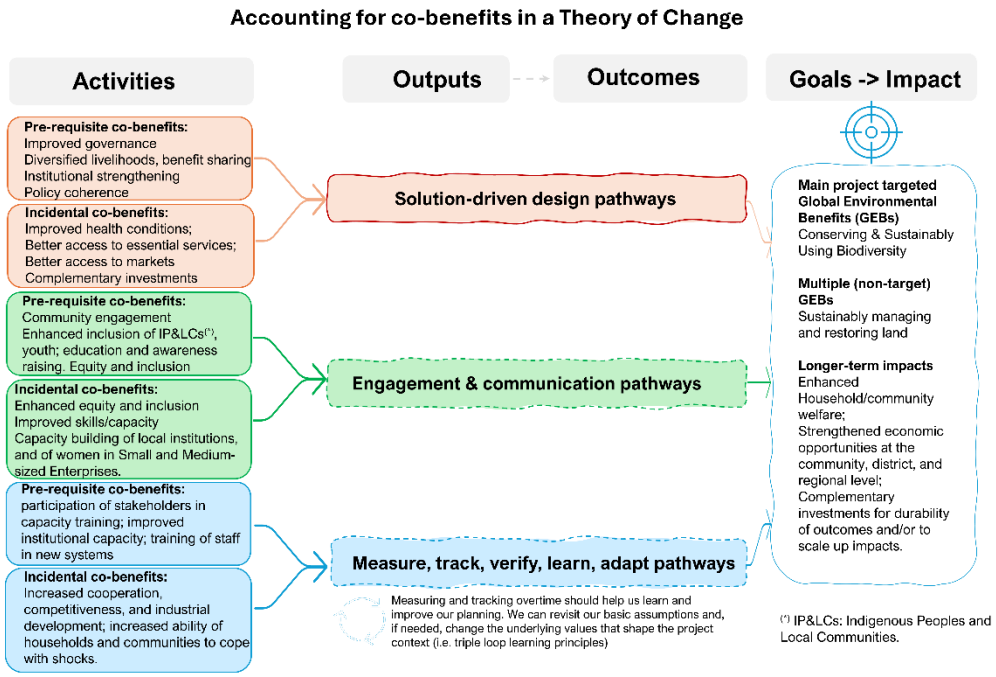
128. **Recommendation 2. Promote the sustainability of co-benefits by strengthening country portfolio coordination, with a central role for the operational focal point and key national stakeholders.** In line with the 2022 GEF Country Engagement Strategy, the GEF Secretariat should empower and require the country operational focal points to convene regular exchanges—such as an annual workshop— with GEF agencies, executing agencies, and other partners. These fora would serve to identify implementation challenges, share good practices, and highlight innovative approaches that enhance both global environmental benefits and socioeconomic co-benefits. Such coordination would also support the consolidation and scaling of results through better sequencing and synergy between GEF-funded and other development initiatives. The GEF Secretariat should explore further opportunities for deeper country engagement, to capture and manage knowledge from portfolio implementation.

129. **Recommendation 3. Track co-benefits during project implementation and at completion**. The GEF Secretariat should provide guidance to the agencies and partners on indicators and methods to assess the nature, scale and reach of co-benefits, and track and report on the follow-up done by projects and agencies.

VIII. ANNEXES

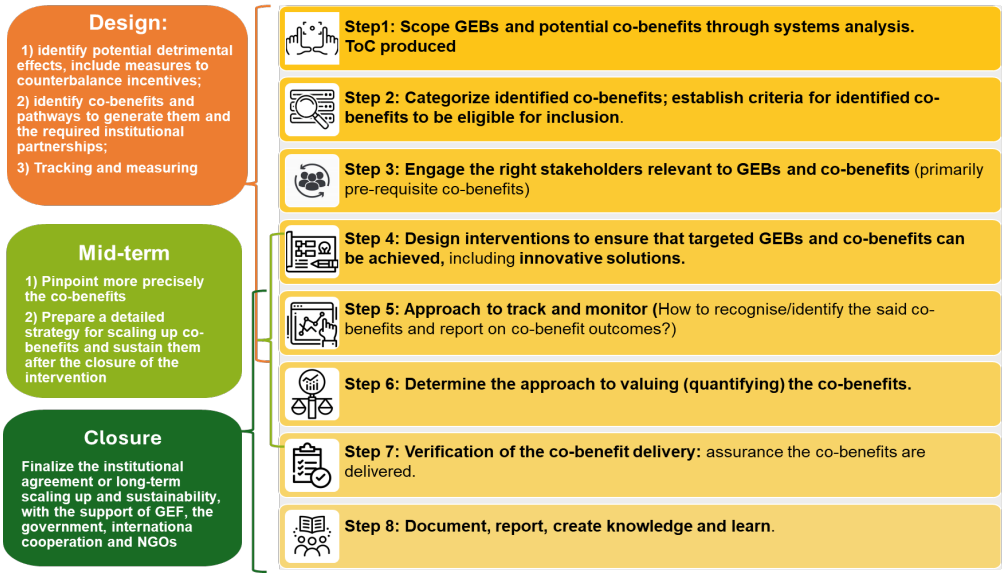
ANNEX A: APPRAISING SOCIOECONOMIC CO-BENEFITS AT DESIGN STAGE

Figure A.1: Accounting for co-benefits in a theory of change at design



Source: Elaboration of the evaluation team (2025).

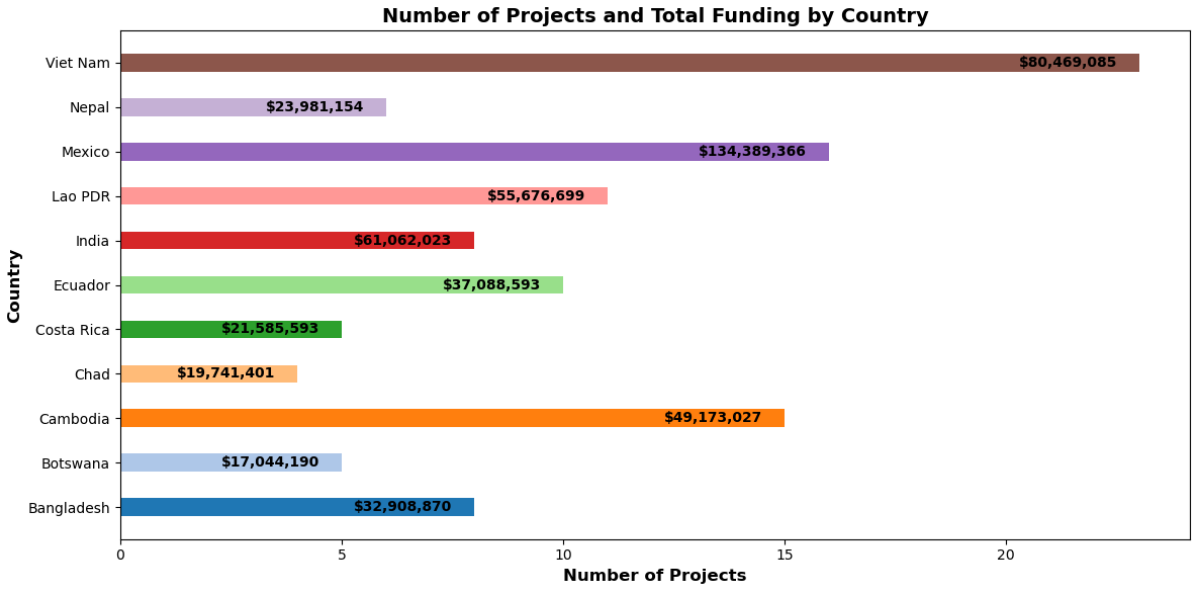
Figure A.2: Graphic representation of identification and monitoring of co-benefits during a project cycle, with key stakeholders and partnerships



Source: Elaboration of the evaluation team (2025).

ANNEX B: FURTHER DETAILS ABOUT THE QUANTITATIVE ANALYSIS

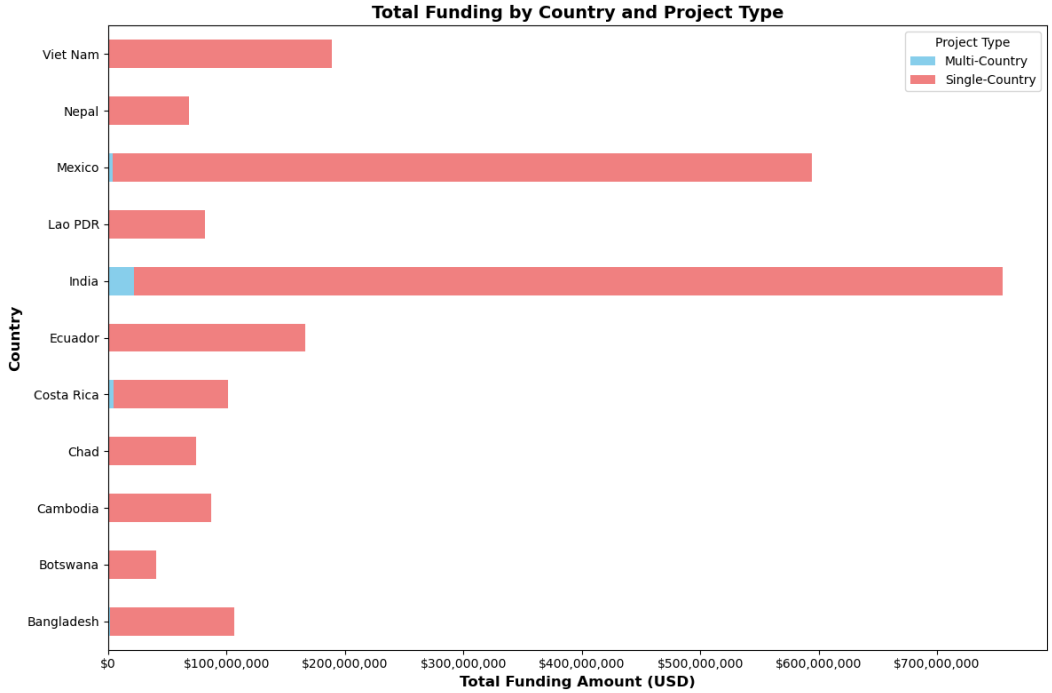
Figure B.1: Number and funding of GEF projects in the evaluation portfolio, by country



Source: Elaboration of the evaluation team (2025).

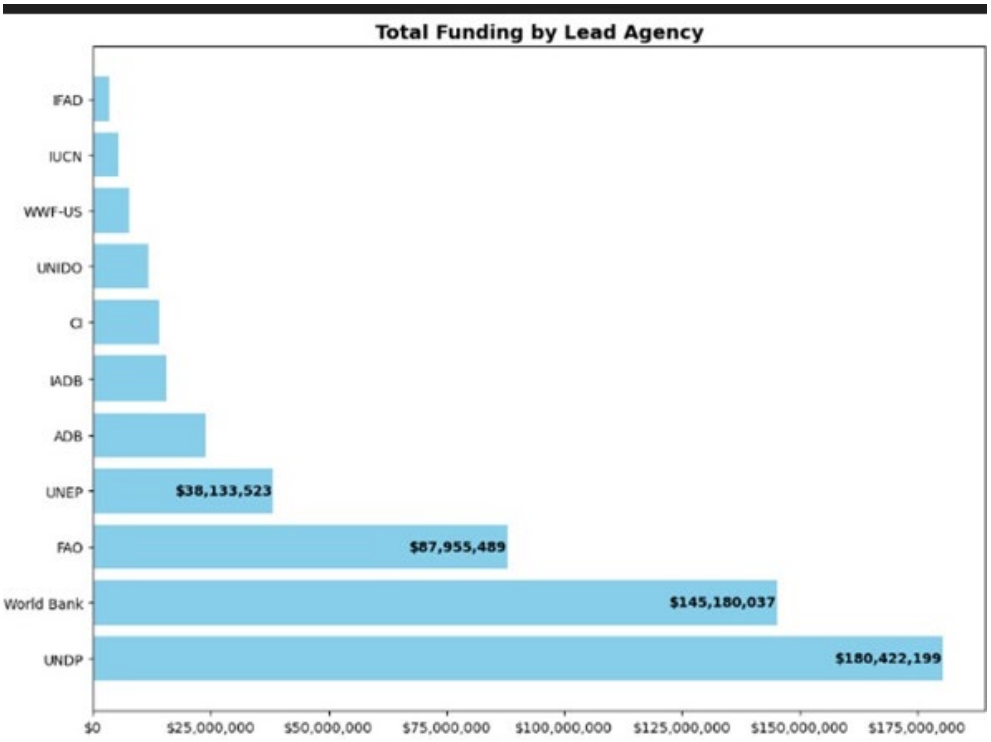
Note: Dollar values in bars are the total amounts allocated to projects included in this analysis, within each country.

Figure B.2: Geographic distribution of evaluation portfolio projects



Source: Elaboration of the evaluation team (2025).

Figure B.3: Total funding of overall GEF portfolio, by lead agency



Source: Evaluation analysis.

Note: ADB = Asian Development Bank; AfDB = African Development Bank; CAF = Development Bank of Latin America; CI = Conservation International; FAO = United Nations Food and Agriculture Organization; IADB; InterAmerican Development Bank; IFAD = International Fund for Agricultural Development; IUCN = International Union for the Conservation of Nature; UNDP = United Nations Development Programme; UNEP = United Nations Environment Programme; WWF-US = World Wide Fund for Nature-US.

Geocoding. For geospatial analysis, trained geocoders extracted location details from project documents and verified their association with GEF-funded activities. Spatial boundaries were either sourced from public datasets or manually digitized for granularity, limited to second-level administrative divisions or smaller.[41] Satellite-derived indicators, including the Normalized Difference Vegetation Index (NDVI) for vegetation health and nighttime light intensity for economic activity, formed key metrics. Other data like precipitation, air temperature, and forest cover supported outcome assessments.

Household survey data from USAID's Demographic and Health Survey (DHS) were incorporated for triangulation. The DHS Wealth Index, derived from principal component analysis (PCA) of assets and housing features, provided a socioeconomic benchmark. Scores were normalized per country for comparability, offering additional context to satellite and geocoded datasets.

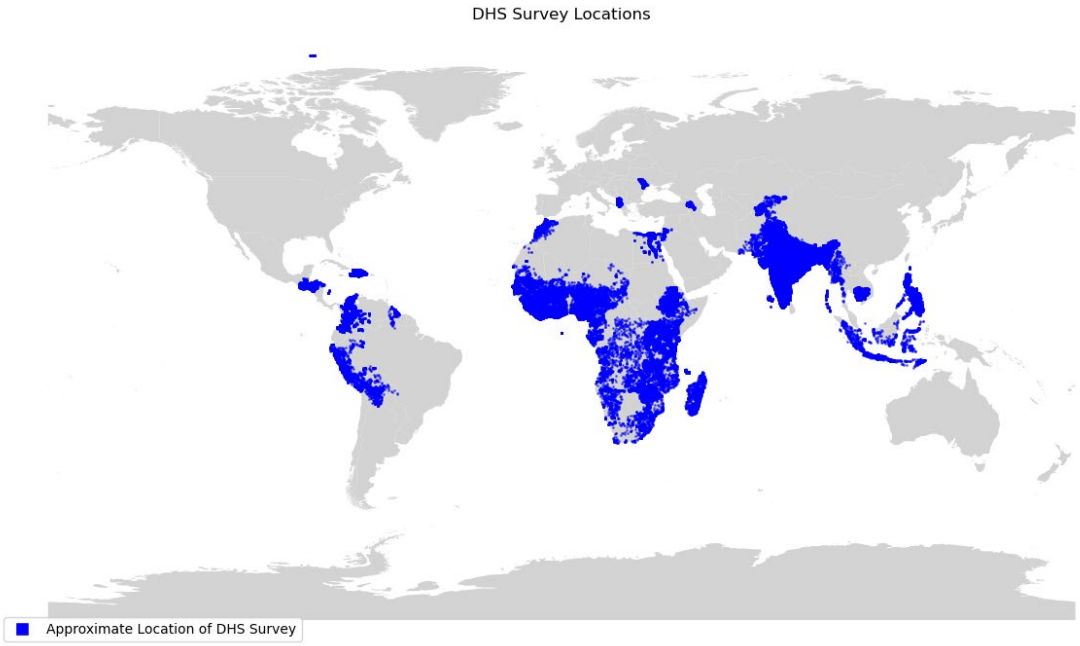
Table B.1: Name, source, and spatial resolution of remotely sensed datasets employed in this analysis

Feature	Source	Resolution
Global Administrative Zones	geoBoundaries Administrative Zones	Variable
NDVI	NASA LP DAAC at the USGS EROS Center	250 m
EVI	NASA LP DAAC at the USGS EROS Center	250 m
Land Surface Temperature	NASA LP DAAC at the USGS EROS Center	1000 m
Nighttime Lights	Defense Meteorological Satellite Program (DMSP-OLS), Earth Observation Group, Payne Institute for Public Policy, Colorado School of Mines	1 km
	Visible Infrared Imaging Radiometer Suite (VIIRS), Earth Observation Group, Payne Institute for Public Policy, Colorado School of Mines	500 m
Population	NASA SEDAC at the Center for International Earth Science Information Network	1 km
Topography	NASA / CGIAR	90 m
Precipitation	ECMWF / Copernicus Climate Change Service	0.25 arc degrees
Air Temperature	ECMWF / Copernicus Climate Change Service	0.25 arc degrees
Surface Pressure	ECMWF / Copernicus Climate Change Service	0.25 arc degrees
Soil Moisture	University of California Merced	2.5 arc minutes
Palmer Drought Severity Index	University of California Merced	2.5 arc minutes
Actual Evapotranspiration	University of California Merced	2.5 arc minutes
Reference Evapotranspiration	University of California Merced	2.5 arc minutes
Runoff	University of California Merced	2.5 arc minutes
Climate Water Deficit	University of California Merced	2.5 arc minutes
Downward Surface Shortwave Radiation	University of California Merced	2.5 arc minutes
Global Forest Change	University of Maryland, Department of Geographical Sciences	30 m

Source: Geospatial Evaluation and Observation Lab, College of William and Mary, USA (2024).

[41] For unverified GEF project locations, metadata highlighted the lack of geographic precision, while additional attributes—like impacted land area, socioeconomic co-benefits, and project focus—were recorded.

Figure B.4. Distribution of Demographic and Health Survey (DHS) survey locations



Source: Geospatial Evaluation and Observation Lab, College of William and Mary, USA (2024).

Table B.2: GEF funding of evaluation portfolio projects

Country	Total funding (million $)	% of total
Bangladesh	32.9	5.78%
Botswana	17.0	2.99%
Cambodia	49.1	8.64%
Chad	19.7	3.46%
Costa Rica	21.6	3.79%
Ecuador	37.1	6.51%
India	61.1	10.73%
Lao PDR	55.7	9.78%
Mexico	134.4	23.62%
Nepal	23.9	4.21%
Viet Nam	80.5	14.14%

Source: Evaluation team elaboration (2024).

ANNEX C: PROJECTS CONSIDERED IN THE COUNTRY CASE STUDIES

Table C.1. Projects considered in Chad

GEF ID	Agency	Focal Area	Status	GEF Phase	Project Title
5376	IFAD	Climate Change	Under Implementation	5	Enhancing the Resilience of the Agricultural Ecosystems
8001	UNDP	Climate Change	Under Implementation	6	Community-based Climate Risks Management in Chad
9050	AfDB	Multifocal Area	Under Implementation	6	Building Resilience for Food Security and Nutrition in Chad's Rural Communities
9417	IUCN	Multifocal Area	Under Implementation	6	Restoring Ecological Corridors in the Mayo-Kebbi Quest, Chad, to Support Multiple Land and Forests Benefits
10315	World Bank	Biodiversity	Under Implementation	7	Chad ALBIA – Local Development and Adaptation Project
11459	UNEP	Multifocal Area	CEO PIF Cleared	8	Promoting Integrated Natural Resources Management in Support of GGW in Chad (PINAMAC)
11550	IFAD	Climate Change	Council Approved	8	Strengthening the resilience of smallholder farmers and ecosystems to the effects of climate change (STRADAP)

Table 2. Projects considered in Mexico

GEF ID	Agency	Focal Area	Status	GEF Phase	Project Title
5751	CI	Climate Change	Financially Closed	GEF – 5	Maintaining and Increasing Carbon Stocks in Agro-silvopastoral Systems in Rural Communities of the Selva Zoque - Sumidero Canyon Complex as a Climate Change Mitigation Strategy.
9167	UNDP	Multifocal	Project Implemented	GEF - 6	Sixth Operational Phase of the GEF Small Grants Programme in Mexico
9445	CI	Biodiversity	Under Implementation	GEF - 6	Conservation and Sustainable Use of Biological Diversity in Priority Landscapes of Oaxaca and Chiapas
9555	World Bank	Multifocal	Under Implementation	GEF - 6	Sustainable Productive Landscapes
10504	UNDP	Multifocal	Under Implementation	GEF - 7	Seventh Operational Phase of the GEF Small Grants Programme in Mexico
10869	UNEP	Multifocal	Under Implementation	GEF - 7	Promoting sustainability in the agave-mezcal value chain through restoration and integrated management of biocultural landscapes in Oaxaca

11156	WWF-US	Multifocal	Project Identification Form Cleared	GEF - 8	From conflict to coexistence, safeguarding wildlife corridors in Mexico for sustainable development
11274	IUCN	Multifocal	Under Revision by Agency	GEF - 8	Mexico Mesoamerica Forest IP Project: Securing benefits for the well-being of local communities and the ecosystems of the Maya Forest

Table 3. Projects considered in Nepal

	GEF ID	Agency	Focal Area	Project Status	Phase	Project Name
1	5203	UNEP	Climate Change	Active	GEF-5	Catalysing Ecosystem Restoration for Climate Resilient Natural Capital and Rural Livelihoods in Degraded Forests and Rangelands of Nepal.
2	5596	WWF	Land Degradation	Closed	GEF-5	Sustainable Land Management in the Churia Range
3	6989	UNDP	Climate Change	Active	GEF-6	Developing Climate Resilient Livelihoods in the Vulnerable Watershed in Nepal
4	8009	UNEP	Climate Change	Active	GEF-6	Ecosystem-Based Adaptation for Climate-resilient Development in the Kathmandu Valley, Nepal
5	10469	IUCN	Land Degradation	Active	GEF-7	Restoring the degraded watershed and livelihoods of Lakhandei river basin through Sustainable Land Management
6	3412	UNDP	Climate Change	Closed	GEF-4	National Adaptation Programme of Action to Climate Change
7	3573	UNIDO	Chemicals and Waste	Closed	GEF-4	Environmentally Sound Management and Disposal of POPs Pesticides and PCBs
8	4130	ADB	Climate Change	Closed	GEF-4	Kathmandu Sustainable Urban Transport (SUT) Project
9	4345	UNDP	Climate Change	Closed	GEF-5	Renewable Energy for Rural Livelihood (RERL)

10	4464	UNEP	Biodiversity	Closed[1]	GEF-5	Integrating Traditional Crop Genetic Diversity into Technology Using a Portfolio Approach to Buffer Against Unpredictable Environmental Change in the Nepal Himalayas
11	4551	UNDP	Climate Change	Closed	GEF-5	Community Based Flood and Glacial Lake Outburst Risk Reduction
12	5111	FAO	Climate Change	Closed	GEF-5	Reducing Vulnerability and Increasing Adaptive Capacity to Respond to Impacts of Climate Change and Variability for Sustainable Livelihoods in Agriculture Sector in Nepal
13	5224	UNIDO	Chemicals and Waste	Closed	GEF-5	Enabling Activities to Review and Update the National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants (POPs)
14	9152	UNIDO	Chemicals and Waste	Closed	GEF-6	Minamata Initial Assessment in Nepal
15	9352	IUCN	Biodiversity	Closed[2]	GEF-6	Strengthening Capacities for Implementation of the Nagoya Protocol in Nepal
16	9437	WWF-US	Multifocal	Active	GEF-6	Integrated Landscape Management to Secure Nepal's Protected Areas and Critical Corridors
17	10381	FAO	Multifocal	Not started	GEF-7	Enhancing capacity for sustainable management of forests, land and biodiversity in the Eastern Hills (ECSM FoLaBi EH)

List of projects included in the geospatial analysis

Nepal

1. GEFID: 4130, Project Title: Kathmandu Sustainable Urban Transport (SUT) Project, Country: Nepal
2. GEFID: 4464, Project Title: Integrating Traditional Crop Genetic Diversity into Technology Using a BD Portfolio Approach to Buffer Against Unpredictable Environmental Change in the Nepal Himalayas, Country: Nepal
3. GEFID: 4551, Project Title: Community Based Flood and Glacial Lake Outburst Risk Reduction, Country: Nepal
4. GEFID: 5203, Project Title: Catalysing Ecosystem Restoration for Climate Resilient Natural Capital and Rural Livelihoods in Degraded Forests and Rangelands of Nepal., Country: Nepal
5. GEFID: 5596, Project Title: Sustainable Land Management in the Churia Range, Country: Nepal
6. GEFID: 9437, Project Title: Integrated Landscape Management to Secure Nepal's Protected Areas and Critical Corridors, Country: Nepal

Chad

1. GEFID: 4908, Project Title: GGW: Agriculture Production Support Project (with Sustainable Land and Water Management), Country: Chad
2. GEFID: 5795, Project Title: Promoting Energy Efficient Cook Stoves in Micro and Small-scale Food Processing Industries, Country: Chad
3. GEFID: 9417, Project Title: Restoring Ecological Corridors in the Mayo-Kebbi Quest, Chad, to Support Multiple Land and Forests Benefits - RECONNECT, Country: Chad
4. GEFID: 10315, Project Title: Chad ALBIA – Local Development and Adaptation Project, Country: Chad

Bangladesh

1. GEFID: 3287, Project Title: Community Based Adaptation to Climate Change through Coastal Afforestation, Country: Bangladesh
2. GEFID: 4459, Project Title: Development of Sustainable Renewable Energy Power Generation (SREPGen), Country: Bangladesh
3. GEFID: 4700, Project Title: Integrating Community-based Adaptation into Afforestation and Reforestation Programmes in Bangladesh, Country: Bangladesh
4. GEFID: 4858, Project Title: Environmentally-sound Development of the Power Sector with the Final Disposal of PCBs, Country: Bangladesh
5. GEFID: 4931, Project Title: ASTUD: Greater Dhaka Sustainable Urban Transport Corridor Project, Country: Bangladesh

6. GEFID: 5099, Project Title: Expanding the PA System to Incorporate Important Aquatic Ecosystems, Country: Bangladesh

7. GEFID: 5456, Project Title: Ecosystem-based Approaches to Adaptation (EbA) in the Drought-prone Barind Tract and Haor "Wetland" Area, Country: Bangladesh

8. GEFID: 5636, Project Title: Community-based Climate Resilient Fisheries and Aquaculture Development in Bangladesh, Country: Bangladesh

Mexico

1. GEFID: 2654, Project Title: Consolidation of the Protected Area System (SINAP II) - Third Tranche, Country: Mexico

2. GEFID: 2860, Project Title: Regional Framework for Sustainable Use of the Rio Bravo, Country: Mexico

3. GEFID: 2896, Project Title: Sacred Orchids of Chiapas: Cultural and Religious Values in Conservation, Country: Mexico

4. GEFID: 3142, Project Title: Grid-connected Photovoltaic Project, Country: Mexico

5. GEFID: 3159, Project Title: Adaptation to Climate Change Impacts on the Coastal Wetlands, Country: Mexico

6. GEFID: 3270, Project Title: Environmentally Sound Management and Destruction of PCBs, Country: Mexico

7. GEFID: 3813, Project Title: Integrating Trade-offs between Supply of Ecosystem Services and Land Use Options into Poverty Alleviation Efforts and Development Planning, Country: Mexico

8. GEFID: 3816, Project Title: Mainstreaming the Conservation of Ecosystem Services and Biodiversity at the Micro-watershed Scale in Chiapas, Country: Mexico

9. GEFID: 4763, Project Title: Strengthening Management Effectiveness and Resilience of Protected Areas to Safeguard Biodiversity Threatened by Climate Change, Country: Mexico

10. GEFID: 4771, Project Title: Enhancing National Capacities to Manage Invasive Alien Species (IAS) by Implementing the National Strategy on IAS, Country: Mexico

11. GEFID: 4792, Project Title: Conservation of Coastal Watersheds to Achieve Multiple Global Environmental Benefits in the Context of Changing Environments, Country: Mexico

12. GEFID: 5751, Project Title: Maintaining and Increasing Carbon Stocks in Agro-silvopastoral Systems in Rural Communities of the Selva Zoque - Sumidero Canyon Complex as a Climate Change Mitigation Strategy., Country: Mexico

13. GEFID: 9445, Project Title: Conservation and Sustainable Use of Biological Diversity in Priority Landscapes of Oaxaca and Chiapas, Country: Mexico

14. GEFID: 9555, Project Title: Sustainable Productive Landscapes, Country: Mexico

15. GEFID: 9564, Project Title: Mexico Municipal Energy Efficiency Project (PRESEM), Country: Mexico

16. GEFID: 9649, Project Title: Implementation of Projects Prioritized by the Sustainable and Emerging Cities Program in Three Mexican Cities, Country: Mexico

Costa Rica

1. GEFID: 4382, Project Title: Fifth Operational Phase of the GEF Small Grants Programme, Country: Costa Rica
2. GEFID: 4836, Project Title: Conservation, Sustainable Use of Biodiversity, and Maintenance of Ecosystem Services of Internationally Important Protected Wetlands, Country: Costa Rica
3. GEFID: 5838, Project Title: Sustainable Urban Mobility Program for San Jose, Country: Costa Rica
4. GEFID: 6945, Project Title: Strengthening Capacities of Rural Aqueduct Associations' (ASADAS) to Address Climate Change Risks in Water Stressed Communities of Northern Costa Rica, Country: Costa Rica
5. GEFID: 9416, Project Title: Conserving Biodiversity through Sustainable Management in Production Landscapes in Costa Rica, Country: Costa Rica

Viet Nam

1. GEFID: 4, Project Title: Hon Mun Marine Protected Area Pilot Project, Country: Viet Nam
2. GEFID: 209, Project Title: Vietnam PARC - Creating Protected Areas for Resources Conservation (PARC) in Vietnam Using a Landscape Ecology Approach, Country: Viet Nam
3. GEFID: 1030, Project Title: Making the Link: The Connection and Sustainable Management of Kon Ka Kinh and Kon Cha Rang Nature Reserves, Country: Viet Nam
4. GEFID: 1031, Project Title: Biodiversity Conservation and Sustainable Use of the Marine Resources at Con Dao National Park, Country: Viet Nam
5. GEFID: 1296, Project Title: The Green Corridor, Country: Viet Nam
6. GEFID: 1477, Project Title: Conservation of Pu Luong-Cuc Phuong Limestone Landscape, Country: Viet Nam
7. GEFID: 1943, Project Title: Integrating Watershed and Biodiversity Management in Chu Yang Sin National Parkv, Country: Viet Nam
8. GEFID: 2758, Project Title: WB/GEF POL: Coastal Cities Environment and Sanitation Project - under WB/GEF Partnership Investment Fund for Pollution Reduction in the LME of East Asia, Country: Viet Nam
9. GEFID: 3032, Project Title: Environmental Remediation of Dioxin Contaminated Hotspots in Vietnam, Country: Viet Nam
10. GEFID: 3187, Project Title: Demonstration of Sustainable Management of Coral Reef Resources in the Coastal Waters of Ninh Hai District, Ninh Thuan Province, Viet Nam, Country: Viet Nam

11. GEFID: 3603, Project Title: Removing Barriers Hindering PA Management Effectiveness in Vietnam, Country: Viet Nam
12. GEFID: 3627, Project Title: SFM: Promotion of Sustainable Forest and Land Management in the Vietnam Uplands, Country: Viet Nam
13. GEFID: 4659, Project Title: LME-EA: Coastal Resources for Sustainable Development: Mainstreaming the Application of Marine Spatial Planning Strategies, Biodiversity Conservation and Sustainable Use, Country: Viet Nam
14. GEFID: 4760, Project Title: Conservation of Critical Wetland PAs and Linked Landscapes, Country: Viet Nam
15. GEFID: 4766, Project Title: Implementation of Eco-industrial Park Initiative for Sustainable Industrial Zones in Vietnam, Country: Viet Nam
16. GEFID: 5005, Project Title: Integrating Biodiversity Conservation, Climate Resilience and Sustainable Forest Management in Trung Truong Son Landscapes, Country: Viet Nam
17. GEFID: 5365, Project Title: Energy Efficiency Improvement in Commercial and High-Rise Residential Buildings, Country: Viet Nam
18. GEFID: 6924, Project Title: Promoting Climate Resilience in Vietnamese Cities Management, Country: Viet Nam
19. GEFID: 9361, Project Title: Mainstreaming Natural Resource Management and Biodiversity Conservation Objectives into Socio-economic Development Planning and Management of Biosphere Reserve in Viet Nam, Country: Viet Nam
20. GEFID: 9484, Project Title: Integrated Approaches for Sustainable Cities in Vietnam, Country: Viet Nam
21. GEFID: 10245, Project Title: Integrated Sustainable Landscape Management in the Mekong Delta of Vietnam, Country: Viet Nam
22. GEFID: 10539, Project Title: Sustainable Forest and Forest Land Management in Viet Nam's Ba River Basin Landscape, Country: Viet Nam
23. GEFID: 10787, Project Title: Promote Wildlife Conservation and Responsible Nature Based Tourism for Sustainable Development in Vietnam, Country: Viet Nam

Ecuador

1. GEFID: 10184, Project Title: LDN Target-Setting and Restoration of Degraded Landscapes in Western Andes and Coastal areas, Country: Ecuador
2. GEFID: 3717, Project Title: SFM Sustainable Management of Biodiversity and Water Resources in the Ibarra-San Lorenzo Corridor, Country: Ecuador
3. GEFID: 5534, Project Title: Conservation of Ecuadorian Amphibian Diversity and Sustainable Use of its Genetic Resources, Country: Ecuador

4. GEFID: 4731, Project Title: Advancing Landscape Approaches in Ecuador's National Protected Area System to Improve Conservation of Globally Endangered Wildlife, Country: Ecuador

5. GEFID: 4375, Project Title: Fifth Operational Phase of the GEF Small Grants Program in Ecuador, Country: Ecuador

6. GEFID: 4774, Project Title: Conservation and Sustainable Use of Biodiversity, Forests, Soil and Water to Achieve the Good Living (Buen Vivir / Sumac Kasay) in the Napo Province, Country: Ecuador

7. GEFID: 10147, Project Title: Seventh Operational Phase of the GEF Small Grants Program in Ecuador, Country: Ecuador

8. GEFID: 3266, Project Title: Management of Chimborazo's Natural Resources, Country: Ecuador

9. GEFID: 4770, Project Title: Integrated Management of Marine and Coastal Areas of High Value for Biodiversity in Continental Ecuador, Country: Ecuador

10. GEFID: 9369, Project Title: Implementation of the Strategic Plan of Ecuador Mainland Marine and Coastal Protected Areas Network, Country: Ecuador

Botswana

1. GEFID: 9154, Project Title: Managing the Human-wildlife Interface to Sustain the Flow of Agro-ecosystem Services and Prevent Illegal Wildlife Trafficking in the Kgalagadi and Ghanzi Drylands, Country: Botswana

2. GEFID: 4751, Project Title: Mainstreaming SLM in Rangeland Areas of Ngamiland District Productive Landscapes for Improved livelihoods, Country: Botswana

3. GEFID: 10255, Project Title: Integrated sustainable and adaptive management of natural resources to support land degradation neutrality and livelihoods in the Miombo-Mopane landscapes of North-east Botswana, Country: Botswana

4. GEFID: 4544, Project Title: Improved Management Effectiveness of the Chobe-Kwando-Linyanti Matrix of Protected Areas, Country: Botswana

5. GEFID: 5789, Project Title: Using SLM to Improve the Integrity of the Makgadikgadi Ecosystem and to Secure the Livelihoods of Rangeland Dependent Communities, Country: Botswana

Lao PDR

1. GEFID: 78, Project Title: Wildlife and Protected Areas Conservation, Country: Lao PDR

2. GEFID: 3873, Project Title: Developing and Demonstrating Replicable Protected Area Management Models at Nam Et - Phou Louey National Protected Area, Country: Lao PDR

3. GEFID: 4034, Project Title: Improving the Resilience of the Agriculture Sector in Lao PDR to Climate Change Impacts, Country: Lao PDR

4. GEFID: 4554, Project Title: Effective Governance for Small Scale Rural Infrastructure and Disaster Preparedness in a Changing Climate, Country: Lao PDR

5. GEFID: 4650, Project Title: GMS-FBP: Strengthening Protection and Management Effectiveness for Wildlife and Protected Areas, Country: Lao PDR

6. GEFID: 5462, Project Title: Strengthening Agro-climatic Monitoring and Information Systems to Improve Adaptation to Climate Change and Food Security in Lao PDR, Country: Lao PDR

7. GEFID: 5743, Project Title: Reducing of Green House Gas Emissions in the Industrial Sector through Pelletization Technology, Country: Lao PDR

8. GEFID: 6940, Project Title: Sustainable Forest and Land Management in the Dry Dipterocarp Forest Ecosystems of Southern Lao PDR, Country: Lao PDR

9. GEFID: 10187, Project Title: Climate Smart Agriculture alternatives for upland production systems in Lao PDR, Country: Lao PDR

10. GEFID: 10499, Project Title: Lao PDR Landscapes and Livelihoods Project, Country: Lao PDR

11. GEFID: 10514, Project Title: Integrated Water Resource Management and Ecosystem-based Adaptation (EbA) in the Xe Bang Hieng River Basin and Luang Prabang City, Country: Lao PDR

Cambodia

1. GEFID: 621, Project Title: Biodiversity and Protected Area Management Pilot Project for the Virachey National Park, Country: Cambodia

2. GEFID: 1043, Project Title: Establishing Conservation Areas Landscape Management (CALM) in the Northern Plains, Country: Cambodia

3. GEFID: 1086, Project Title: Developing an Integrated Protected Area System for the Cardamom Mountains, Country: Cambodia

4. GEFID: 1183, Project Title: Tonle Sap Conservation Project, Country: Cambodia

5. GEFID: 3635, Project Title: SFM Strengthening Sustainable Forest Management and the Development of Bio-energy Markets to Promote Environmental Sustainability and to Reduce Green House Gas Emissions in Cambodia, Country: Cambodia

6. GEFID: 3890, Project Title: Vulnerability Assessment and Adaptation Programme for Climate Change in the Coastal Zone of Cambodia Considering Livelihood Improvement and Ecosystems, Country: Cambodia

7. GEFID: 4434, Project Title: Strengthening the Adaptive Capacity and Resilience of Rural Communities Using Micro Watershed Approaches to Climate Change and Variability to Attain Sustainable Food Security, Country: Cambodia

8. GEFID: 4905, Project Title: Strengthening National Biodiversity and Forest Carbon Stock Conservation through Landscape-based Collaborative Management of Cambodia's Protected Area System as Demonstrated in the Eastern Plains Landscape (CAMPAS Project), Country: Cambodia

9. GEFID: 4945, Project Title: Collaborative Management for Watershed and Ecosystem Service Protection and Rehabilitation in the Cardamom Mountains, Upper Prek Thnot River Basin, Country: Cambodia
10. GEFID: 5318, Project Title: Strengthening Climate Information and Early Warning Systems in Cambodia to Support Climate Resilient Development and Adaptation to Climate Change, Country: Cambodia
11. GEFID: 5421, Project Title: Reduction of GHG Emission through Promotion of Commercial Biogas Plants, Country: Cambodia
12. GEFID: 9640, Project Title: Low-carbon Development for Productivity and Climate Change Mitigation through the Transfer of Environmentally Sound Technology (TEST) Methodology, Country: Cambodia
13. GEFID: 9781, Project Title: Integrated Natural Resource Management (INRM) in the Productive, Natural and Forested Landscape of Northern Region of Cambodia, Country: Cambodia
14. GEFID: 10177, Project Title: Promoting Climate-Resilient Livelihoods in Rice-Based Communities in the Tonle Sap Region, Country: Cambodia
15. GEFID: 10483, Project Title: Additional Financing for the Cambodia Sustainable Landscape and Ecotourism Project, Country: Cambodia

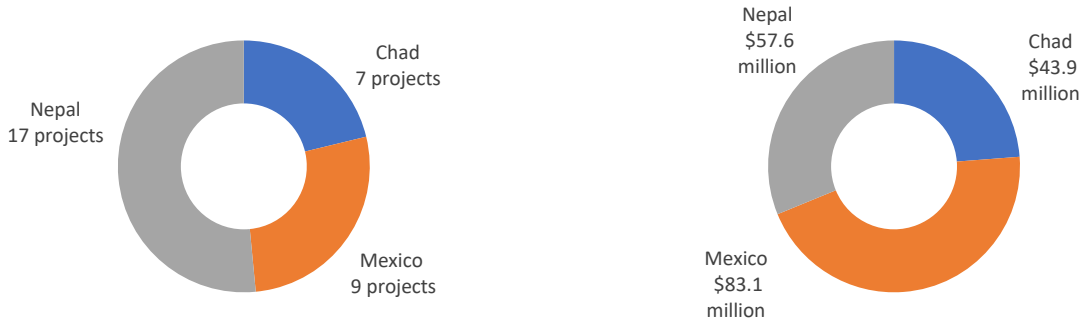
India

1. GEFID: 3024, Project Title: SLEM/CPP: Sustainable Participatory Management of Natural Resources to Promote Ecosystem Health and Resilience in the Thar Desert Ecosystem, Country: India
2. GEFID: 3472, Project Title: SLEM/CPP: Integrated Land Use Management to Combat Land Degradation in Madja Pradesh, Country: India
3. GEFID: 3941, Project Title: IND-BD Mainstreaming Coastal and Marine Biodiversity Conservation into Production Sectors in the Malvan Coast, Maharashtra State, Country: India
4. GEFID: 4215, Project Title: Low Carbon Campaign for Commonwealth Games 2010 Delhi, Country: India
5. GEFID: 4921, Project Title: Efficient and Sustainable City Bus Services, Country: India
6. GEFID: 5132, Project Title: Integrated Management of Wetland Biodiversity and Ecosystems Services (IMWBES), Country: India
7. GEFID: 5137, Project Title: Mainstreaming Agrobiodiversity Conservation and Utilization in Agricultural Sector to Ensure Ecosystem Services and Reduce Vulnerability, Country: India
8. GEFID: 9243, Project Title: Green-Ag: Transforming Indian Agriculture for Global Environmental Benefits and the Conservation of Critical Biodiversity and Forest Landscapes, Country: India

ANNEX D: PORTFOLIO SUMMARY FOR THE THREE CASE STUDIES (CHAD, MEXICO, AND NEPAL; AS OF AUGUST 2024)

The portfolio of projects spans three countries, including Chad, Mexico, and Nepal (figure D.1)**.** The evaluation assesses a total of 33 projects: 7 projects in Chad, 9 in Mexico, and 17 in Nepal. Using data from the Project Identification Framework/CEO endorsement stage available by the end of Fiscal Year 2024, these projects collectively receive $184.6 million in GEF financing, which includes project financing, agency fees, and project preparation grants.

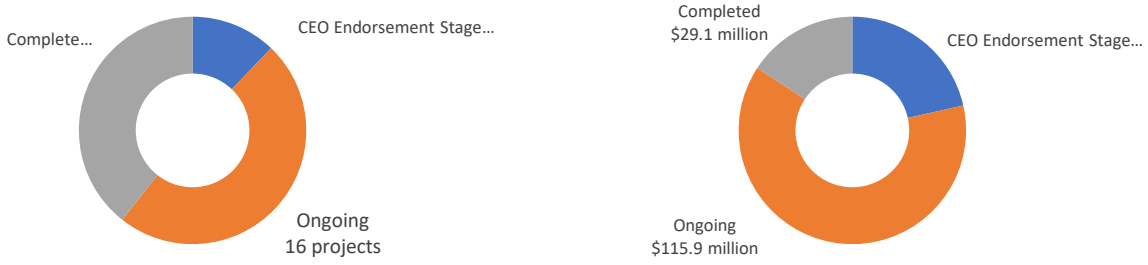
Figure D.1 - Distribution of projects in the evaluation portfolio by country



Source: Evaluation elaboration from data retrieved from GEF Portal (2025).

The 33 projects in the portfolio include those that are still in the design stage, ongoing projects, and completed projects (figure D.2)**.** Four projects are in the CEO endorsement stage (all from GEF-8), while 16 projects are ongoing, including those that have cleared CEO endorsement but are not yet under implementation. Additionally, 13 projects are completed, with ongoing projects accounting for nearly 63 percent of the total GEF financing in the portfolio.

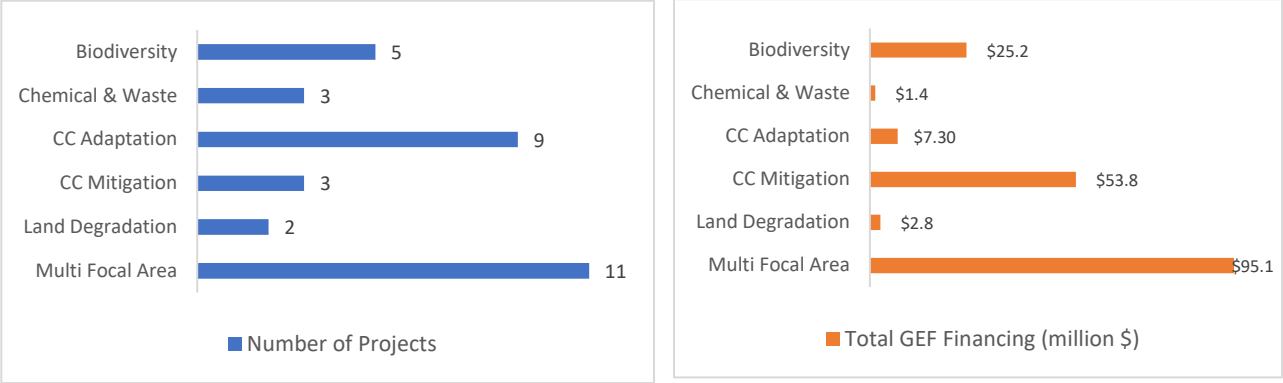
Figure D.2. Distribution of projects by status



Source: Evaluation elaboration from data retrieved from GEF Portal (2025).

The portfolio includes projects from the Biodiversity, Chemicals and Waste, Climate Change, Land Degradation, and Multifocal Areas (figure D.3). Climate Change projects include both adaptation and mitigation projects. Multifocal Area projects represent a third of the total portfolio but receive over half of the GEF financing.

Figure D.3 - Distribution of projects by focal area

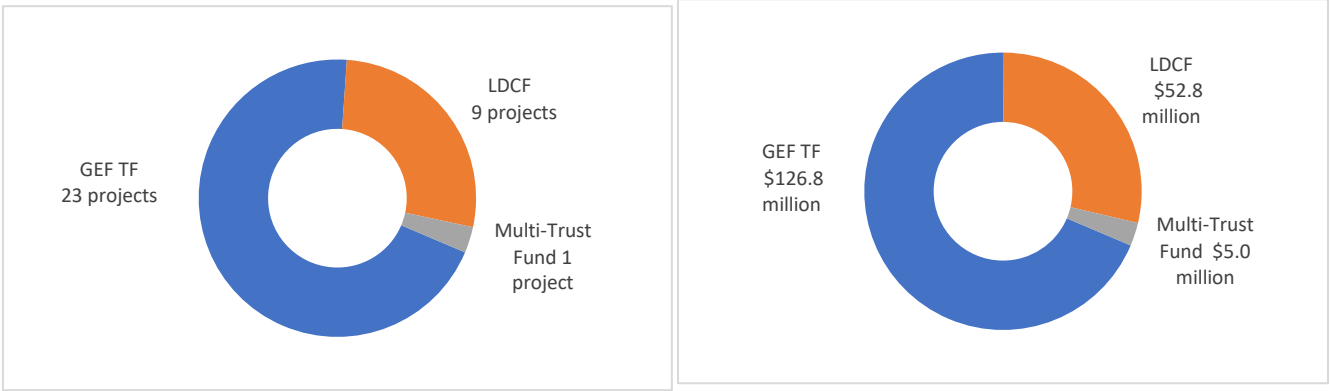


Source: Evaluation elaboration from data retrieved from GEF Portal (2025).

The portfolio includes projects of different modalities (see figure D.4). More than 75 percent of the projects, representing 96 percent of the GEF financing, are full-sized projects (FSPs). The remaining portfolio consists of five medium-sized projects (MSPs) that collectively receive $6.42 million and three enabling activities that account for $642,000 in GEF financing.

Projects in the portfolio receive funding from the GEF Trust Fund and the Least Developed Countries Fund (LDCF; see figure D.4)**.** All nine projects in Mexico are funded by the GEF Trust Fund. A total of 11 projects in Nepal are funded by the GEF Trust Fund, while the remaining 6 are funded by the LDCF. The portfolio of projects in Chad includes three GEF Trust Fund projects, three LDCF projects, and one multitrust fund project funded by both the GEF Trust Fund and LDCF (which is also a multifocal area project).

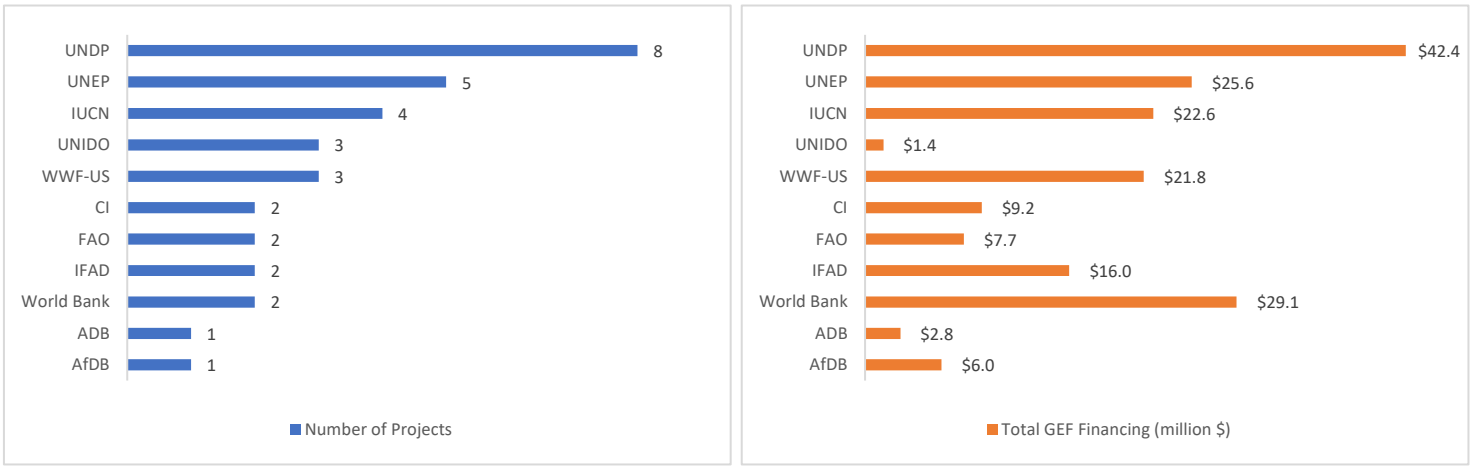
Figure D.4 – Distribution of projects by funding modality



Source: Evaluation elaboration from data retrieved from GEF Portal (2025).

The portfolio features a variety of implementing agencies, with a notable concentration of projects managed by a few GEF Agencies (figure D.5)**.** UNDP leads in both the number of projects (8) and total GEF financing ($42.4 million). UNEP and IUCN follow as the second and third largest agencies, managing five projects ($25.6 million) and four projects ($22.6 million), respectively. The United Nations Industrial Development Organization (UNIDO), with three projects, has a relatively modest allocation of $1.4 million, while the World Bank, despite managing only two projects, oversees $29.1 million in GEF financing.

Figure D.5. Projects and financing by lead agencies



Source: Evaluation elaboration from data retrieved from GEF Portal (2025).

ANNEX E: EXPECTED SOCIOECONOMIC CO-BENEFITS AT DESIGN

Table E.1 Chad - Expected co-benefits at design

	UNPUM (UNEP) **Project for the Promotion of Integrated Natural Resource Management in Support of GGW in Chad (PINAMAC; GEF ID 11459)-**	**AfDB** **Building Resilience for Food Security and Nutrition in Rural Communities in Chad** **(GEF ID 9050)**	**World Bank** **Albia - Local Development and Adaptation Project** **(GEF ID 10315)**	**IFAD-PARSAT** **(GEF ID 5376)**	**IFAD-STRADAP** **(GEF ID 11550)**	**UNDP** **Community-based Climate Risks Management in Chad** **(GEF ID 8001)**	**IUCN** **Restoring Ecological Corridors in the Mayo-Kebbi Quest, Chad, to Support Multiple Land and Forest Benefits - RECONNECT** **(GEF ID 9417)**
Discussion of co-benefits in formulation documentation	Co-benefits are identified in a general way. Benefits: In Component 1, by promoting afforestation (with half-moons) and reforestation (with adapted local species) options, by supporting assisted natural regeneration, the project sequesters carbon and contributes to land degradation neutrality.	Rural infrastructure development: The main activities will focus on the development of irrigation, livestock, and conservation/processing and marketing, as well as basic social facilities. Value chain and market development: Activities and capacity building will promote the protection of natural and timber resources; development of the sub-sectors of agriculture, livestock, fisheries; improving	Co-benefits are mentioned but not very specifically in the GEF document (but the World Bank has prepared a separate document concerning its contribution). Expected results include: improved management of the project area, community and private lands, state reserves,	Benefits are mentioned in the project formulation document. In component 1, the project mentioned securing against climate risks and the intensification of agricultural production (water and soil conservation, improved early seeds,	Addressing adaptation challenges by strengthening the resilience of degraded agro-pastoral production landscapes and the livelihoods of vulnerable women and youth. Co-benefits are mentioned and relate to the creation of green jobs	Improving the capacities of populations in vulnerable communities to cope with different climate risks through early warning and index micro-insurance	Restoration and maintenance of ecosystem services to reduce greenhouse gas emissions and increase carbon sequestration, in forests and agro-sylvo-pastoral systems.

	Co-benefits: By establishing community farms, producing seedlings, and promoting value chains, community members will benefit from diversified livelihood opportunities that will reduce their direct impact on resources. Acacia plants will contribute to carbon sequestration, thereby improving soil fertility, and promoting agroforestry and biodiversity conservation while supporting sustainable land use practices. By training producers in market gardening and agroforestry, the project will create the capacity and technical know-how needed to support environmentally friendly production systems	market access and financing; strengthening nutrition; and the promotion of youth employment. At the local level, there will be expected positive socioeconomic impacts and many impacts on the biophysical and human environment, including: i) improved water availability for crops, livestock, and trees; (ii) improvement and diversification of agroforestry productivity and reduction of post-harvest losses; (iii) reduced vulnerability to climate and other shocks; (iv) diversification of activities, income generation and job creation; (v) preservation of natural resources and improvement of resource management; (vi) improved access to basic socioeconomic	and wildlife corridors, including nature-based tourism. Commitment of communities on economic activities (market gardening for women, ecotourism for young people) Improving access to safe drinking water Improved water Sanitation	environmental education). Co-benefits include increased yields, soil fertility, tree planting and environmental protection, job creation through beekeeping, market gardening, and the processing of local products. Improved ovens for fish smoking to be popularized, thus reducing the pressure on natural resources.	for vulnerable youth and women, and the restoration of degraded land.		

		services; and (vii) secure food production.					
Are co-benefits considered in the theory of change and results framework?	In the document, there is no theory of change and co-benefits are not taken into account. in the results framework.	No, there is no explicit theory of change.	No explicit theory of change in the document.	Yes, it is captured in the theory of change and the results framework.	Yes, it is taken in the theory of change in order to establish an institutional and policy environment and support concrete measures to build adaptive capacity.	Yes, it is taken as part of the results framework through a system for communicating and disseminating agrometeorological advice and building risk management capacities (index micro-insurance).	No theory of change but the results framework foresaw co-benefits relating to the sustainable management of natural resources through the involvement of local actors, the increased capacity for CO2 sequestration through sustainable management of forest ecosystems, the sustainable exploitation of natural resources through the development of sustainable IGAs and increased productivity of degraded soils.
What are the co-benefits considered	Fairly general definition:	Includes: (i) improving the availability of water for crops, livestock, and trees; (ii) improvement	Income diversification (general concept) and	Improvement of agricultural water catchment and	Climate resilience in agro-sylvo-pastoral and	Dissemination of agrometeorological advisories and	CO2 sequestration, restoration of degraded land,

during the design phase?	Plant production, market gardening (diversification, sources of income), value chains, improvement of soil productivity.	and diversification of agroforestry productivity and reduction of post-harvest losses; (iii) reduced vulnerability to climate and other shocks; (iv) diversification of activities, income generation, and job creation; (v) preservation of natural resources and improvement of resource management; (vi) improved access to basic socioeconomic services; and (vii) secure food production.	sustainable agricultural production. Market gardening to generate alternative income to the exploitation of natural resources	management, market gardening, beekeeping, processing of local products to create employment and income for young people and women	fisheries value chains and supporting climate-resilient livelihoods and employment opportunities for rural youth.	index microinsurance	management of natural resources
Does the design mention lessons learned from previous experience on co-benefits?	There is no mention of previous experiences on co-benefits, but there is general mention of previous projects implemented in the country.	No	No	No	Yes, IFAD's previous projects (REPER and PARSAT)	Yes, projects implemented by UNDP (PNA) on the dissemination of weather advisories	No
Does the project design indicate who should have access to eco-benefits (inclusion)	The draft generally mentions gender mainstreaming, but without specific discussion or action.	Attention to women and children (food security). Some specific activities identified for women. Special attention will be paid to women and children due to their	Not mentioned	The design of the project indicated that it is the youth and the women.	The design indicates that vulnerable youth and women are beneficiaries.	Producers	Rural communities made up of men, women and youth

		more acute food and nutrition insecurity. Specific activities to promote gender equality will include: the production and analysis of sex-disaggregated data throughout the implementation of the project; strengthening the position of women's groups in the field of agricultural and forestry product processing; facilitate women's access to factors of production; the promotion of gender-sensitive infrastructure (micro-irrigation areas, improvement of rural roads, etc.); ensure equal access for men and women to information, capacity-building training and awareness-raising campaigns; and the hiring of a gender expert for the National Human Resources Coordination Unit.					
Scaling	Not mentioned. In generic terms, discussion of	Presented in a general way (lessons learned can	Not mentioned	Not mentioned but some activities are	During the assembly, the project did not	During implementation, the project did not	Yes, a new proposal is underway for

	knowledge management to facilitate the scaling up of effective practices.	be considered in other future projects.		being scaled up such as solar dewatering, spreading threshold, environmental education.	mention. the scaling aspect.	provide for a scaling mechanism.	phase II of the project and also scaling up in other areas of the country, including Tandjilé, Batha.

Source: Evaluation elaboration (2025) based on project design documents.

Table E.2 Nepal - Expected co-benefits at design

Description	Projects					
	UNEP EbA-II[42] (GEF ID 5203)	UNDP DCRL[43] (GEF ID 6989)	UNEP Urban EbA[44] (GEF ID 8009)	IUCN Lakhandei[45] (GEF ID 10469)	WWF-US Ilam[46] (GEF ID 9437)	FAOECSM[47] (GEF ID 10381)
Discussion of co-benefits in formulation documentation	Mention of socioeconomic benefits in project identification document but in a general way. Benefits categorized into "national" and "local." National benefits, under outcome 1 and 2, consist of technical capacity of policy makers and decision makers on climate change adaptation through ecosystem restoration. Local socioeconomic benefits, under outcome	Primarily framed in terms of planning for and adoption of integrated watershed management in vulnerable watershed/sub-watersheds. Indirect mention of co-benefits of adaptation interventions. Emphasis on supply-side actors,	Extensive use of adaptation and non-adaptation co-benefits, including i) reducing urban temperatures by planting trees and other vegetation; ii) providing livelihoods through the use of productive trees in open spaces; iii) improving surface water quality; iv) increasing habitat for biodiversity; v) providing recreational spaces; and vi)	"Co-benefits" not explicitly used but social and economic benefits widely considered in the project document. It seeks to achieve productive landscapes with profound impacts on livelihoods (and biodiversity). Value chain promotion, markets development, skills development in the youth, horticulture	Includes both environmental benefits and forest and biodiversity co-benefits, include: climate smart agriculture and community gardens and sustainable supply of biomass energy. Co-benefits include biogas (e.g. with health and env benefit), livelihood benefits through interventions.	The project's co-benefits are considered in terms of greenhouse gas emissions reduction; and social-economic benefits as "incentive mechanisms." Includes: improved food security through sustainable and resilient production of agricultural and livestock products; increased and stabilized livelihoods through IGAs based on

[42] Catalysing Ecosystem Restoration for Climate Resilient Natural Capital and Rural Livelihoods in Degraded Forests and Rangelands of Nepal, executed by UNEP >> UNOPS.
[43] Developing Climate Resilient Livelihoods in the Vulnerable Watershed in Nepal Project, executed by UNDP.
[44] Ecosystem-Based Adaptation for Climate-resilient Development in the Kathmandu Valley, Nepal" Executed by UNEP, and Kathmandu Valley Development Authority (KVDA).
[45] Restoring the degraded watershed and livelihoods of Lakhandei river basin through Sustainable Land Management Project, executed by IUCN.
[46] Integrated Landscape Management to Secure Nepal's Protected Areas and Critical Corridors Project, executed by WWF-US.
[47] Enhancing capacity for sustainable management of forests, land and biodiversity in the Eastern Hills (ECSM FoLaBi EH) Project, executed by FAO.

Description	Projects					
	UNEP EbA-II[42] (GEF ID 5203)	UNDP DCRL[43] (GEF ID 6989)	UNEP Urban EbA[44] (GEF ID 8009)	IUCN Lakhandei[45] (GEF ID 10469)	WWF-US Ilam[46] (GEF ID 9437)	FAOECSM[47] (GEF ID 10381)
	3, "Demonstration measures that reduce vulnerability and restore natural capital"; activities include trialing drought-resilient species and those producing fruit, fiber, timber and fodder, and water-tolerant species; undertake agroforestry; improved pasture management; contouring and stone ridging; identify feasible alternative livelihoods; increase tourism infrastructure; promote restoration-based tourism; water-efficient crop production; In addition, strengthening local institutions and greater women's representation, training, and skills.	especially government agencies. Co-benefits indirect and implicit.	strengthening cultural values. Further co-benefits include improved quality of soil, air and water; a reduced urban heat island effect; enhanced aesthetic and recreational value of public spaces; alternative livelihood options.	examples of co-benefits. Problems in marketing of nontimber forest products, unequal distribution of benefits; Also identifies socio-political issues as problems, such as unemployment; feminization in agriculture [TOC].	Demonstration project interventions in the national park, buffer zone, and corridors. Training for applied forest management to community and private sector.	flows of ecosystem goods and services.
Are co-benefits considered in the theory of change	In CEO endorsement document, ToC presented as "problem	Mention of certain outputs that potentially lead to	Indirect mention of co-benefits that may result from outcome 3	Extensively considered in TOC; O2.3 Restore	Component 3 of the project consists of significant	Both results framework and TOC incorporate co-

Description	Projects					
	UNEP EbA-II[42] (GEF ID 5203)	UNDP DCRL[43] (GEF ID 6989)	UNEP Urban EbA[44] (GEF ID 8009)	IUCN Lakhandei[45] (GEF ID 10469)	WWF-US Ilam[46] (GEF ID 9437)	FAOECSM[47] (GEF ID 10381)
(TOC) and results framework?	tree" and "solution tree" and TOC per outcome. The problem of increased poverty is envisioned to be addressed to lead to enhanced livelihoods. However, the pathways are not clear. TOC revised in the MTE [midterm review?], yet not clear on socioeconomic benefits.	co-benefits, including conservation farming, integrated agroforestry, along with fodder and controlled fuelwood production; catchment ponds with groundwater recharge.	interventions - rainwater harvesting; household infiltration pits; urban farming/ gardening, conservation ponds; Results framework – in outcome 3 – mentions 50% in 6 wards in 5 municipalities experience improvements in supply of ecosystem services (flood control, water availability, soil stabilization, greenery improvement)	farmland; cultivate horticulture and forest crops; O3.2 Sustainable land management (SLM) product-based value chain development; O4.1 Economic & social benefits from SLM. Results framework adopts GESI [spell out] and needs and priorities of vulnerable groups.	cobenefits, while 1&2 focus on national capacity & enabling environment, and integrated planning. TOC. Results Framework.	benefits but not worded that way.
What are the co-benefits considered during the design phase?	Stated generally; for instance, promoting tourism and its infrastructure; climate resilient crops introduction; improved water management. These are assumed to	Not explicitly as socioeconomic benefits – but include women empowerment and their stewardship; GESI mainstreaming. In UNDP Risk Log, mention of	Rainwater harvesting; household infiltration pits; urban farming/ gardening, conservation ponds; flood control, water availability, soil	Sustainable-land-management-based enterprises for women; improved food security (e.g., horticulture plantation); income (e.g., capacity development on	Integrated livestock management, including higher productivity cattle and reduced grazing area, invasive species removal in	Results framework: 300 Community Forest User Groups and other LFUGs/CBOs and 30,000 household implement forest, livestock, agriculture and other livelihoods support practices; 10

Description	Projects					
	UNEP EbA-II[42] (GEF ID 5203)	UNDP DCRL[43] (GEF ID 6989)	UNEP Urban EbA[44] (GEF ID 8009)	IUCN Lakhandei[45] (GEF ID 10469)	WWF-US Ilam[46] (GEF ID 9437)	FAOECSM[47] (GEF ID 10381)
	lead to resilient livelihoods.	"immediate benefits for communities in terms of awareness, preparedness, skill development and income generation (agro-forestry schemes)"	stabilization, greenery improvement.	value chain; establishment of local product-based marketplaces (Sindhuli and Lalbandi).	grasslands and riparian areas, community nurseries and revegetation with native species (livelihood opportunities).	pro-poor, biodiversity-enhancing livelihood opportunities identified and value chain supported; 100 Forest User Groups linked to markets. TOC – incentives to conservation; value chains etc.
Does the design mention lessons learned from previous experience on co-benefits?	No explicit mention of prior experience of co-benefits; mention of the experience of other forestry, conservation, or resilience projects.	Not explicit.	No. The project envisions reviewing lessons from previous interventions, and adoption of this project's lessons in the future.	Not apparent.	Mentions lessons from several projects, but in generic terms, not specific to co-benefits.	The project will draw on lessons from other projects, but no explicit reference to learning on co-benefits.
Does the project design indicate who should have access to eco-benefits (inclusion)	Project identification document specifies women to be preferentially provided with skills; however, it misses out Dalits and indigenous people (IPs) as specifically targeted	Not mentioned for benefits from interventions. But "Women, Dalit and marginalized groups will be hired at assistant level" in	Not apparent. Emphasis mainly on supply side. Not specific on the categories of people who will benefit.	Commits to considering needs and priorities to ensure the inclusion of women, the poor, indigenous peoples, under-privileged, youth and vulnerable	Engages women and indigenous peoples but does not include Dalits. No specific mention of	Acknowledges the risk of elite capture and exclusion of poorest and disadvantaged groups; 30,000 households (150,000 population, 50% female) will benefit

Description	Projects					
	UNEP EbA-II[42] (GEF ID 5203)	UNDP DCRL[43] (GEF ID 6989)	UNEP Urban EbA[44] (GEF ID 8009)	IUCN Lakhandei[45] (GEF ID 10469)	WWF-US Ilam[46] (GEF ID 9437)	FAOECSM[47] (GEF ID 10381)
	beneficiary in accessing co-benefits.	outcome 1 interventions.		people as appropriate, e.g., 50 SLM practice-based enterprises owned by women. Support women, poor, marginal, and ethnic groups for creating/improving decentralized marketplaces/ community facility centers to improve market access.	disaggregatedmarginalized groups in access to co-benefits; the distribution tends to be generic across populations.	from livelihood intervention; no specific mention of IPs and Dalits in benefits access; but committed to socially disaggregated reporting.
Scaling	Does not mention scaling up of co-benefits; however, significant element of scaling up of ecosystem-based restoration approaches such as through technical capacity of stakeholders, academic and training, and institutions at various scales.	No direct mention of scaling of co-benefits. Mention of scaling up of watershed restoration to at least 844 sq km through securing knowledge, directing public finance and private funding.	Not apparent. Scaling up mainly considered for knowledge exchange.	Upscaling through the institutions – CFUGs, cooperatives – within the watershed.	The potential for scaling is more likely, especially as WWF has engagements across other NPs, BZs and corridors.	Not apparent.

Source: Evaluation elaboration based on project design documents (2025).

Table E.3 Mexico - Expected co-benefits at design

	5751 Conservación Internacional - AMBIO	9445 Conservación Internacional	9555 Banco Mundial SEMARNAT	10504 PNUD	10869 PNUMA/ PRONATURA	11156 WWF	11274 IUCN
Categoría de co-beneficio							
Incremento del ingreso de las mismas fuentes	Agricultura y forestería sostenible con beneficios económicos gracias a los mercados de carbono.	Incremento de la sustentabilidad financiera en la gestión integrada de los tres paisajes prioritarios	Mejoramiento de la gestión sustentable de los territorios productivos e incremento de oportunidades para productores rurales	Optimización de los procesos del abastecimiento forestal (marqueo, clasificación, documentado y transporte) en las comunidades que integran la UZACHI. Aprovechamiento de desechos maderables para la manufactura de juguetes y comercialización.	Trazabilidad en la producción de mezcal para garantizar que no proceden de procesos de degradación y deforestación	No	No
Nuevos ingresos	Acceso a mercados de bonos de carbón. Pago de	Si	Ecoturismo	Ecoturismo	Aprovechamiento comercial de otras especies distintas al	Incentivos para prácticas	Análisis nacionales de las brechas de financiamiento y las barreras para la

(diversificación)	servicios ecosistémicos				mezcal como son orégano silvestre, flores, venados	productivas sustentables	inversión en paisajes de bosques primarios y medios de vida relacionados con los bosques. Coalición regional para movilizar fondos que aceleren la conservación de los bosques primarios y el desarrollo de medios de vida viables relacionados con los bosques.
Oportunidades de ecoturismo	No	Si. Cooperativa de pescadores desarrollan ecoturismo en zonas de alto valor ecológico.	Fomento al ecoturismo asociados con cadenas locales de valor	Si. Ecoturismo en bosques.	No	No	No
Nuevas oportunidades laborales	Conservación de bosques para mitigación de GEI	Prácticas productivas sustentables con enfoque de cadenas de valor orientadas al mercado	Nuevas prácticas sostenibles (agroecológicas, agroforestales y silvopastoriles) en actividades productivas con nuevos mercados.	Ecoturismo	Pago por servicios ambientales y por conservar los ecosistemas y evitar deforestar	No	Gestión sustentable del territorio

Mejor protección contra peligros naturales (incendios, inundaciones, deslaves, etc.);	Reducción de vulnerabilidad de la gente a peligros climáticos. Reducción de deslaves mediante el manejo adecuado del agua	No	Producción orgánica y diversificación de productos que pueden incorporarse y alcanzar mayor precio de mercado lo que disminuye el riesgo de pérdidas y daños en caso de impacto de peligros naturales.	Aplicación de una metodología de adaptación basada en ecosistemas en la fase de diseño de cada proyecto para así reducir el riesgo de desastres de origen meteorológico y climático		Construcción de capacidades de adaptación de comunidades locales para enfrentar peligros climáticos. Salvaguardas para identificar y reducir los riesgos socio-ambientales.	No
Mejoramiento de la fertilidad del suelo	Restauración de ecosistemas degradados y mejoramiento de la calidad del suelo	No	Prácticas que favorezcan la biodiversidad y mejoren el uso del suelo. Conservación de suelos para reducir el riesgo de inundaciones	Las oportunidades de mejora identificadas incluyen promover prácticas de conservación del suelo, apoyar iniciativas para transferir tecnologías sostenibles a las comunidades y fomentar la diversificación de las fuentes de financiamiento.	Desarrollo de sistemas agroforestales	No	No

Mejoramiento en las condiciones de salud (calidad del agua, aire, recursos naturales)	Mejoramiento de los servicios hidrológicos y ecosistémicos.	Gestión de servicios ecosistémicos proveyendo agua dulce y alimentos	Uso eficiente de la energía Manejo integral de plagas, malezas y enfermedades. Cosecha de productos de mayor calidad.	Cosecha y uso sostenible de recursos hídricos	Sistemas de saneamiento de agua y de baños secos, letrinas en las comunidades rurales productoras de mezcal.	No	No
Mejoramiento en la nutrición familiar	Seguridad alimentaria y mejoramiento de la nutrición	Si	Si	Producción de alimentos bajo el enfoque de agroecología para no degradar la base de recursos naturales para fomentar la resiliencia comunitaria	No	No	No
Mejor acceso a caminos, escuelas, servicios de salud		No	Si		No	No	No
Major acceso a mercados/cadenas de valor	Venta de bonos de carbón incrementan el ingreso de las comunidades	Cadenas de valor de 7 actividades productivas (café, miel, maíz, pesca, camarón y ecoturismo) a replicarse en	Desarrollo de mercados y optimización de procesos de comercialización en industria maderera.	Mejor acceso a financiamiento justo. El proyecto incluye actividades de desarrollo de capacidades y capacitación para	Creación y mejoramiento de las cadenas productivas en torno al mezcal. Oportunidades para que	No	Modelos de negocio innovadores para desarrollar bienes y servicios compatibles con la conservación forestal. Mecanismo

		cacao, etc. Oportunidades de mercado para cada organización productiva Pequeños productores con acceso a mayores oportunidades de mercado		organizaciones y alianzas, con el objetivo de entender y acceder a mecanismos y canales de financiamiento justos y sostenibles, fortalecer las capacidades para la elaboración de planes de negocio y facilitar el contacto con fuentes financieras para mejorar la resiliencia financiera de las organizaciones comunitarias.	pequeños productores locales, para grupos organizados de hombres y mujeres en ferias locales, en eventos locales.		de preparación de proyectos para facilitar el acceso a financiamiento privado y de desarrollo.
Mejores habilidades (*know-how*) y capacidades	Capacidades locales para la gestión de recursos. Acceso a servicios de asistencia técnica.	Capacidades de participación incluyendo mujeres y grupos vulnerables en diseño e implementación de planes de gestión del territorio como es la ADVC. Construcción de	Mejoramiento de las capacidades de organización de los productores y de sus habilidades técnicas, empresariales y mercadotécnicas para la	Desarrollando capacidades para el manejo adecuado del paisaje y la adopción de prácticas y tecnologías innovadoras y sostenibles, como fuentes de energía renovable y eficiente,	Ampliación de las capacidades de producción a través de palenques colectivos	No	Plan de comunicación regional a largo plazo para movilizar apoyo a la conservación de bosques primarios y biomas forestales críticos.

		capacidades para favorecer la adaptación al cambio climático.	producción sustentable.	agroecología, turismo sostenible, silvicultura y pesca, el proyecto permitirá a las comunidades locales reducir vulnerabilidades y aumentar la resiliencia de los ecosistemas. Monitoreo de la calidad del agua.			
Fortalecimiento del capital social, conectividad con organizaciones rurales/servicios públicos.	Cooperación entre instituciones a nivel local para la mitigación	Procesos participativos en la planeación del uso del suelo de 1,000 organizaciones productivas.	Alianzas de negocios para las inversiones. Generación de valor social y económico local al involucrar a las comunidades en la definición de prioridades.	Fortalecimiento de la gobernanza a nivel de paisaje. El enfoque de paisaje del proyecto busca agrupar las acciones de grupos y comunidades individuales con el objetivo común de generar un impacto beneficioso en el paisaje en su conjunto. Esto implica la participación, el compromiso y la colaboración de muchas partes.	Esquema de gobernanza local en áreas destinadas voluntariamente a la conservación	No	

Otros co-beneficios	Mitigación: secuestro de carbono y reducción de emisiones de GEI. Perspectiva de género	Para integrar el enfoque de cadena de valor orientado al mercado en los tres paisajes, se requieren inversiones significativas provenientes de una combinación de fuentes financieras. Mejoramiento en el acceso a mercados y a mecanismos financieros debido a los productos sustentables. Beneficio a grupos vulnerables, indígenas, afrodescendientes, mujeres, jóvenes	Co-beneficios de mitigación y adaptación al cambio climático en 90-100% del financiamiento. Disminución de GEI. Fortalecimiento de las organizaciones comunitarias para facilitar el acceso a programas públicos; Creación de mecanismos de monitoreo participativo que empoderen a las organizaciones comunitarias en la toma de decisiones. Se incluye teoría del cambio	Fomentar la participación de las mujeres y crear oportunidades para la juventud y otros grupos vulnerables. Beneficios para las comunidades indígenas. El proyecto busca apoyar a las comunidades indígenas que gestionan los recursos naturales de manera comunal. Las lecciones aprendidas de estas comunidades se ampliarán, y se respaldarán las innovaciones. Monitoreo participativo de fauna y agua.	Organización de grupos de mujeres Se esperan crear esquemas de créditos financieros para los productores	Fortalecimiento de los modos de vida de las comunidades rurales y grupos vulnerables incluyendo a las mujeres, jóvenes y grupos marginados.	El proyecto traerá beneficios sociales a las poblaciones locales, especialmente a los grupos vulnerables como mujeres, jóvenes y pueblos indígenas. Componente 1 incluirá la implementación de acciones afirmativas para integrar a estas comunidades mediante la realización de un programa de liderazgo y la promoción de su participación en estructuras de gobernanza relevantes.

Source: Evaluation elaboration based on project design documents (2025).

ANNEX F: ACHIEVED CO-BENEFITS

Table F.1: Chad – Co-benefits achieved

Co-benefit category			
	IFAD Project – PARSAT *(GEF ID 5376)*	*UNDP Project* *Community-based Climate Risks Management project* *(GEF ID 8001)*	*IUCN Project RECONNECT* *(GEF ID 9417)*
Increased income from the same sources	Yes		Yes
New revenue streams (diversification)	Yes (vegetable crops, processing of local products (oil, fish, market gardening products), beekeeping)		Yes (vegetable and fodder crops), beekeeping, production and sale of forest and fruit plants, collection and sale of nontimber forest products)
Opportunities for ecotourism			
New job opportunities	Yes		Yes
Better protection against natural hazards (fires, floods, landslides, etc.);	Yes (alert, dissemination of weather information)	Yes (alert, dissemination of weather information)	Yes (early fire to control bushfires)
Improved soil fertility	Yes (organic manure, hydro-agricultural development)	Yes (advice and training)	Yes (organic manure, hydro-agricultural development)
Improvement of health conditions (quality of water, air, natural resources, etc.);	Yes	Yes (prevention of health risks)	Yes
Better access to roads, schools, health services,	Yes (establishment of rural road maintenance committees, animal health)		Yes (animal health)
Better access to markets/value chains to markets;	Yes		Yes
Better skills (know-how)	Yes	Yes: better knowledge of weather conditions and awareness of the need to change the crop calendar,	Yes

		given the flooding during the rainy season.	
Strengthening social capital, connectivity with rural organizations/public services.	Yes	In part, through the monitoring committees at the sub-prefectures level. We don't get deep into the communities yet	Yes

Source: Evaluation elaboration (2025).

Table F.2: Nepal – Co-benefits achieved

Co-benefit category			
	UNEP Climate Resilient Natural Capital project (GEF ID 5203)	IUCN Lakhandei project (GEF ID 10469)	WWF Integrated Landscape Management project (GEF ID 9437)
1. Increased income from the same sources	Y	Y	Y
2. New revenue streams (diversification)	Y (nontimber forest products (NTFP) plantation or processing)	Y (value chain, marketing)	Y (goat, milk production from cowshed improvement)
3. Opportunities for ecotourism			Y (home stays)
4. New job opportunities	Y (restoration work, construction)	Y (construction, marketing)	Y (leaf-plate making)
5. Better protection against natural hazards (fires, floods, landslides, etc.);	Y (gully control, check dams)	Y (gully control)	Y (flood control structures)
6. Improved soil fertility	Y (ecological restoration, water retention in conservation pond)	Y (expected – improved watershed management)	Y (from shed improvement, liquid manure)
7. Improvement of health conditions (quality of water, air, natural resources, etc.);		Y (water quality and ground water expected to improve)	
8. Improved family nutrition		Y (expected - increased vegetable farming and consumption)	
9. Better access to roads, schools, health services			
10. Better access to markets/value chains to markets	Y (NTFP processing, marketing)	Y (vegetable value chains)	Y (goat, milk, leaf plate)
11. Better skills (know-how)	Y (NTFP cultivation)	y	Y (cow-shed improvement; liquid manure preparation;
12. Strengthening social capital, connectivity with rural organizations/public services	Y	Y (youth, women group, Community Forest User Group)	Y (Buffer Zone User Group, Community Forest User Group)

Co-benefit category			
	UNEP Climate Resilient Natural Capital project (GEF ID 5203)	IUCN Lakhandei project (GEF ID 10469)	WWF Integrated Landscape Management project (GEF ID 9437)
13. Other co-benefits	Community leadership; women empowerment	Greenhouse gases reduction	Community leadership; women empowerment

Source: Evaluation elaboration (2025).

Table F.3: Mexico – Co-benefits achieved

Co-benefit category			
	Sustainable Productive Landscapes project *(GEF ID 9555, World Bank)*	*UNDP Small Grants Programme OP-7 (GEF ID 10504)*	*Sustainable Landscapes project* *(GEF ID 9445, Conservation International)*
Increased income from the same sources	Yes		Not yet evident
New revenue streams (diversification)	Incipient	Incipient	Not yet realized
Opportunities for ecotourism		Yes	Yes
New job opportunities	Yes		Yes
Better protection against natural hazards (fires, floods, landslides, etc.)	No	No	No
Improved soil fertility	Yes (biofertilizers)	No	No
Improvement of health conditions (quality of water, air, natural resources, etc.)	Likely, but no evidence	No	No
Better access to roads, schools, health services	No	No	No
Better access to markets/value chains to markets	Yes	Incipient	No
Better skills (know-how)	Yes	Yes	Yes
Strengthening social capital, connectivity with rural organizations/public services	Yes	Yes	Yes

Source: Evaluation elaboration (2025).

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ANNEX H: KEY PERSONS MET

GEF Secretariat*

Mr Ulrich Apel, Senior Environmental Specialist

Mr Jean-Marc Sinnassamy, Senior Environmental Specialist

Mr Cyril Blet, Senior Results-based Management Specialist

*Including interactions on multiple evaluations

Chad case study

National and local government representatives (remote modality)*

1. Mr. Oumar Gadji Soumaila, Climate Change Director, Ministry of Environment, Fisheries and Sustainable Development, Chad (Operational Focal Point)*
2. Mr Mahmat Moussa, Associate to the Climate Change Director, Ministry of Environmemt, Fisheries and Sustainable Development
3. Gen. Mahamat Sougour Galma, Gouverneur de la Region de Mayo Kebbi Ouest
4. M. Norson Kampété Mayor of the municipality of Bongor
5. M. François Pata, Secretary General, municipality of Bongor
6. M. Abeina Deguelo, Délégué environnement, Région de Mayo-Kebbi Ouest
7. M. Abdeldjelil Issa Djouma, Préfet, Département de Lac-Léré

International organization and NGO representatives and project coordinators

8. M. Claude N'Kodia, Representative of the African Development Bank, Chad
9. Mr. J Dokoubou, Senior Country Officer, African Development Bank, Chad
10. Mr Erik Reed, Senior Environmental Specialist, The World Bank
11. Mr Tahir Brahim Adouma, National Coordinator, ALBIA Project, funded by the World Bank and GEF
12. Mr Yassine Assafo Ahmad, National Coordinator, RECONNECT Project IUCN
13. Mr Adamou Bouari, Task Manager UNEP- Office of Mauritania *
14. Mr Jos de la Haye, Deputy Resident Representative, UNDP-Chad

15. Mr Abraham Allonanga, National Coordinator Community Climate Risk Management Project, UNDP-Chad
16. Mr Alexis Ramadji Nangtar, M&E Specialist, Community Climate Risk Management Project UNDP-Chad
17. Ms Rachel Senn, Country Director IFAD for Chad *
18. Mr Amadou Kourtou, Country Officer, IFAD, Chad
19. Mr Abdoulaye Mahamoud Labit, Coordonnateur du Programme de Coopération Tchad – FIDA

Mexico Case Study

National and local government representatives

Ms Regina Rosales, Directora General, Secretaría de Hacienda y Crédito Público

María Bonilla, Subsecretaria Adjunta de Crédito Público, Secretaría de Hacienda y Crédito Público

Ms Gabriela Niño Gómez, Directora de Finanzas Sostenibles, Secretaría de Hacienda y Crédito Público

Ms Silvia Gamboa, Subdirectora de Fondos Verdes, Secretaría de Hacienda y Crédito Público

Camila Zepeda, Jefe de la Unidad de Asuntos Internacionales de la Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT)

Ms Viridiana González Coordinadora de Esquemas de Financiamiento Ambiental, SEMARNAT

Mr. Iván Cornejo Villalva, Director Organismos Financieros Internacionales, Nacional Financiera

Mr. Luis Sifuentes, Director de Investigación de Contaminantes, Sustancias, Residuos y Bioseguridad, Instituto Nacional de Ecología y Cambio Climático

Ms Renée Gonzalez Montagut, Directora General, Fondo Mexicano para la Conservación de la Naturaleza

Ms Graciela Reyes Retana, Directora de Investigación y Desarrollo, Fondo Mexicano para la Conservación de la Naturaleza

Mr. José Feliciano Gonzalez Jimenez, Director General de Fortalecimiento Institucional y Temas, Comisión Nacional de Áreas Naturales Protegidas.

Mr. Froylan Martinez, Comisión Nacional de Áreas Naturales Protegidas.

Ms Cristina Martin Arrieta, Coordinadora del proyecto Territorios Productivos Sostenibles, SEMARNAT

Ms Verónica Bunge, Directora de atención al cambio climático en zonas prioritarias, Secretaría de Agricultura y Desarrollo Rural

Mr. Salvador Anta Fonseca, Coordinador en la Ciudad de México, Comisión Nacional Forestal

Mr. Camilo Ortega, Representante para México, Instituto de Crecimiento Verde Mundial

Ms Marina Calderón Hernández, Agente de la Agencia Oaxaca, Fideicomisos Instituidos en Relación con la Agricultura

Mr. David Domingo Rafael, Secretaría de Medio Ambiente, Energías y Desarrollo Sustentable, Estado de Oaxaca

Mr. Habacuc Flores, Programa Sembrando Vida (Secretaría de Bienestar)

International organizations and NGOs (in person and online interviews)

Ms Lina Pohl Alfaro, Representante de la FAO en México

Ms Joanne Gaskell, Senior Agricultural Economist, The World Bank

Ms Elena Mora Lopez, Agricultural Analyst, The World Bank

Ms. Rosa Maria Martínez, Senior Social Development Specialist, World Bank-Mexico

Ms Azul del Villar Bastón, World Bank - Mexico

Ms Katharina Siegmann, Senior Environmental Specialist, World Bank Mexico

Mr. Sébastien Proust, Coordinador Programa de Pequeñas Donaciones, UNDP-Mexico

Ms Virginia Leal Cota, Oficial Nacional de Monitoreo, UNDP-Mexico

Mr. Fernando Camacho, National Environment, Energy and Resilience Officer, UNDP-Mexico

Ms Esther Quintero, Senior Technical Director, Conservación Internacional, Mexico

Mr. Josafat Contreras, Coordinador, Proyecto Paisajes Sostenibles, Conservación Internacional

Mr Gustavo Garduño, Especialista de Proyecto, Conservación Internacional, Mexico

Ms. Helena Iturribarria, Coordinator, Pronatura Sur, UNEP Agave Mezcal Project

Ms. Romeo Dominguez, Director, Pronatura Sur, UNEP Agave Mezcal Project

Mr. David Ortega, Biodiversity Specialist, Pronatura Sur, Agave Mezcal Project

Mr. Isaias Gomez Sanchez, Social Inclusion Specialist, FAO Mexico

Mr. Eloy Fernandez, ex coordinador regional del proyecto GEF 5 ProTierras en Oaxaca y Proyecto Mixteca Sustentable A.C. (ex Agencia Técnica Local)

Mr. Girmey Lopez Martínez, Ex Coordinador del proyecto GEF 6 Agrobiodiversidad Mexicana en Oaxaca

Mr. Eliud Oliva Cervantes, Ex Asistente Operativo del proyecto GEF 6 Agrobiodiversidad Mexicana en Oaxaca

Sandra Petrone Mendoza - Coordinadora de Especies Terrestres Prioritarias de WWF-Mexico

Rodrigo León, Oficial de Vida Silvestre, WWF-Mexico

Martha Rosas, consultora, WWF Mexico

Nadia Mújica, Gerente de proyectos GEF/GCF, IUCN Costa Rica

Diana Bernaola, Especialista en Sistemas de Gestión Ambiental y Social, IUCN

Tony Nello, Economic Specialist, IUCN Mexico

Romeo Domínguez, Director General, Pronatura Sur

Dolores Barrientos Aleman, Representante UNEP, Mexico

Robert Erath, Program Officer, UNEP, Panama

Javier Alcantara Plazola, Food Systems Consultant, UNEP, Mexico

Elsa Esquivel Bazán: Directora del Programa Scolel´te, Cooperativa AMBIO

Nepal Case Study

I. Pre-mission Consultations

Vivek Dhar Sharma, GEF Small Grants Program / UNDP

Top Bahadur Khatri, UNEP EbA-II Project

Narendra Pradhan,* IUCN Nepal

II. Execution Agency Teams

UNEP/UN-OPS

Top Bahadur Khatri, * UNEP / EbA-II Project

Dr Digambar Dahal, UNEP / EbA-II Project

WWF Nepal

Shiva Raj Bhatta, WWF-NP/Ilam Project

Bharat Gotame, WWF-NP/Ilam Project

Nishant Adhikari, WWF-NP/Ilam Project

IUCN

Gyanendra Mishra, IUCN/Lakhandei Project

Amit Poudyal, IUCN/ Lakhandei Project

III. UNEP EbA-II Project Salyan District

Divisional Forest Office Salyan

Tek Bahadur Rawal, DFO, Salyan

Anjana Sharma, DFO Office, Salyan

Community Members

Bhirchuli CFUG members; 17 participants Bhirchuli Bangad Kupinde Municipality, Ward 7, Salyan

Mr and Ms. Yog B Budhathoki NTFP Processing / Collection Enterprise, Sunauli bazaar, Salyan

Restoration Site – 1, community members Ghatgaun Village, Bangadh Kupinde Mun-1, Salyan

Restoration Site – 2, community members Bureli Village, Bangadh Kupinde Mun- ward 1, Salyan

Local Government

Karna Bahadur Budhathoki, & civil service staffs - 3 Mayor, Bangad Kupinde Municipality, Devasthal, Salyan

IV. WWF Nepal. Ilam Project Banke, Bardia & Kailali Districts

Local Community

Sadabahar BZ CFUG – community members- 20 pax, Rapti Sonari Rural Municipality, ward 6, Banke (Kamdi Corridor)

Patabhar Buffer zone CFUG members – 15 pax, Geruwa Rural Municipality, Ward 2, Bardiya

Janata Secondary School; 6 eco-club participants (student / teachers) Janakinagar Rural Municipality, Ward 9, Amarabati

Madhyabindu BZUC; 17 participants, Rapti Sonari Rural Municipality ward 8, Banke district; Balapur village

Ilam Project Site Office

WWF Ilam project – 5 staff members, Ilam Project Site Office, Kohalpur, Banke

Civil Society Members

Sabitra Pun, FECOFUN, Banke District chairperson

Bardiya National Park

Dr Ashok Kumar Ram, Warden, Bardiya National Park, Thakurdwara, Bardiya

Community enterprise

Leaf Plates Enterprise (cottage industry)- 3 women members, Lamki Chuha Municipality, Ward 1, Bhuruwa Kuntikhet village, Kailali district

V. IUCN Lakhandei Project Sarlahi District

Divisional Forest Office

1. Prashant Roka*

Alamgir Ahmad, Project Officer

Divisional Forest Office Sarlahi

Santosh Kumar Jha, and staff DFO, Sarlahi Division Forest Office

Local Community

Madan-Ashrit CFUG- 2 participants Lalbandi Municipality ward 13, Patharkot village, Sarlahi

Civil Society

Pabitra BK, Chair, FECOFUN, Sarlahi

Uttar Kumar Mainali, Member, FECOFUN Central Committee

VI. Ministry of Forest and Environment Kathmandu

Badri Raj Dhungana, Chief, MoFE Planning Division, Kathmandu, Kathmandu

Deepa Oli, Under Secretary, MoFE Planning Division