

Evaluation Findings HIGHLIGHTS 2022-25

An Evaluation Report by the GEF IEO

2025 April

Evaluation Findings Highlights 2022–25

April 2025



© 2025 Global Environment Facility Independent Evaluation Office 1818 H Street, NW, Washington, DC 20433 Internet: <u>www.gefieo.org/</u>; email: <u>gefevaluation@thegef.org</u>

Reproduction permitted provided source is acknowledged. Please cite the work as follows: Global Environment Facility Independent Evaluation Office (GEF IEO), Evaluation Findings Highlights 2022-25, Washington, DC: GEF IEO, 2025.

The findings, interpretations, and conclusions in this report are those of the authors and do not necessarily reflect the views of the GEF Council or the governments it represents.

This report was prepared for the first GEF-9 replenishment meeting, May 2025.

ISBN: 978-1-64233-065-6

Editing, design, and layout: Nita Congress

All dollar amounts are U.S. dollars unless otherwise indicated.

GEF replenishment periods: Pilot phase: 1991–94; GEF-1: 1995–98; GEF-2: 1999–2002; GEF-3: 2003–06; GEF-4: 2006–10; GEF-5: 2010–14; GEF-6: 2014–18; GEF-7: 2018–22; GEF-8: 2022–26

Contents

Acknowle	edgments	. iv
Abbrevia	tions	\
0: Summ	ary	. vi
1: Introdu	iction	1
1.1	Background	1
1.2	Sources of evidence	2
1.3	Approach and methods	3
2: The GE	F portfolio	1
3: GEF pe	rformance	7
3.1	Portfolio performance	7
3.2	Socioeconomic co-benefits	. 14
3.3	Performance at the regional/country level	. 17
4: Focal a	area performance	.23
4.1	Biodiversity	.23
4.2	Climate change adaptation	.28
4.3	Climate change mitigation	.34
4.4	International waters	.38
4.5	Land degradation	.44
4.6	Chemicals and waste	.50

5: Integrat	ed programming55
5.1	Historical overview
5.2	Portfolio
5.3	Program governance
5.4	Efficiency of implementation
5.5	Performance and effectiveness
5.6	Private sector engagement
5.7	Knowledge management73
5.8	Nature-based solutions74
6: Policy ar	nd institutional framework
6.1	GEF policies and safeguards79
6.2	Financing, cofinancing, and efficiency
6.3	Institutional framework92
Annex: OP	S8 approach paper105
Reference	s135

Acknowledgments

his report could not have been prepared without the timely and invaluable assistance of the task team leaders and staff of the Independent Evaluation Office (IEO) of the Global Environment Facility (GEF). They provided documentation and verified the information presented here, which is drawn largely from draft and final GEF IEO evaluation reports.

The IEO would like to acknowledge the time and insights generously provided by the GEF Agencies, the GEF Scientific and Technical Advisory Panel, the GEF Secretariat, the operational and country focal points, the GEF Council, and civil society. The IEO would also like to thank members of the Eighth Comprehensive Evaluation of the GEF (OPS8) advisory panel: Monika Weber-Fahr, Vinod Thomas, Stefan Schwager, Patricia Rogers, and Hasan Tuluy, for their inputs at this stage.

IEO team

Director: Geeta Batra Chief Evaluator and Deputy Director: Fabrizio Felloni Senior Evaluation Officer: Anupam Anand Senior Evaluation Officer: Carlo Carugi Senior Evaluation Officer: Jeneen Garcia Senior Evaluation Officer: Neeraj Negi Senior Evaluation Officer: Anna Viggh **Evaluation Officer:** Silke Heuser **Evaluation Officer:** Mitsuaki Hirai Evaluation Officer: Kate Steingraber Evaluation Officer: Kseniya Temnenko Evaluation Analyst: Mariana Calderon Evaluation Analyst: Rasec Niembro Evaluation Analyst: Eki Ramadhan Evaluation Analyst: Peixuan Zhou Data Scientist: Thanicha Ruangmas Senior Operations Officer: Juan Jose Portillo Information Analyst: Francisco Grahammer Knowledge Management Officer: James Joseph Sylvester-Paz Senior Executive Assistant: Manuella Koukoui Chief Editor: Nita Congress

Abbreviations

- ABNJ areas beyond national jurisdiction
- ADB Asian Development Bank
- AFOLU agriculture, forestry and other land use
- Al artificial intelligence
- CACILM Central Asian Initiative for Land Management
 - **CBA** community-based approach
 - **CEO** Chief Executive Officer
 - **CES** Country Engagement Strategy
- CIEWS climate information and early warning systems
- **COP** conference of the parties
- **CSO** civil society organization
- CSP Country Support Program
- FAO Food and Agriculture Organization of the United Nations
- FCV fragile, conflict-affected, and violent
- FOLUR Food, Land Use, and Restoration Impact Program
 - GCF Green Climate Fund
 - GEF Global Environment Facility
- GloMEEP Global Maritime Energy Efficiency Partnerships
 - GWP Global Wildlife Program
 - IAP integrated approach pilot
 - IEO Independent Evaluation Office
 - IFAD International Fund for Agricultural Development
 - IPLC indigenous peoples and local communities
 - IUCN International Union for Conservation of Nature
- KM&L knowledge management and learning LDC least developed country LDCF Least Developed Countries Fund M&E monitoring and evaluation NbS nature-based solutions NGI nongrant instrument OPS comprehensive evaluation of the GEF (previously overall performance study) PIF project identification form PIR project implementation report POP persistent organic pollutant R2R ridge to reef SAP strategic action program SCCF Special Climate Change Fund SDG Sustainable Development Goal SFM sustainable forest management SGP Small Grants Programme SIDS small island developing states SLM sustainable land management **STAP** Scientific and Technical Advisory Panel STAR System for Transparent Allocation of Resources transboundary diagnostic analysis TDA United Nations UN UNCCD United Nations Convention to Combat Desertification UNDP United Nations Development Programme UNEP United Nations Environment Programme UNFCCC United Nations Framework Convention on **Climate Change** World Wildlife Fund WWF

Summary

0.1 Background and context

1. This report presents a summary of key findings from completed and ongoing evaluations conducted by the Independent Evaluation Office (IEO) of the Global Environment Facility (GEF), prepared to inform the first meeting of negotiations for the GEF's ninth replenishment.1 These evaluations form the evidence base for the Eighth Comprehensive Evaluation of the GEF (OPS8), providing insights into areas of strong performance and opportunities for improvement. The findings aim to support efforts to enhance the GEF's effectiveness in delivering global environmental benefits and to inform strategic programming and policy directions for the next replenishment period in an increasingly complex operating context. The full OPS8 report will be released in September 2025, ahead of the second replenishment meeting. This overview summarizes the key findings that are elaborated in the sections that follow.

2. In a challenging global context, GEF-9 presents a critical opportunity for action. The GEF's ninth replenishment comes at a time of mounting global crises. Despite gains in area-based biodiversity conservation, renewable energy, and sustainable agriculture, the overall trajectory of environmental degradation is worsening. In 2024, global temperatures surpassed the 1.5°C

threshold, fueling extreme weather events, ocean pollution, and biodiversity loss. The Stockholm Resilience Centre found that six of nine planetary boundaries had been breached in 2023, pushing humanity beyond the safe limits required for Earth's stability.² These escalating environmental threats are compounded by geopolitical conflict, trade tensions, and economic instability—factors that undermine development finance and global cooperation. There is an urgent need for transformative, integrated, and inclusive action to answer to this situation.

3. Amid intensifying global environmental pressures, the GEF stands uniquely positioned to drive transformative action. As the financial mechanism for major multilateral environmental agreements—and with over three decades of proven experience delivering high-impact, performance-driven interventions—the GEF fosters innovation and encourages measured risk-taking. Grounded in strong governance, policy, and institutional frameworks, and working through a diverse and capable network of 18 implementing Agencies, the GEF leverages its catalytic funding model to mobilize additional resources. Its ability to work across sectors and scales helps it respond more effectively to the world's pressing and interconnected environmental issues.

¹This document is mostly based on findings from completed evaluations. Evidence from ongoing evaluations is preliminary and will be confirmed in preparation for the full report.

² Stockholm Resilience Centre, <u>Planetary boundaries</u> web page.

0.2 Findings

A. The GEF portfolio

4. The GEF's portfolio reflects its long-standing role as a major source of financing for global environmental action. As of March 2025, the GEF has provided a total of \$26.2 billion in funding for more than 6,000 projects across its family of funds. The GEF Trust Fund remains the primary financing instrument, accounting for \$23.2 billion across 5,460 projects. During GEF-8, \$3.6 billion has been approved for 479 projects—representing 71 percent of the \$5.1 billion target allocation. Across all GEF-managed trust funds, 6 percent of projects are currently in the preparation phase, with approximately 30 percent under implementation. To date, 3,889 projects have been completed, reflecting the GEF's continued commitment to delivering global environmental benefits at scale.

5. Shifts in the regional and thematic allocation of GEF resources under GEF-8 reflect evolving priorities and strategic realignments. Recent replenishment periods have brought noticeable changes in regional distribution. While Africa and Asia have historically received the largest shares of GEF financing, in GEF-8, Latin America and the Caribbean increased its share from 22 percent (prior to GEF-5) to 26 percent, and Africa rose slightly-from 25 percent to 27 percent-over the same period. Meanwhile, Asia's share declined from 26 percent to 20 percent, and Europe and Central Asia's dropped from 9 percent to 5 percent. Global projects also saw an increase, rising from 16 percent to 19 percent over the same period. Although these shifts may appear modest, they reflect a rebalancing in line with current strategic priorities. Support for small Island developing states (SIDS) and least developed countries (LDCs) also increased, reinforcing the GEF's focus on vulnerable countries.

6. Across focal areas, allocations have adapted to reflect growing global needs. Biodiversity remains the largest investment area, rising from 29 percent in GEF-5

to 39 percent in GEF-8. Funding for chemicals and waste and land degradation has also increased, with the latter showing a strong focus on Africa. Support for international waters declined slightly, and climate change funding under the GEF Trust Fund has decreased, although adaptation continues to be supported through the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF), with an increase in funding since GEF-6. Programmatic approaches have gained significant prominence in GEF-8, now accounting for nearly 60 percent of the portfolio at this stage of the GEF-8 programming cycle—highlighting a continued shift toward more integrated, systems-based solutions.

7. At the institutional level, the distribution of GEF resources across Agencies has also evolved. While the United Nations Development Programme (UNDP), the World Bank, and the United Nations Environment Programme have historically managed the majority of GEF Trust Fund resources, GEF-8 reveals notable changes. Specifically, comparing Agency shares for the replenishment periods up to GEF-4 with GEF-8, UNDP's share declined from 36 percent to 29 percent, and the World Bank's has fallen sharply from 46 percent to just 8 percent. In contrast, the share for the Food and Agriculture Organization of the United Nations (FAO) has grown from 1 percent to 17 percent, reflecting its increasing engagement in GEF operations. Multilateral development banks continue to play a key role in the GEF, consistently achieving higher cofinancing ratios than other Agencies; this highlights their strategic importance in leveraging GEF resources to scale impact.

B. Relevance

8. **GEF programming continues to demonstrate strong alignment with global environmental conventions and national priorities.** Across all focal areas, the GEF has consistently aligned its support with the mandates of multilateral environmental agreements, as well as with national priorities and country-driven strategies. Biodiversity interventions show strong adherence to the Convention on Biological Diversity and actively support implementation of the post-2020 Global Biodiversity Framework. Climate change mitigation efforts reflect evolving United Nations Framework Convention on Climate Change guidance and increasingly emphasize enabling environments. International waters projects remain consistent with regional and national development priorities and, more recently, align with the emerging framework of the Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction (BBNJ Agreement). Land degradation projects align closely with the objectives of the United Nations Convention to Combat Desertification, while chemicals and waste programming is guided by the Stockholm and Minamata Conventions.

9. The System for Transparent Allocation of Resources (STAR) plays a central role in enabling country ownership and long-term planning within the GEF framework. Through the STAR, eligible countries receive a predictable allocation at the start of each GEF cycle, with flexibility to reallocate funds across STAR-eligible focal areas based on national priorities. This predictability has supported steady grant utilization—64 percent of STAR allocations had been used by the midpoint of GEF-8, consistent with previous cycles.

10. The STAR's share of total GEF funding has gradually declined, dropping from 53 percent in GEF-6 to 46 percent in GEF-8. This decline is largely due to reduced climate change allocations and a growing share directed to set-asides, especially for integrated programming. While the STAR offers predictability once announced, it also has its limitations for many users: few understand how allocations are calculated, and the formula is too complex for many countries to apply or interpret on their own. Survey responses reflect this, with countries rating the fairness of the STAR significantly lower

than internal stakeholders, citing concerns such as disadvantages for countries with weaker institutions and the exclusion of more recently added environmental conventions.

C. Performance

11. **GEF project performance remains strong overall, with consistent outcome achievement across replenishment periods and notable results across focal areas.** The outcomes of approximately 81 percent of 2,384 completed projects with terminal evaluations are rated in the satisfactory range, with particularly strong performance in international waters and chemicals and waste. Regional variation is evident: projects in Asia and Europe and Central Asia generally perform better, while those in Africa, Latin America and the Caribbean, SIDS, and fragile and conflict-affected situations face greater implementation challenges. Stand-alone projects have shown slightly higher outcome ratings than programmatic child projects.

12. Across focal areas, GEF interventions have contributed to biodiversity protection, improved land management, and strengthened regulatory frameworks. More than half of GEF-6 and GEF-7 projects achieved some form of broader adoption and met at least 70 percent of their environmental targets at larger scales than older projects. Behavior change plays a critical role in influencing outcomes and sustainability, such as in the Conservation and Sustainable Use of Globally Important Agro-biodiversity (GEF ID 6943; UNDP) project in Azerbaijan, where three times the number of targeted households learned to plant native crops, leading to the restoration of more than 1,000 hectares of degraded land. At the same time, challenges remain, including uneven innovation uptake and limited private sector engagement.

13. At the country level, the GEF's interventions in country clusters of drylands, the Lower Mekong, and Pacific SIDS have become increasingly aligned with regional ecological priorities

and national development goals, evolving from sectoral efforts to integrated, landscape-scale approaches. Environmental successes are notable-such as land restoration, improved water management, and coral reef recovery-particularly when embedded in national strategies and supported by local institutions. Regional sustainability of project outcomes remains an area for improvement, with a third of projects rated as unlikely to sustain outcomes at completion. Projects in chemicals and waste show the highest sustainability, while land degradation projects and those implemented in Africa and LDCs face elevated risks. Strong implementation and execution-each rated satisfactory in over 80 percent of projectsare closely linked to outcome success and long-term impact. Other important factors contributing to stronger performance and sustainability include robust community engagement, cross-sectoral integration, alignment with national priorities, and the strengthening of institutional and policy frameworks. Long-term financial viability remained a challenge because of continued reliance on external funding and limited integration with national monitoring systems.

14. GEF initiatives increasingly serve as a foundation for scaling through other funds, particularly the Green Climate Fund (GCF). A recent review of 253 GCF-funded projects found that 17 percent of the projects explicitly built on GEF-supported interventions by scaling up, replicating, mainstreaming, or sustaining them; another 4 percent identified the GEF as a cofinancier. Examples include the GCF's project Climate Resilient Food Security for Farming Households across the Federated States of Micronesia project, which builds upon prior initiatives implemented through the GEF's Small Grants Programme (SGP); these aimed to enhance adaptation capacity and execute subgrants via nongovernmental organizations. The World Bank's Sava and Drina Rivers Corridors Integrated Development Program is a regional initiative in the Western Balkans that seeks to strengthen transboundary water cooperation and improve flood protection in the corridor, and

encompassing Bosnia and Herzegovina, Montenegro, and Serbia. The effort builds on enabling conditions established by earlier World Bank-implemented GEF projects in the region.

15. GEF projects have delivered a broad range of socioeconomic co-benefits alongside environmental outcomes. These co-benefits include improved livelihoods, food security, income generation, local governance, and community cohesion-particularly for women, youth, and indigenous peoples and local communities. These benefits have often led to increased productivity, diversified income streams, and greater community agency in natural resource management. Such outcomes have typically emerged when ecological goals were paired with participatory governance. However, these gains have frequently been limited in scale and constrained by short project durations, weak monitoring systems, and the absence of clearly defined implementation mechanisms. Limited country-level coordination and the lack of in-country GEF presence have further restricted the potential for scaling and sustaining impact. While lead Agencies and national partners are well positioned to support collaboration, efforts are not consistently systematized, and opportunities for integration are often missed. GEF-9 presents a strategic opportunity to address these challenges by strengthening coordination, institutionalizing collaboration and enhancing the design, delivery, and tracking of socioeconomic co-benefits to ensure long-term relevance and impact.

D. Integrated programming

16. The GEF's integrated programming offers a unique platform to deliver transformational impact by addressing interconnected environmental challenges through coordinated, cross-sectoral approaches. Introduced in GEF-6 as integrated approach pilots, integrated programming initiatives reflect the GEF's distinctive ability to align efforts across multiple focal areas—including biodiversity, climate change, international waters, land degradation, and chemicals and waste—while supporting country-driven priorities and advancing the objectives of multiple environmental conventions.

17. The model has expanded significantly over successive replenishment periods, evolving into impact programs in GEF-7 and broadening further under GEF-8. Integrated programming now accounts for 32 percent of targeted allocations-up from 7 percent in GEF-6-and engage 98 countries, which is nearly double the number from earlier periods. Participation among LDCs increased from 8 to 31, and among SIDS from 0 to 26. Nine of the 11 GEF-8 integrated programs address at least three focal areas, and implementation spans seven GEF Agencies. By engaging a broad range of stakeholders-including Agencies, local governments, civil society, and the private sector-these programs promote collaborative implementation and are designed to mobilize additional investment through cofinancing. While most remain in early implementation stages, initial evidence from the Global Wildlife, Sustainable Forest Management, Food Systems, and Sustainable Cities programs offers valuable insights into their emerging contributions and potential impact.

18. The GEF's integrated programming has evolved from pilot initiatives into a more structured and strategic programming modality. The integrated approach pilots initially launched in GEF-6 supported multiple focal area objectives-spanning biodiversity, climate change, land degradation, and international waterswhile aligning with national strategies and global environmental conventions. Over successive replenishment cycles, the integrated programming model has matured significantly. GEF-7's impact programs introduced clearer theories of change, competitive country and Agency selection, and stronger support for knowledge platforms. GEF-8 has further expanded thematic coverage-addressing emerging issues such as plastic pollution and net-zero transitionswhile maintaining the programmatic structure of global coordination platforms and country-level child projects. Nature-based solutions are now embedded across most GEF-8 integrated programs, through interventions such as ecosystem-based adaptation, sustainable land and forest management, and regenerative food systems.

19. Early experiences with integrated programming have demonstrated tangible environmental outcomes, with sustainability and private sector engagement emerging as areas for further attention. Performance from the limited set of closed projects indicates that the programs have contributed to environmental gains, particularly in ecosystem management and conservation. They have contributed to co-benefits by promoting local livelihoods, governance, gender, and indigenous inclusion-especially when communities were involved in decision-making. For example, the SFM projects contributed to bringing 78 million hectares under improved management and 5.6 million hectares under formal protection. The Global Wildlife Program supported enforcement reforms, leading countries such as Bhutan, Mozambique, and Thailand to institutionalize dedicated wildlife crime units. Integrated programs performed strongly where governance structures were led by capable agencies with clear mandates. However, sustainability in programs and in mainstreaming nature-based solutions remains fragile due to weak policy integration, limited postproject financing, and high institutional turnover. Private sector engagement has also been uneven, hindered by regulatory uncertainty, lack of financial incentives, capacity constraints, and limited partnerships with market actors.

20. As integrated programming continues to grow, effective knowledge management and coordination are increasingly critical to sustaining impact and avoiding fragmentation. Global platforms such as the Food, Land Use and Restoration Impact Program and the Global Wildlife Program serve as hubs for learning and collaboration, and have developed promising knowledge tools-from standardized indicators to toolkits on enforcement and biodiversity-based enterprises-yet implementation remains uneven. Many programs lack systematic learning processes and adequate budgets for knowledge sharing, particularly at the country level. At the same time, the scale and thematic scope of integrated programs have expanded, while average funding per program and per child project has declined-by 20 percent between GEF-6 and GEF-8even as the number of child projects per program has, on average, grown-from 10 to 18. This trend amplifies coordination and oversight challenges across multiple stakeholders, Agencies, and countries. Although implementation timelines for child projects are comparable to stand-alone initiatives, emerging evidence points to the increasing complexity of inter-Agency coordination and financial management, especially in multicountry settings. Strengthening design, streamlining delivery, and enhancing learning systems will be essential to achieving greater coherence, minimizing delays, and improving outcomes. Ultimately, the effectiveness of integrated programs will depend on their ability to demonstrate clear additionality both through measurable results and the generation of practical, transferable knowledge.

0.3 Partnerships and policies

A. Partnerships

21. The strength of the GEF partnership lies in its extensive network of engaged actors. Working with 18 accredited Agencies—including United Nations (UN) bodies, multilateral development banks, and international nongovernmental organizations—the GEF offers countries a wide range of implementation partners, each with distinct strengths. UN agencies bring technical expertise and convention alignment; multilateral development banks provide financial scale, policy leverage, and engagement with key decision-making ministries; and the nongovernmental organizations offer innovation, inclusion, and local access. This broad network also includes donors, country focal points, civil society, the private sector, and research institutions, all contributing to project design, delivery, and knowledge generation. The GEF's country-driven approach empowers national focal points to guide GEF Agency selection, reinforcing partnerships with Agencies embedded in national systems. These complementary roles enable GEF to deliver across levels and sectors.

22. Competition among Agencies, particularly for lead roles in integrated programs, can challenge collaboration, and stakeholder feedback points to inconsistent cooperation. Additionally, the complex accreditation process and lack of regular performance assessments limit transparency and hinder efforts to optimize Agency contributions. Strengthening performance monitoring could help improve Agency effectiveness and enhance project outcomes.

23. The GEF is recognized for its strong foundation in science, supported by the Scientific and Technical Advisory Panel (STAP), which provides independent advice to enhance the technical quality and relevance of GEF investments. Based on responses to a survey conducted by the IEO, the GEF is respected for its attention to science. The STAP reviews all full-size projects and global components of integrated programs, playing a key role in guiding policies, strategies, and project design. Strengthening accountability and tracking the uptake of STAP recommendations could further enhance its impact. The GEF also engages with the broader scientific community-particularly through technical advisory meetings during replenishment cycles-to ensure its strategic direction is informed by the latest scientific insights.

B. Policies on safeguards, gender, and inclusion

24. The GEF's safeguards and inclusion frameworks are robust, yet implementation difficulties remain. The GEF maintains a strong environmental and social safe-guards system aligned with international good practice. Since adopting its Policy on Environmental and Social Safeguards in 2019, compliance with risk screening has improved. However, risks related to disadvantaged groups—particularly persons with disabilities, indigenous peoples, and women—are the least identified in project documentation. While the GEF applies its 2012 Principles and Guidelines for Engagement with Indigenous Peoples, it does not yet have a related stand-alone policy.

25. The GEF-8 strategy advanced a "whole-of-society" inclusion approach and expanded engagement with historically marginalized groups. Advisory bodies such as the GEF Gender Partnership and the Indigenous Peoples Advisory Group provide well-regarded technical expertise on inclusion. Gender integration has significantly improved across project design, with nearly 100 percent consideration of gender in projects and increasing use of gender action plans and sex-disaggregated indicators. However, inclusion beyond gender remains inconsistent, and meaningful engagement throughout the project cycle is limited by short preparation windows, budget constraints, and the absence of dedicated indicators. The GEF-Civil Society Organization (CSO) Network remains underutilized, and past recommendations for reform have not been fully acted on or implemented.

26. Community-based approaches and inclusive practices are central to sustainable results, but deeper local empowerment is needed. GEF-supported community-based approaches have demonstrated strong environmental and socioeconomic outcomes, particularly where local actors are empowered in planning and implementation. Community-based approaches from GEF-5 received high performance ratings, and initiatives like Indonesia's Citarum Watershed Management and Biodiversity Conservation Project (GEF ID 3279, Asian Development Bank) illustrate how activities can be sustained beyond project closure. Despite this, only a minority of recent projects fully applied good practices around accountability, participation, and resource devolution. Women, youth, and indigenous peoples and local communities are increasingly acknowledged in project design, but their participation in leadership and decision-making remains limited. IEO evaluations confirm that projects with well-integrated inclusion efforts are more likely to achieve performance targets. As GEF-9 approaches, a critical opportunity exists to deepen inclusive implementation-by supporting local leadership, improving monitoring systems, and integrating inclusive practices throughout the project life cycle.

27. Private sector engagement is gaining traction, with GEF-8 initiatives supporting partnerships, in sustainable food systems, nature-based solutions, and the blue economy; nonetheless, overall engagement remains below potential. Private sector engagement remains constrained by several factors: the GEF's institutional complexity, its limited internal capacity, and the mismatch between private sector timelines and its own lengthy project preparation and implementation time frames. Additionally, limited Agency and country understanding of the application of the GEF's private sector engagement strategy and incentives for Agencies to develop private sector-oriented proposals restrict broader participation. Although GEF-8 introduces new models and tools to strengthen engagement, achieving lasting impact will require more strategic alignment, stronger enabling conditions, and deliberate partnerships with key market actors across sectors and value chains. To unlock greater private sector involvement, the GEF will need to adopt more flexible funding instruments, clarify its value proposition, strengthen operational readiness, and support greater integration of nongrant instruments (NGIs) into national programming frameworks.

C. Policy coherence

28. The GEF has taken steps to promote policy coherence as a strategic priority, aiming to align environmental objectives with broader development goals across government sectors. The 2023 approval of a new policy coherence strategy-Enhancing Policy Coherence through GEF Operations-marked a shift toward more deliberate integration of environmental considerations into national and sectoral planning. This approach is evident in the evolution of the GEF's integrated programs, which now include mechanisms to align policies across local, national, and regional levels and link them to financing instruments. The GEF has also supported cross-sectoral alignment through national action plans tied to the environmental conventions, as well as initiatives like sustainable land and water management. Despite these efforts, coherence initiatives have typically emphasized mainstreaming over deeper institutional reform, with explicit harmonization of policies still limited.

29. Initial outcomes show that GEF-supported reforms can improve coordination, but progress is uneven and highly context-dependent. Positive examples include integrated water resource management in Azerbaijan and Georgia, and clarifying institutional roles in wildlife law enforcement in the Philippines. However, in countries like Malawi and Uruguay, limited cross-disciplinary capacity and political support have constrained impact. While the GEF is well positioned to serve as a neutral facilitator of intersectoral collaboration, a lack of shared understanding of policy coherence and limited engagement with finance and planning ministries hamper effectiveness. Multilateral development banks, with their experience in economic policy reform and access to ministries beyond the environment, are well suited to lead on this agenda within the GEF partnership. Leveraging their comparative advantage, alongside stronger strategic use of integrated programming and sustained stakeholder engagement, will be key to advancing policy coherence goals in GEF-9.

0.4 Financing and operational effectiveness

A. Replenishment trends and financing stability

30. The GEF's funding base has narrowed over recent replenishment periods, increasing risks to financial stability amid rising global demands. The number of donor countries declined from 33 in GEF-5 to 29 in GEF-8, with donor recipient participation decreasing from 8 to 6 countries. Côte d'Ivoire is the only new donor country since GEF-5, although it had previously contributed to GEF-1 through GEF-3. The top five donors in the GEF-8 replenishment period accounted for more than 64 percent of the total, underscoring concentration risks. While GEF-8 secured \$5.3 billion-a 30 percent nominal increase over GEF-7-inflation-adjusted figures reveal a 7 percent decline compared to GEF-5. With shifting geopolitical priorities and growing environmental financing needs, expanding the donor base beyond traditional contributors is critical to sustaining impact and supporting an increasingly ambitious agenda.

B. Cofinancing and blended finance

31. Cofinancing remains a core strength of the GEF model, enabling significant leverage, although challenges around realization and transparency persist. Between GEF-6 and GEF-7, projects attracted an average of \$7.50 for every GEF dollar across all GEF-managed trust funds in GEF-8, although realization varies across contexts. Only half of the projects fully met their cofinancing targets, with lower realization in LDCs and SIDS. The GEF's flexible policy accepts a range of contributions—grants, loans, guarantees, equity, and in-kind inputs—allowing cofinancing packages to be appraised based on project characteristics and country context. While this broadens participation and increases overall cofinancing levels, it raises concerns about quality, particularly because of the inclusion of parallel financing and noncash contributions. A clearer definition of cofinancing, along with rigorous tracking during implementation, is needed to ensure that cofinancing commitments enhance GEF investments and to strengthen confidence in reported cofinancing data.

32. While blended finance has expanded private sector engagement within the GEF portfolio, its full potential remains underutilized because of persistent operational and structural constraints. Since inception, the GEF has approved 110 projects utilizing NGIs, with a total investment of approximately \$976.8 million to support innovative tools such as convertible and performance-based grants that de-risk investments and mobilize private capital. Through its NGI Program, the GEF has mobilized around \$10.6 billion in cofinancing. Notable initiatives include the Natural Capital Fund promoting climate-smart agriculture, the Yield Lab Opportunity Fund for sustainable food systems, the Brazil Living Amazon Mechanism, and the Rhino Bond, leveraging capital markets for conservation. The current \$15 million cap on NGI projects further limits scalability, while limited country-level uptake reflects hesitancy and lack of familiarity with NGI modalities. To unlock the full potential of NGIs, the GEF will need to deepen collaboration with multilateral development banks, leveraging their financial expertise, risk appetite, and access to capital markets to scale private sector engagement and innovative financing solutions.

C. Administrative and operational efficiency

33. The GEF ranks as the most efficient among vertical climate funds such as the GCF, the Adaptation Fund, and the Climate Investment Funds in terms of administrative costs/ financing ratios. Administrative costs accounted for between 1 and 18 percent of total expenditures across various funds, with the GCF recording the highest at 18 percent. With an administrative cost/ financing ratio of 3.7 percent, the GEF maintained a relatively low overhead compared to several other funds, highlighting its operational efficiency. The GEF's disbursement/approval ratio is 76 percent, compared to 31 percent for the GCF, and lower ratios for other vertical climate funds (G20 SFWG 2024). Agency fees for the GEF are about 9 percent, which is in line with other climate funds.

34. While the GEF has made measurable progress in improving operational efficiency over the past four years, important challenges in the activity cycle remain. Notably, the approval of project identification forms (PIFs) for stand-alone full-size projects has remained efficient, and the median time from PIF approval to endorsement by the Chief Executive Officer (CEO) has decreased from 22 months (for the 2015-18 cohort) to 19 months in more recent cohorts. Despite these gains, challenges remain. Only 50 percent of medium-size projects approved following the two-step procedure were approved within the target time frame of 12 months. For full-size projects, 48 percent were endorsed within the target time frame of 18 months.

35. The increasing number of GEF financing windows has added operational complexity for countries and Agencies. The GEF now operates five competitive windows under the GEF Trust Fund-the Blended Finance Program, the Inclusive GEF Assembly Challenge Program, the Innovation Window, the SGP CSO Challenge Program, and the STAR Competitive Window for Policy Coherence-each with distinct objectives and application procedures. Additional funding sources and mechanisms, such as the Global Biodiversity Framework Fund and the Gustavo Fonseca Youth Conservation Leadership Program, have separate selection and implementation processes. Further, the Challenge Program for Adaptation Innovation operates as a competitive funding window under the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF)-again with its own selection and implementation processes.

36. Civil society and community-based organizations currently access GEF resources through a growing number of entry points. These include the SGP (implemented by UNDP, FAO, and Conservation International), the SGP CSO Challenge Program, the SGP Microfinance Initiative (to be launched), and the Inclusive Conservation Initiative. While this expansion reflects the GEF's evolving engagement and growing inclusivity, each mechanism has distinct timelines, requirements, and procedures, creating a fragmented landscape for recipients and Agencies.

37. This proliferation of funding channels poses coordination and access challenges, complicating project development and increasing transaction costs. Streamlining and consolidating these mechanisms would allow for more efficient management of demand, enable the GEF Secretariat to better allocate resources across programs, and reduce inconsistencies in policy and operational standards. A simplified structure would also help minimize delays, lower administrative burdens, and support more coherent delivery of environmental outcomes at the country level.

0.5 Innovation and risk

A. Innovation

38. The GEF has broadened its support for innovative technologies across its portfolio; fully realizing their transformative potential will require a more strategic, proactive, and systemwide approach. The GEF has expanded its support for technological innovation from GEF-6 through GEF-8, with approximately 120 technologies identified in its portfolio. These range from highly specialized innovations—such as artificial intelligence (AI) and green hydrogen—to broader platforms including remote sensing, digital tools, and nature-based solutions. A recent portfolio review of 2,016 GEF projects indicated that 63 percent incorporate technology components, 31 percent support broader, cross-cutting innovations, and 10 percent include specialized or emerging technologies. Broader technologies such as digital platforms and nature-based solutions have seen the most uptake. Potentially disruptive innovations such as blockchain and nanotechnology are largely absent, despite their increasing relevance in global markets and expertise in GEF Agencies. This underrepresentation reflects systemic constraints, including a demand-driven programming model and the absence of a strategic approach to guide technology identification and deployment.

39. Private sector participation is significantly higher in technology-enabled projects-reported at 67 percent-and plays a critical role in scaling innovation. However, such engagement remains predominantly project-specific. To fully realize the transformative potential of technological innovation, a more strategic and systemwide approach is required. This entails enhancing enabling environments through supportive national policies, strengthening institutional capacities across Agencies, and leveraging guidance from the STAP. Broader adoption of innovation is further constrained by inconsistent institutional readiness, limited appetite for risk, and the absence of a systematic approach to identifying innovations that anticipate future oppor-Strengthening strategic partnerships, tunities. aligning risk appetite with bold technological ambition, and investing in early stage innovation will be key to advancing the GEF's innovation agenda in GEF-9.

B. Portfolio risk

40. As the GEF strives for greater transformational impact, embracing calculated risk has become a strategic priority yet operationalizing this shift remains a work in progress. The adoption of a risk appetite framework at the 66th GEF Council meeting marks an important step toward guiding Agencies in navigating and managing higher-risk investments. While most GEF projects remain low risk and achieve satisfactory results, high-risk projects—though fewer—demonstrate greater variability in outcomes and, on average, lower ratings. These high-risk projects include investments in fragile contexts, emerging clean technologies, and forest protection in areas prone to illegal activity. To shift the overall portfolio toward more deliberate risk-taking, and aligning it with bold technological ambition, the GEF must clearly define acceptable risk levels, assign ownership, and align internal processes accordingly. Success will depend on tailored support for Agencies, recognizing that each operates within a distinct institutional culture and incentive structures that shape their capacity and appetite for risk.

0.6 Country engagement, results, and learning systems

A. The Country Engagement Strategy

41. The GEF introduced a Country Engagement Strategy (CES) in 2022 to streamline and coordinate country-level engagement under one framework, and replacing the earlier Country Support Program. It aimed to support countries in making informed decisions on GEF resource use and improve alignment with national and global environmental goals.

42. While the CES brings together a variety of tools—including technical dialogues, knowledge-sharing activities, and stakeholder engagement programs—progress on the CES agenda has been mixed. As of late 2024, implementation of key activities such as upstream dialogues, capacity support for focal points, and the Knowledge Management and Learning (KM&L) Strategy remained limited. Only 40 percent of the CES budget had been used, and some activities had not been started. The number of national dialogues was lower than in the previous replenishment period, partly because of competing demands from integrated program rollouts and the demand-driven nature of these dialogues.

43. The CES has supported portfolio alignment and informed country programming; however, coordination with other funds has seen limited progress. Workshops and national dialogues have supported project prioritization and increased awareness of GEF policies, particularly in countries with more established coordination mechanisms. In some cases, national dialogues took place too late to meaningfully influence programming decisions, and coordination with other climate and environment funds has occurred in only a few pilot cases. While CES events have attracted a diverse range of participants, engagement-especially beyond government agencies-has been uneven. Strengthening execution capacity, increasing support for SIDS, and improving monitoring systems will be important to make the CES more effective in GEF-9.

B. Results-based management

44. The GEF's results-based management system and the GEF Portal show marked improvements over GEF-7, with opportunities to strengthen reporting on integrated programs and data access, respectively. During GEF-8, the GEF made important progress in strengthening its results-based management system, including improvements to the GEF Portal, clearer indicator guidance, and enhanced self-evaluation practices. The Portal now supports greater alignment and automation, although user experience challenges and limited access for some stakeholders remain. Updated guidance and templates have improved midterm review tracking and lesson capture, though timeliness and consistency of midterm reviews and terminal evaluations vary by Agency. While measurement of core indicators has improved, the framework still struggles to capture long-term, transformative change and underreports socioeconomic co-benefits. Operational efficiency metrics also need refinement to better reflect performance trends. Self-evaluation candor remains a concern, with discrepancies found between internal ratings and independent validations. In fragile and conflict-affected contexts, the current results-based management framework lacks appropriate tools to address conflict sensitivity and sociopolitical outcomes, underscoring the need for tailored indicators and monitoring practices. Overall, while notable gains have been made, further improvements are needed to enhance data quality, transparency, and the system's ability to support adaptive management and transformational impact.

C. Knowledge management and learning

45. The GEF is advancing as a knowledge and learning institution, with opportunities for further strengthening. The GEF has taken important steps to strengthen its knowledge management and learning systems, including the rollout of a KM&L Strategy which introduced a structured, systemwide approach. Built around the pillars of people, process, and systems, the strategy has made progress in capturing and curating knowledge, with over 1,700 lessons logged and knowledge platforms established across key integrated programs. Learning tools such as microlearning modules and internal learning events are gaining traction, and the development of communities of practice is under way. Gaps remain in project-to-project knowledge exchange, country-level sharing, and application of lessons to design. Moving into GEF-9, sharper prioritization, improved tracking, and consistent use of lessons in programming will be essential to realizing the GEF's vision of becoming a fully adaptive, learning-driven institution.

0.7 Conclusion

46. The GEF continues to serve as a key partner to countries in advancing global environmental benefits, with a unique ability to align national priorities with multilateral environmental agreements through integrated, cross-sectoral programming. Its competitive advantage lies in its broad-based partnerships with 18 Agencies, a strong track record of performance, and a catalytic funding model that mobilizes complementary financial resources. The GEF also benefits from an efficient administrative cost structure and a solid foundation of technical and policy expertise, enabling it to operate effectively in complex and dynamic contexts. Ongoing enhancements in results tracking, gender integration, and safeguards compliance further underscore the GEF's commitment to accountability, transparency, and best practice.

47. **GEF-9** is expected to adopt a more strategic and focused approach to ensure that limited resources are directed toward areas with the greatest potential for impact. In an increasingly constrained funding environment, selectivity will be critical—focusing on interventions that deliver systemic benefits, long-term sustainability, and strong alignment with both national priorities and global environmental objectives.

48. As the GEF's delivery model continues to evolve, attention may turn to further streamlining financing windows and activity cycle processes to enhance efficiency and improve accessibility for countries and Agencies. Innovation, deeper private sector engagement, and strengthened coordination at the country level—particularly in lower-capacity settings—are likely to play an expanding role in shaping outcomes and supporting durable results.

49. The implementation of knowledge and country engagement strategies, along with more consistent application of risk-informed and inclusive approaches, will also be essential in navigating today's complex environmental and institutional landscape. Collectively, these developments signal a continued strengthening of the GEF's core capabilities and its ability to deliver high-impact results in an increasingly dynamic global context.

EVALUATION FINDINGS HIGHLIGHTS 2022-25

section 1 Introduction

1.1 Background

This report is a first presentation by the Independent Evaluation Office (IEO) of the Global Environment Facility (GEF) of the main findings of the evaluations that will underpin the Eighth Comprehensive Evaluation of the GEF (OPS8), which will inform negotiations for the ninth replenishment of the GEF. The present report includes key findings from completed and ongoing IEO evaluations. The full OPS8 report will be made available in time for the second replenishment meeting in September 2025.

The GEF's ninth replenishment comes at a time of mounting global crises. Despite gains in biodiversity conservation, renewable energy, and sustainable agriculture, the overall trajectory of environmental degradation is worsening. In 2024, global temperatures surpassed the 1.5°C threshold, fueling extreme weather events, ocean pollution, and biodiversity loss. The Stockholm Resilience Centre found that six of nine planetary boundaries have been breached, pushing humanity beyond the safe limits required for Earth's stability.¹

Echoing these concerns, the World Economic Forum's *Global Risks Report 2025* identifies environmental risks as among the most severe long-term threats to global stability. Based on findings from the Global Risks Perception Survey, expert consultations, scenario analysis, and real-world data, the report offers a comprehensive assessment of the interconnected risks the world now faces. In its 10-year outlook, four of the top five global risks are environmental in nature: extreme weather events, biodiversity loss and ecosystem collapse, critical changes to Earth systems, and natural resource shortages (World Economic Forum 2025). These escalating environmental threats are further compounded by misinformation, geopolitical conflict, trade tensions, and economic instability—factors that undermine development finance and global cooperation. In this context, there is a pressing need for coordinated action that is not only transformative, but also integrated and inclusive—to develop environmental, social, and economic solutions at scale.

The GEF has adopted integration as a core strategy to drive transformational change and deliver global environmental benefits by addressing the root causes of environmental degradation through coordinated, cross-sectoral approaches. This framework seeks to break down silos, promote synergies across global environmental goals, and align efforts with national development priorities. The ultimate aim is to enable change that is sustainable, scalable, and resilient. In this context, this report places a strong emphasis on integration, providing evidence on the extent to which the GEF's integrated programming has contributed to large-scale system transformations and supported more cohesive approaches to environmental management. The report also addresses integration more broadly-not only as a thematic or programmatic structure, but as

¹Stockholm Resilience Centre, <u>Planetary boundaries</u> web page.

a unifying principle across inclusion, private sector engagement, and the generation of socioeconomic co-benefits—reflecting the GEF's ambition to deliver holistic, people-centered, and systemwide impacts.

In addition to integration, this report presents evidence across several critical areas:

- It assesses the performance of the GEF portfolio across the GEF focal areas—biodiversity, climate change, land degradation, international waters, and chemicals and waste—highlighting areas of strength as well as persistent challenges. Also discussed is how focal area strategies have evolved over time to better reflect the GEF's shift toward greater integration. Increasingly, these strategies are being implemented through programmatic and multifocal approaches that address complex environmental challenges in a more coordinated, systemic manner.
- The report covers variation in country-level performance, as shaped by regional contexts, institutional capacities, and enabling environments.
- It offers insights on inclusion, particularly in relation to the participation and empowerment of women, indigenous peoples, youth, and other marginalized groups.
- On the **financing** side, it examines trends in cofinancing, blended finance, and the application of innovative financial instruments.
- Finally, it synthesizes findings on policy and institutional frameworks, presenting evidence on the GEF's contributions to policy coherence, governance, and inter-Agency coordination. These findings are intended to inform the strategic choices and priorities that will shape the design and delivery of GEF-9.

1.2 Sources of evidence

The sections that follow present evidence from completed and ongoing evaluations conducted between 2022 and 2025 and will inform the final OPS8 report. The evidence presented addresses the themes outlined in the OPS8 Council-approved approach paper (annex A). In all, 34 evaluations have been conducted over the OPS8 period: 23 are completed (box 1.1), and 11 are ongoing (box 1.2). This report presents key findings from the completed evaluations that have been presented to the GEF Council and preliminary findings from most of the ongoing evaluations.

The report is organized into six sections. Following this introductory section, section 2 provides an overview of the GEF portfolio as of end March 2025, including trends in resource allocation, regional distribution, and Agency participation. Section 3 presents findings on the performance and broader uptake of GEF interventions, drawing on outcome ratings, sustainability assessments, and evidence of scaling and replication. Section 4 focuses on the GEF focal areas, systematically reviewing the strategic evolution, relevance, effectiveness, sustainability, socioeconomic co-benefits, innovation, and knowledge generation across each. Section 5 examines evidence related to the GEF's integrated programming model, including the integrated approach pilots of GEF-6, the impact programs of GEF-7, and the integrated programs of GEF-8. It also reviews GEF support for nature-based solutions and the operational dynamics of integrated program delivery. Section 6 presents findings on the institutional and policy dimensions of GEF operations. It covers policies on inclusion and safeguards, approaches to policy coherence, financing and cofinancing trends, risk and innovation, country engagement strategies, results-based management, and knowledge management systems. As some evaluation work is ongoing, the text clearly indicates where evidence remains partial or provisional.

BOX 1.1 Completed evaluations 2022–25

- 1. <u>Evaluation of the Effects of the COVID-19</u> <u>Pandemic on GEF Activities</u>
- 2. Evaluation of the GEF's Approach to and Interventions in Water Security
- 3. <u>GEF Support to Climate Information and Early</u> <u>Warning Systems</u>
- 4. <u>Review of the GEF Management Action Record</u>
- 5. <u>Strategic Country Cluster Evaluation: GEF</u> <u>Support to Drylands Countries</u>
- 6. <u>Strategic Country Cluster Evaluation: Lower</u> <u>Mekong River Basin</u>
- 7. GEF Support to Sustainable Forest Management
- 8. Evaluation of GEF Interventions in International Waters: Freshwater and Fisheries
- 9. Evaluation of GEF Interventions in Chemicals and Waste
- 10. Assessing Portfolio-Level Risk in the GEF
- 11. <u>GEF Programs in Pacific Small Island Developing</u> <u>States</u>
- 12. Evaluation of Cofinancing in the GEF
- 13. Evaluation of GEF Support to Community-Based Approaches
- 14. Evaluation of GEF Support to Nature-Based Solutions
- 15. <u>Evaluation of Components of the Results-Based</u> <u>Management System</u>
- 16. Evaluation of Socioeconomic Co-Benefits of GEF Interventions
- 17. <u>GEF Annual Performance Report 2023</u>
- 18. LDCF/SCCF Annual Evaluation Report 2023
- 19. Evaluation of the Global Wildlife Program
- 20. Learning from Challenges in GEF Projects
- 21. LDCF/SCCF Annual Evaluation Report 2024
- 22. LDCF/SCCF Annual Evaluation Report 2025
- 23. Annual Performance Report 2025: Project Efficiency and Broader Adoption

BOX 1.2 Ongoing evaluations 2022–25

- 1. Evaluation of the GEF Country Engagement Strategy
- 2. Assessing the Inclusion of Marginalized Groups in Fragile and Conflict-Affected Situations
- 3. Evaluation of the Sustainable Cities Program
- 4. Evaluation of GEF Support to the Amazon
- 5. Evaluation of the GEF Food Systems Programs
- 6. Evaluation of Innovation and Application of Technologies in the GEF
- 7. Evaluation of the GEF Small Grants Programme
- 8. Evaluation of the GEF's Engagement with the Private Sector
- 9. Evaluation of the GEF's Interventions in Climate Change Mitigation
- 10. Evaluation of GEF Support to Policy Coherence
- 11. Assessment of the GEF Competitive Advantage

1.3 Approach and methods

In conducting its evaluations, the GEF IEO has applied a diverse set of evaluation methods grounded in international good practice and adapted to the complexity of global environmental challenges. The approaches used in all evaluations underpinning OPS8 are methodologically rigorous, evidence-based, and utilization-focused. All evaluations apply a mixed-methods approach, combining qualitative insights with quantitative tools and analytics to assess the performance, relevance, effectiveness, and impact of GEF interventions. Core methods include portfolio analysis, country case studies, thematic and impact evaluations, and stakeholder consultations, drawing on a variety of data sources such as project documents, field observations, interviews, and surveys. To strengthen the robustness and objectivity of its findings, the IEO also employs advanced quantitative methods, including the following:

- Geospatial and remote-sensing analysis. This is used to independently verify environmental outcomes related to land use, forest cover, and ecosystem changes. This method enhances the accuracy of assessments where field data are limited or where environmental impacts are spatially distributed.
- Artificial intelligence (AI) and machine learning tools. These are applied to identify patterns and trends across large data sets, and include project performance metrics, satellite imagery, and global environmental indicators. These tools support early risk identification, clustering of project characteristics, and detection of systemic issues or emerging opportunities.
- Statistical and econometric techniques. These are used in quasi-experimental designs and contribution analysis to estimate causal relationships, assess attribution, and explore the effects of interventions under varying contexts.
- Big data and text analytics. These are deployed to analyze unstructured information from project documents, reports, and stakeholder feedback at scale—enabling more nuanced understanding of project implementation and results.

The evaluation evidence was collected by the IEO during 2022–25. Local consultants assisted with field-work. The report also draws on completed evaluations undertaken by independent evaluation offices of the GEF Agencies during the GEF-8 period.

The GEF portfolio

s of end March 2025, the GEF had provided \$26.2 billion in total funding for more than 6,000 projects through its family of funds. The GEF Trust Fund remains the primary source for GEF financing, contributing \$23.2 billion across 5,460 projects (table 2.1). In total, the GEF has raised \$143.7 billion in cofinancing pledges. During the GEF-8 cycle, this translates to \$7.50 in cofinancing for every dollar of GEF financing (table 2.2).

GEF-8 is currently in progress and is scheduled to conclude in June 2026. As of end March 2025, the GEF had approved 71 percent of its target allocation for GEF-8, amounting to \$3.6 billion for 479 projects, out of a \$5.1 billion funding target.¹ At the same stage of GEF-7, the number of approved projects and the percentage of resources programmed were comparable, with 462 projects accounting for 69 percent of the \$3.9 billion funding target.²

Focal areas and corporate programs in GEF-8 have a similar percentage of target allocations programmed as at the equivalent stage of GEF-7. However, resources for the Non-Grant Instrument (NGI) Program have been programmed at a faster pace in GEF-8, while the Small Grants Programme (SGP) had already fully programmed its target allocation in GEF-7. As of December 2024, no resources had been programmed for the Innovation Window.

Consistent with the programming directions in GEF-8, financing for biodiversity has increased, whereas the share allocated to climate change mitigation has declined (figure 2.1). Multifocal area interventions have gained greater prominence in GEF-8, both in terms of number of projects and resource allocation, reflecting the strategic focus on integrated programs (figure 2.2). In terms of planned cofinancing by focal area and corporate program, the biodiversity focal area has the lowest cofinancing ratio in GEF-8, while the NGI Program has the highest.

Cumulatively, the United Nations Development Programme (UNDP), the World Bank, and the United Nations Environment Programme (UNEP) have accounted for significant shares of GEF Trust Fund resources: 35 percent, 27 percent, and 14 percent, respectively. However, individual Agency shares of GEF programming have shifted over time. In GEF-8, UNDP's share declined to 29 percent, which represents a decrease from previous GEF cycles. The World Bank experienced an even steeper drop, with its share falling from 46 percent from the pilot phase until GEF-4 to just 8 percent in GEF-8. In contrast, the Food and Agriculture Organization of the United Nation's (FAO's) share has steadily grown across replenishment periods, increasing from 1 percent to 17 percent. Cofinancing ratios are highest for

¹This excludes the Country Support Program (\$28 million) and the corporate budget (\$187 million) which were part of the total GEF-8 replenishment (\$5.33 billion). Source: GEF (2024b).

² This excludes the Country Support Program (\$21 million), and the corporate budget (\$151.9 million) which were part of the total GEF-7 replenishment (\$4.052 billion). Source: GEF (2022b).

Funding	Up to	Up to GEF-4		GEF-5		GEF-6		GEF-7		GEF-8		Total	
source	No.	Mil. \$	No.	Mil. \$	No.	Mil. \$	No.	Mil. \$	No.	Mil. \$	No.	Mil. \$	
CBIT	0	0	0	0	41	53	3	5	0	0	44	58	
GBFF	0	0	0	0	0	0	0	0	40	202	40	202	
GET	2,614	9,070	964	3,617	679	3,261	724	3,645	479	3,621	5,460	23,213	
LDCF	87	146	132	798	42	299	84	506	62	578	407	2,327	
NPIF	0	0	14	16	0	0	0	0	0	0	14	16	
SCCF	25	106	42	194	10	46	14	14	14	42	105	402	
Total	2,726	9,322	1,131	4,625	771	3,658	802	4,170	582	4,444	6,012	26,218	

TABLE 2.1 Number of projects and amount of GEF financing by GEF replenishment period and funding source

S O U R C E : GEF Portal as of March 26, 2025.

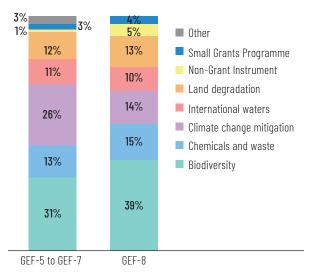
N 0 T E : CBIT = Capacity-building Initiative for Transparency; GBFF = Global Biodiversity Framework Fund; GET = GEF Trust Fund; LDCF = Least Developed Countries Fund; NPIF = Nagoya Protocol Implementation Fund; SCCF = Special Climate Change Fund. The sum of projects by funding source may exceed the total number of projects because multitrust fund projects are counted in more than one funding source category. Totals include Agency fees and project preparation grant funding and fees.

TABLE 2.2 Cofinancing ratio by funding source

Funding source	Up to GEF-4	GEF-5	GEF-6	GEF-7	GEF-8	Total
CBIT	n.a.	n.a.	0.7	2.3	n.a.	0.8
GBFF	n.a.	n.a.	n.a.	n.a.	3.1	3.1
GET	4.3	6.1	8.3	7.5	8.1	6.2
LDCF	1.8	4.6	3.9	4.5	5.0	4.4
MTF	n.a.	8.4	3.0	4.3	9.0	7.0
NPIF	n.a.	2.4	n.a.	n.a.	n.a.	2.4
SCCF	6.5	9.1	7.8	3.7	5.0	7.7
Total	4.3	6.1	7.8	7.1	7.5	6.1

SOURCE: GEF Portal as of March 26, 2025.

N 0 T E : n.a. = Not applicable. CBIT = Capacity-building Initiative for Transparency; GBFF = Global Biodiversity Framework Fund; GET = GEF Trust Fund; LDCF = Least Developed Countries Fund; MTF = multitrust fund; NPIF = Nagoya Protocol Implementation Fund; SCCF = Special Climate Change Fund. Considers reported cofinancing when projects enter the work program. GEF financing excludes Agency fees and project preparation grant funding and fees. FIGURE 2.1 GEF Trust Fund financing by focal area and corporate program



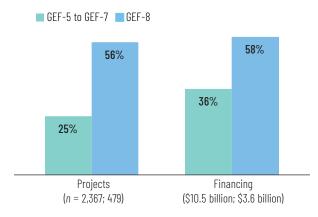
SOURCE: GEF Portal as of March 26, 2025.

N 0 T E : GEF financing includes Agency fees and project preparation grant funding and fees. Other = cross-cutting capacity and multifocal area investments from previous GEF cycles, where contributions from specific focal areas are not separately identified.

Agency shares of GEF financing vary across regions. In Africa, UNDP, UNEP, and FAO receive the largest shares of funding. In Latin America and the Caribbean, governments primarily rely on UNDP, FAO, and UNEP, in that

multilateral development banks (15.9) in GEF-8, compared with 6.9 for United Nations entities and 4.9 for others (figure 2.3).

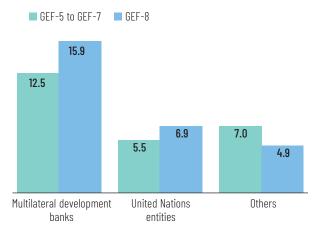
FIGURE 2.2 Multifocal area projects as a share of the GEF portfolio and of GEF Trust Fund financing



S O U R C E : GEF Portal as of March 26, 2025.

N O T E : GEF financing includes Agency fees and project preparation grant funding and fees. Data exclude multifocal area projects that are part of the Non-Grant Instrument Program or the Small Grants Programme.

FIGURE 2.3 Cofinancing ratio by GEF Agency type



SOURCE: GEF Portal as of March 26, 2025.

N O T E : Considers reported cofinancing when projects enter the work program. GEF financing excludes Agency fees and project preparation grant funding and fees.

order, followed by Conservation International. In Asia, the predominant agencies are UNDP, FAO, and United Nations Industrial Development Organization, while in Europe and Central Asia, the leading agencies are UNDP, FAO, the World Bank, and UNEP. For global programs, UNDP plays a dominant role, accounting for nearly half of the programmed financing in GEF-8 (table 2.3).

TABLE 2.3	Distribution of GEF-8 GEF Trust Fund
financing by	region and Agency (%)

GEF Agency	Africa	Asia	ECA	LAC	Reg.	Global	Total
ADB	0	3	0	0	16	4	2
AfDB	6	0	0	0	0	0	2
BOAD	1	0	0	0	0	0	0
CAF	0	0	0	4	0	0	1
CI	3	0	0	7	7	4	4
DBSA	2	0	0	0	0	0	1
EBRD	2	0	8	0	0	0	1
FAO	12	24	25	21	4	9	17
FUNBIO	0	0	0	4	0	0	1
IDB	0	0	0	3	52	0	2
IFAD	5	4	6	0	0	1	3
IUCN	7	4	0	5	13	2	5
UNDP	23	33	29	24	0	47	29
UNEP	22	10	10	19	8	15	16
UNIDO	7	13	3	3	0	3	6
WB	9	6	19	6	0	8	8
WWF-US	2	3	0	4	0	7	4
Total	100	100	100	100	100	100	100
Total (mil. \$)	984	715	187	944	96	695	3,621

SOURCE: GEF Portal as of March 26, 2025.

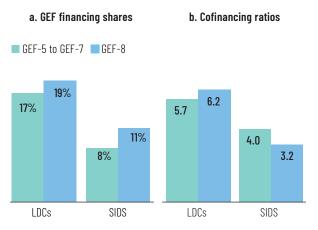
N 0 T E : Details may not sum to totals because of rounding. GEF financing includes Agency fees and project preparation grant funding and fees. ADB = Asian Development Bank; AfDB = African Development Bank; CAF = Development Bank of Latin America; CI = Conservation International; DBSA = Development Bank of Southern Africa; EBRD = European Bank for Reconstruction and Development; FAO = Food and Agriculture Organization of the United Nations; FUNBIO = Brazilian Biodiversity Fund; IDB = Inter-American Development Bank; IFAD = International Fund for Agricultural Development; IUCN = International Union for Conservation of Nature; UNDP = United Nations Development Programme; UNEP = United Nations Environmental Programme; UNIDO = United Nations Industrial Development Organization; WB = World Bank; and WWF-US = World Wildlife Fund-US. ECA = Europe and Central Asia; LAC = Latin America and the Caribbean.

Overall, 25 percent of financing through the GEF Trust Fund has been delivered through child projects approved under the framework of programmatic approaches. The use of this framework has grown significantly since GEF-6. In GEF-8 to date, programmatic approaches account for nearly 60 percent of the portfolio—both in terms of the number of projects and total financing (figure 2.4a). Child projects under programs in GEF-8 have also attracted higher cofinancing, with a ratio of 8.7 compared to 7.3 for stand-alone projects (figure 2.4b).

The shares of financing for small island developing states (SIDS) and least developed countries (LDCs) has increased in GEF-8, continuing a trend that emerged in the later stages of GEF-7 (figure 2.5a). However, cofinancing remains a challenge for SIDS, with a ratio of 3.2—significantly lower than the 6.2 ratio observed for LDCs (figure 2.5b).

Africa and Asia have historically held the largest shares of total GEF financing. However, recent replenishment periods have shown notable shifts in regional distribution. In GEF-8, the shares for Africa and Latin America and the Caribbean have increased, with each region now accounting for slightly more than one-quarter of total GEF Trust Fund financing (figure 2.6a). In contrast, shares for Asia, and Europe and Central Asia have declined. The financing share for global projects rose from 15 percent in earlier periods to 18 percent

FIGURE 2.5 GEF Trust Fund financing and cofinancing ratios for LDCs and SIDS



SOURCE: GEF Portal as of March 26, 2025.

N 0 T E : GEF financing (\$10.5 billion for GEF-5 to GEF-7; \$3.6 billion for GEF-8) includes Agency fees and project preparation grant funding and fees.

in GEF-7, a trend that has continued into GEF-8. This increase is largely driven by the growing prominence of global projects implemented under programmatic

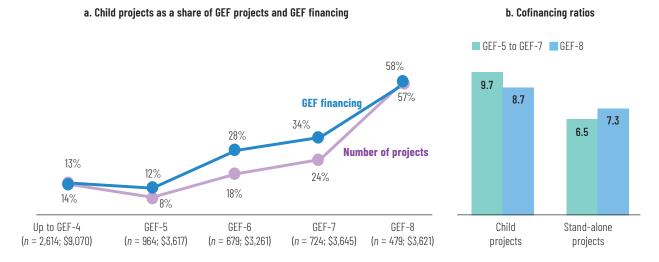


FIGURE 2.4 Growth of programmatic approaches in the GEF Trust Fund portfolio

SOURCE: GEF Portal as of March 26, 2025.

N O T E : Excludes dropped and canceled projects without a first disbursement. Considers reported cofinancing when projects enter the work program. GEF financing Includes Agency fees and project preparation grant funding and fees. Dollars are in millions.

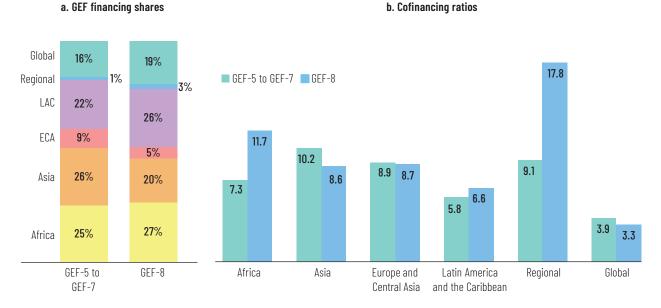


FIGURE 2.6 GEF Trust Fund financing and cofinancing ratios by region

SOURCE: GEF Portal as of March 26, 2025.

N O T E : GEF financing (\$10.5 billion for GEF-5 to GEF-7; \$3.6 billion for GEF-8) includes Agency fees and project preparation grant funding and fees. Considers reported cofinancing when projects enter the work program.

approaches.³ In terms of cofinancing, the Latin America and the Caribbean region has comparatively lower ratios, while Africa leads in cofinancing performance in GEF-8 (figure 2.6b).

The top 10 recipients of GEF financing have remained largely unchanged since GEF-5. There have been some shifts in the rankings, however, with China falling from first to sixth place. Nigeria has joined the top 10, while Ecuador has dropped off the list (figure 2.7).

Cumulatively, 65 percent of GEF projects have been completed.

Out of the 6,012 projects implemented across all GEF trust funds, 6 percent are in the preparation phase, and approximately 30 percent are currently under implementation. The total number of completed projects stands at 3,889 (figure 2.8). According to the GEF Evaluation Policy, Agencies are required to submit

terminal evaluations upon completion of full- and medium-size projects, as well as for enabling activities processed as full-size projects (GEF IEO 2022c). These evaluations are independently validated either by the GEF IEO or by the evaluation units of the implementing GEF Agencies. To date, 2,384 projects have submitted terminal evaluations to the GEF Portal.⁴ Of these, 43 percent (1,016 projects) were independently validated by the GEF IEO, and 57 percent (1,368 projects) were validated by Agency evaluation units. The OPS8 cohort includes 578 completed projects with terminal evaluations submitted after the OPS7 cycle.

³ The financing share of global child projects has increased from 9 percent in GEF-5 to 29 percent in GEF-8.

⁴The cumulative portfolio of 2,384 completed GEF projects for which terminal evaluations were submitted by June 30, 2024, and performance ratings were independently validated through December 2024.

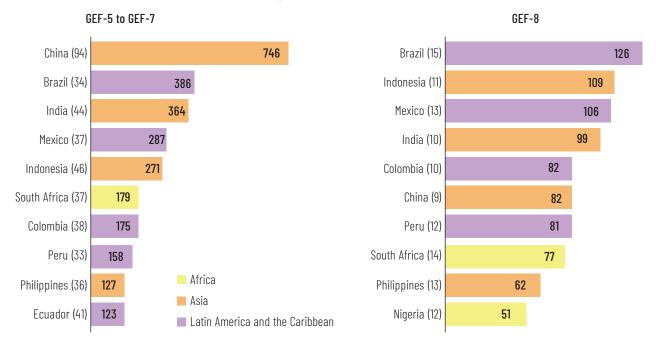
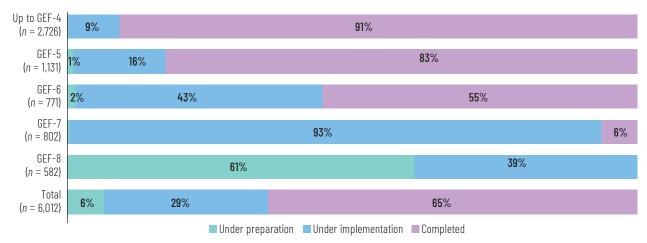


FIGURE 2.7 Top 10 countries in GEF financing (million \$)

SOURCE: GEF Portal as of March 26, 2025.

NOTE: GEF financing includes Agency fees and project preparation grant funding and fees. Number of projects is shown in parentheses.





SOURCE: GEF Portal as of March 26, 2025.

GEF performance

his section analyzes the performance of GEF projects, focusing on the key dimensions of outcomes, sustainability, quality of implementation and execution, monitoring and evaluation (M&E) design and implementation, broader adoption, and socioeconomic co-benefits, as well as factors influencing these results dimensions. The analysis is based on a cumulative portfolio of 2,384 completed GEF projects with terminal evaluations submitted by June 30, 2024 (table 3.1). Performance ratings for these projects were independently validated through December 2024. Collectively, the projects represent \$10.35 billion in GEF funding and at least \$69.38 billion in reported materialized cofinancing. Finally, the section presents findings on country performance, drawing on strategic country cluster evaluations of drylands, the Lower Mekong River Basin, and the Pacific Islands.

3.1 Portfolio performance

Project outcomes at completion

The vast majority of GEF projects are rated in the satisfactory range for outcomes. The outcome rating assesses the extent to which a completed project achieved the outcome expected at implementation completion. Cumulatively, validated outcome ratings of 81 percent of completed projects are in the satisfactory range. Projects approved in GEF-4 show a marginal improvement compared to previous periods, with 81 percent within the satisfactory outcome range, up from 78 percent in earlier periods (figure 3.1). Although GEF-5 and GEF-6 projects show a higher percentage of projects in the satisfactory range, these figures may decline as more projects from these periods are completed. Historical data indicate that underperforming projects tend to take longer to close and, once completed, tend to lower the percentage of projects in the satisfactory range for their period.

There are variations in outcome performance across focal areas, regions, and country groups, but programmatic and stand-alone projects perform equally well. Among completed projects from GEF-4 onwards, the percentage of projects rated in the satisfactory outcome range varies moderately across focal areas, ranging from 87 percent in international waters and chemicals and waste to 82 percent in climate change. Regionally, a higher percentage of projects in Europe and Central Asia and Asia are rated in the satisfactory range for outcomes, while Africa and Latin America and the Caribbean have the lowest percentages. Since GEF-4, the share of completed projects rated in the satisfactory range for outcomes has increased in both Asia and Africa compared to earlier periods. A high percentage of global projects are rated in the satisfactory range.

GEF projects face greater challenges in small island developing states (SIDS) and fragile and conflict-affected situations in achieving their intended outcomes. Consequently, about a quarter of the projects in these contexts are rated in the unsatisfactory range, which is lower than

	CEO endorsed/	Closed		Closed with ter tion submitted		Closed with validated ratings available	
GEF period	approved (No.)	No.	% of approved projects	No.	% of closed projects	No.	% of closed projects
Up to GEF-3	1,114	1,074	96	1,058	99	996	93
GEF-4	735	717	98	678	95	661	92
GEF-5	834	697	84	595	85	574	82
GEF-6	595	237	40	165	70	147	62
GEF-7	670	12	2	7	58	6	50
Total	3,948	2,737	69	2,503	91	2,384	87

TABLE 3.1 Portfolio of closed projects

S 0 U R C E S : GEF Portal and GEF IEO Annual Performance Report (APR) 2025 data set, which includes completed projects for which terminal evaluations were submitted by June 30, 2024, and performance ratings were independently validated through December 2024.

N 0 T E : Data exclude parent projects, dropped or canceled projects, projects with less than \$0.5 million of GEF financing, enabling activities with less than \$2 million of GEF financing, and projects from the Small Grants Programme. Closed projects refer to all projects closed as of June 30, 2024. The GEF IEO accepts validated ratings from some Agencies; however, their validation cycles may not align with the GEF IEO's reporting cycle, which can lead to some projects with available terminal evaluations lacking validated ratings within the same reporting period; thus, validated ratings here are from the APR data set only.

FIGURE 3.1 Percentage of projects with outcomes rated in the satisfactory range, by GEF period



S 0 U R C E : GEF IEO Annual Performance Report 2025 data set, which includes completed projects for which terminal evaluations were submitted by June 30, 2024, and performance ratings were independently validated through December 2024.

 $\rm N~O~T~E$: The number of projects for which validated outcome ratings are available is shown in parentheses.

performance in other countries. The Evaluation of GEF Support in Fragile and Conflict-Affected Situations highlighted the challenges projects face in these settings (GEF IEO 2024a). In SIDS, capacity constraints contribute to lower outcome achievements. While past projects in least developed countries (LDCs) were less likely to receive satisfactory outcome ratings, their performance has significantly improved in recent periods.

The percentage of projects rated in the satisfactory range for outcomes is similar for child and stand-alone projects, at 82 and 84 percent, respectively. Although in recent periods a slightly higher percentage of stand-alone projects is rated in the satisfactory range for outcomes compared to child projects-that is, projects approved within a programmatic framework-this difference is not statistically significant. The percentage of projects in the satisfactory range for outcomes has increased for both child and stand-alone projects, with greater gains observed in child projects because of their lower baseline. Note too that child projects under programs for GEF-3 and earlier periods were classified retroactively by the GEF Secretariat. Validated outcome ratings for 10 child projects under the integrated approach pilots in GEF-6 show that 9 are rated in satisfactory range, which aligns with the GEF-6 portfolio average.

Achievement of outcomes relative to targets

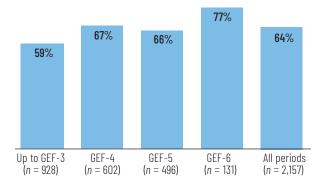
At project completion, most indicators in M&E plans were measured and reported using consistent units. The Evaluation of Components of the GEF's Results-Based Management System reviewed 2,213 indicators listed in the M&E plans of GEF-6 and GEF-7 completed projects with terminal evaluations (GEF IEO 2025 forthcoming). It found that 91 percent had their achievement measured and reported. In 88 percent of cases, this reporting consistently used the units specified in the M&E plan (table 3.2). Of the instances where indicators were specified, 64 percent fully met their targets. When considering only those indicators with results reported using consistent units at completion, 73 percent fully achieved their specified targets.

Likelihood of sustainability at completion

Based on assessment of risks at project completion, nearly two-thirds of completed GEF projects are rated in the likely range for sustainability. The sustainability rating assesses the extent to which a project's outcomes are durable and the project is likely to achieve its expected long-term impact. Cumulatively, 64 percent of completed projects are rated in the likely range for sustainability. GEF-6 shows a high percentage of projects in the likely range, although this figure may change as more projects approved during this period are completed (figure 3.2).

Although the overall share of projects rated in the likely range for sustainability has increased, projects in land degradation, Africa, fragile and conflict-affected situations, and LDCs continue to face higher sustainability risks. In recent

FIGURE 3.2 Percentage of projects with sustainability of outcomes rated in the likely range, by GEF period



S O U R C E : GEF IEO Annual Performance Report 2025 data set, which includes completed projects for which terminal evaluations were submitted by June 30, 2024, and performance ratings were independently validated through December 2024.

NOTE: The number of projects for which validated sustainability ratings are available is shown in parentheses.

			Reporting at completion (% of indicators)				
Category		Number of indicators	Reported on	Use of consistent units	Full target achievement (100%+)		
GEF results	Core and subcore indicators	253	94	92	59		
framework	Other indicators	1,960	91	87	65		
	Environmental stress and status	243	95	91	59		
Type of benefit	Other environmental benefits	141	92	89	58		
Dellelli	Nonenvironmental benefits	561	89	86	65		
Total		2,213	91	88	64		

TABLE 3.2 Reporting on project indicators at project completion by indicator category

S 0 U R C E: GEF IEO 2025 forthcoming, based on a review of 122 GEF-6 and GEF-7 completed projects with terminal evaluations.

replenishment periods, likely sustainability ratings vary: from chemicals and waste at 76 percent to land degradation at 58 percent. Global and regional projects lead in terms of sustainability ratings from GEF-4 onwards, while also demonstrating the greatest improvements compared to previous periods. Although sustainability ratings in Africa have also improved, projects in this region still face significant risks at implementation completion. A substantial share of projects in fragile and conflict-affected situations and LDCs are rated in the unlikely range for sustainability. There is no statistically significant difference in the performance of child projects and stand-alone projects.

Quality of implementation and execution

Over 80 percent of completed GEF projects are rated in the satisfactory range for both implementation and execution. Implementation ratings reflect how well GEF Agencies have fulfilled their roles in project design, start-up, supervision, application of policies, M&E, and adaptive management. Execution ratings assess how effectively executing agencies delivered project activities under the supervision of the GEF Agency, including procurement, stakeholder engagement, and on-theground monitoring.

Cumulatively, 82 percent of projects are rated satisfactory for implementation and 81 percent are so rated for execution (figure 3.3). Both measures have improved since GEF-4, with implementation quality now consistent across focal areas and execution showing moderate variation. However, projects in Africa, SIDS, and fragile and conflict-affected situations face greater challenges in both areas. Additionally, stand-alone projects have more frequently achieved satisfactory implementation ratings than those under programmatic approaches—a difference that is statistically significant at the 10 percent level.

Projects rated satisfactory for implementation and execution are more likely to achieve satisfactory outcome ratings. A satisfactory rating for outcome is positively correlated with implementation (0.60) and with execution (0.56) (table 3.3). The strong positive correlation between these factors underscores the importance of strengthening implementation and execution to enhance project outcomes.

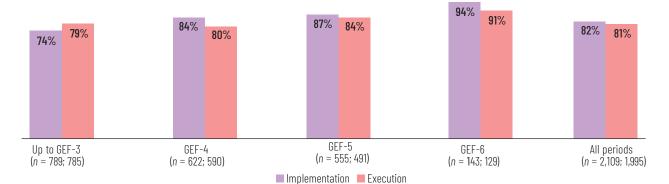


FIGURE 3.3 Percentage of projects with quality of implementation/execution rated in the satisfactory range, by GEF period

S O U R C E : GEF IEO Annual Performance Report 2025 data set, which includes completed projects for which terminal evaluations were submitted by June 30, 2024, and performance ratings were independently validated through December 2024.

NOTE: The number of projects for which validated ratings for quality of implementation and execution are available is shown in parentheses.

Performance rating	Outcomes	Sustainability	Quality of M&E design	Quality of M&E imple- mentation	Quality of implemen- tation	Quality of execution
Outcomes (<i>n</i> = 2,353)	1					
Sustainability (n = 2,157)	0.3823*	1				
Quality of M&E design (<i>n</i> = 2,172)	0.1992*	0.1626*	1			
Quality of M&E implementation ($n = 2,129$)	0.3718*	0.2794*	0.4432*	1		
Quality of implementation ($n = 2,109$)	0.5955*	0.2957*	0.2925*	0.4513*	1	
Quality of execution (<i>n</i> = 1,995)	0.5611*	0.3264*	0.1670*	0.3818*	0.5822*	1

TABLE 3.3 Correlations between performance ratings

S 0 U R C E : GEF IEO Annual Performance Report 2025 data set, which includes completed projects for which terminal evaluations were submitted by June 30, 2024, and performance ratings were independently validated through December 2024.

N 0 T E : The phi coefficient measures the degree of association between dichotomous variables. Its interpretation is similar to a Pearson correlation coefficient. In 2 × 2 contingency tables, the phi coefficient and Pearson correlation coefficient are the same. * Statistically significant at the 1 percent level. The number of projects for which validated ratings are available is shown in parentheses.

Quality of M&E

There has been substantial improvement in the quality of M&E design since GEF-4, while progress in implementing M&E plans has been more limited. M&E ratings assess how well a plan was designed and how effectively it was implemented to monitor progress and results. For projects approved during GEF-3 and earlier, ratings for design and implementation were similar, with implementation slightly higher (figure 3.4). From GEF-4 onward, design quality improved significantly, but gains in implementation were more modest—indicating that strengthening M&E implementation remains a greater challenge than improving design.

The quality of M&E has improved across most focal areas, with the exception of land degradation. Chemicals and waste and international waters show the most significant progress, with 86 percent and 82 percent of projects, respectively, rated satisfactory for M&E design in recent periods. Multifocal area projects have also improved, but about 25 percent still fall into the unsatisfactory range—similar to land degradation, which has seen a slight decline in ratings. For M&E implementation, chemicals and waste again lead, with 79 percent of projects rated satisfactory. In contrast, multifocal area and land degradation projects trail behind, with only 64 percent and 56 percent, respectively, rated satisfactory. The lower ratings for land degradation are partly linked to implementation in countries with challenging operational environments, although the exact reasons for the decline from the pre-GEF-4 period remain unclear.

Regionally, around 80 percent of projects in Africa since GEF-4 are rated satisfactory for M&E design. However, 39 percent fall short on implementation. Global projects tend to perform better in M&E implementation than design, while projects in fragile and conflict-affected situations have the smallest percentage of satisfactory ratings in both categories.

The role of behavior change in enhancing outcomes and sustainability

Many of the environmental challenges the GEF seeks to address are rooted in human behaviors, which can be changed through targeted interventions. While the GEF has historically aimed to influence behavioral drivers of environmental degradation, a 2020 assessment by the Scientific

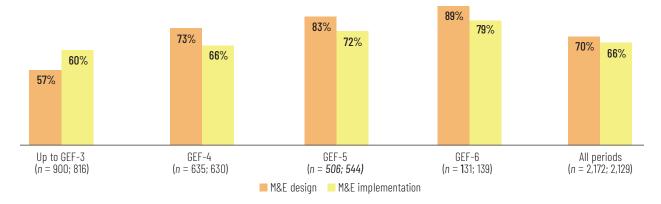


FIGURE 3.4 Percentage of projects with M&E design/implementation rated in the satisfactory range, by GEF period

S O U R C E : GEF IEO Annual Performance Report 2025 data set, which includes completed projects for which terminal evaluations were submitted by June 30, 2024, and performance ratings were independently validated through December 2024.

NOTE: The number of projects for which validated M&E design and implementation ratings are available is shown in parentheses.

and Technical Advisory Panel found that most projects did not explicitly articulate how they would promote behavior change leading to environmental benefits (Metternicht, Carr, and Stafford Smith 2020). In GEF-8, however, many integrated programs have begun to position behavior change as a key strategy for achieving large-scale environmental impact.

The GEF IEO reviewed 37 completed GEF-6 and GEF-7 projects and 21 ongoing GEF-8 projects that targeted behavior change. It also conducted six case studies in Azerbaijan, Georgia, the Philippines, and Uruguay to evaluate postproject outcomes. Across these projects, knowledge and skill building in pro-environment practices emerged as the most frequently used approach to behavior change, as lack of expertise was identified as the most common barrier. For instance, by providing training to small farmers, the Conservation and Sustainable Use of Globally Important Agro-biodiversity (GEF ID 6943, United Nations Development Programme [UNDP]) project in Azerbaijan facilitated a switch to native crops in more than triple the number of targeted households, consequently restoring more than 1,000 hectares of degraded land.

More recent projects are increasingly addressing not only technical knowledge gaps but also stakeholder needs and institutional barriers to enable behavior change. While both completed and ongoing projects often aim to motivate behavior change through improved legal frameworks or awareness raising, GEF-8 projects show a greater focus on aligning interventions with stakeholder needs (38 percent versus 14 percent in earlier projects) and strengthening institutional capacities (43 percent versus 24 percent). In Panama, for example, Strengthening Ecological Connectivity in Natural and Productive Landscapes Between the Amistad and Darien Biomes (GEF ID 11209, UNDP) aims to curb unsustainable subsistence farming by promoting biodiversity-friendly livelihoods through partnerships with value chain actors, including civil society and financial institutions.

Behavior change indicators have shown positive results. Sixty-nine percent of projects with such indicators achieved at least 70 percent of their behavior change targets, and nearly half also met related environmental targets. In Turkmenistan's Supporting Climate Resilient Livelihoods in Agricultural Communities in Drought-prone Areas (GEF ID 6960, UNDP) project, for example, efforts to promote climate-resilient agriculture met both behavioral targets, with over 3,000 farmers adopting new practices; and environmental goals, including improved irrigation across 20,000 hectares.

While awareness raising and training were effective in catalyzing initial change, sustaining new behaviors depended heavily on access to capital, perceived cost-benefit advantages, and continued institutional support. In Enhancing Resilience of Agricultural Sector in Georgia (GEF ID 5147, International Fund for Agricultural Development [IFAD]), pilot beneficiaries of climate-resilient agricultural measures continued to invest in them three years after project closure. In contrast, those trained but without material support were less able to implement the full suite of practices, resulting in economic losses that further hindered adoption. Similarly, in the Implementation of SLM [Sustainable Land Management] Practices to Address Land Degradation and Mitigate Effects of Drought (GEF ID 5767, UNDP) project undertaken in the Philippines, some farmers replicated sustainable practices postproject through continued government support. Others continued to practice conventional farming given its guicker returns and fewer skill requirements-despite the higher risks and lower incomes associated with those methods.

These findings suggest that behavior change is critical to achieving environmental outcomes, and requires supportive conditions to endure. These include available capital, institutional support and incentives, and lower costs of adoption to scale beyond initial pilot efforts. Projects that integrate these elements into their design are more likely to produce lasting and replicable environmental benefits.

Broader adoption

The GEF's resources are limited, and only through large-scale adoption by other actors can the GEF achieve transformational change and sustainability. Broader adoption refers to the uptake of GEF-supported interventions by stakeholders through sustaining, mainstreaming, replication, and scaling up—without the use of GEF funds. A review of completed GEF-6 and GEF-7 projects randomly sampled from a pool of 161 projects was conducted to assess the extent to which broader adoption was occurring at the time of project completion.

Sixty-two percent of projects achieved some form of broader adoption. Projects primarily achieved broader adoption of interventions that created enabling conditions through policy, legal, and institutional development (58 percent); and individual and institutional capacity building (40 percent). Technologies, practices, and approaches that directly generated environmental benefits were adopted at a lower rate (18 percent). Climate change and multifocal area projects had the highest rates of broader adoption. In comparison, broader adoption was reported in 40 percent of projects covered in the Seventh Comprehensive Evaluation of the GEF (OPS7) and in 55 percent of the projects covered in OPS6.

The Philippines SLM project cited above has been replicated by the city government using its own agriculture budget. The provincial government has also scaled up SLM efforts; while at the national level, SLM has been integrated into agricultural programs, prompting additional local governments to allocate funding for further adoption.

In Uruguay, the Environmental Sound Life-Cycle Management of Mercury Containing Products and their Wastes (GEF ID 4998, UNDP) project provided capacity building for mercury analysis. One pilot laboratory institutionalized the initiative by hosting biennial training for other countries. Five years after project closure, project participants continue to engage through an informal learning network spanning six Latin American countries. In Sri Lanka, the Rehabilitation of Degraded Agricultural Lands in the Central Highlands (GEF ID 5677, Food and Agriculture Organization of the United Nations [FAO]) project, which transitioned farmer field schools online during the COVID-19 pandemic, led to increased replication of sustainable agricultural practices, particularly among women and youth. Building on this success, the government has since scaled up the model nationwide.

Broader adoption beyond project completion is influenced by alignment with government priorities, sustained support, and economic benefits. Initiatives aligned with national priorities were more likely to be taken up. Government uptake in turn provided continuity and long-term support through policies and budgets. Potential economic benefit was the most common motivation for broader adoption cited by different stakeholder groups.

GEF-supported interventions serve as a foundation for projects supported by the Green Climate Fund (GCF). A review of 253 projects financed by the GCF found that 17 percent indicate an intent to build on GEF projects. Consistent with the GCF role of providing financing at scale, in two-thirds of these instances (12 percent of the total), projects aimed to scale up GEF-supported interventions. One GCF program seeks to scale up climate adaptation initiatives originally supported through the GEF Small Grants Programme in the Federated States of Micronesia, offering grants of up to \$10 million per project. The proposal emphasized that such projects were not viable for government debt financing and that only GCF support could provide funding at the necessary scale. Another GCF project builds on a \$8.74 million GEF Special Climate Change Fund (SCCF) initiative implemented by the World Bank on West Balkans Drina River Basin Management (GEF IDs 5556 and 5723). It aims to upgrade and expand the hydrometric monitoring network while scaling up proven solutions and technologies developed under a UNDP SCCF project, among others.

3.2 Socioeconomic co-benefits

"Co-benefits" refers to additional positive results of a policy or intervention beyond its primary objectives. In the case of natural resource protection and climate change adaptation, co-benefits beyond the formal set of environmental benefits can include improved incomes, livelihoods, health, employment, and better access to services.

Key findings

A vast majority of GEF-funded projects mention co-benefits in their design documents, with 94 percent of projects including some reference to socioeconomic impacts. Starting in GEF-4 and increasing noticeably from GEF-5 onward, there has been a clear trend toward more explicit recognition of co-benefits in project documents from a median mention of 2 to 6.

GEF-funded projects generally fall into two distinct paradigms: conservationist and rural sustainable development. Projects rooted in the conservationist approach—often led by United Nations entities or nongovernmental organizations—prioritize global environmental benefits, treating socioeconomic co-benefits as secondary. In contrast, those aligned with a rural sustainable development model, commonly implemented by international financial institutions, emphasize socioeconomic outcomes such as income generation and job creation, while also recognizing the need to protect natural resources. Projects under this second paradigm tend to incorporate economic and production-related co-benefits more deliberately at the design stage.

Project designs built on local foundations, but causal pathways were not clearly articulated. Most GEF project designs built on existing local initiatives and activities, leveraging ongoing efforts by nongovernmental organizations, government programs, or development partners. As such, GEF interventions often played a catalytic role, adding technical value rather than initiating entirely new interventions. However, a frequent shortcoming was the lack of clearly articulated causal pathways linking project activities to expected co-benefits. Many assumed economic or social gains would emerge organically, without defining specific mechanisms or partnerships. The rural developmentoriented projects generally articulated these linkages better, treating co-benefits as core objectives. Additionally, projects often overlooked potential short-term negative impacts on communities, such as restricted access to natural resources or crop damage by wildlife.

Socioeconomic co-benefits are diverse and context-specific. Across case studies, GEF-funded projects consistently enhanced community knowledge and technical skills in natural resource management. The Community-Based Climate Risks Management in Chad (GEF ID 8001, UNDP) project supported local radio broadcasts that helped farmers adapt to shifting weather patterns. In Mexico, the World Bank-led Sustainable Productive Landscapes (GEF ID 9555) project provided training in organic input production and low-chemical farming, in partnership with universities and extension services. In Nepal, projects led by the World Wildlife Fund (WWF) and the United Nations Environment Programme-Integrated Landscape Management to Secure Nepal's Protected Areas and Critical Corridors (GEF ID 9437) and Catalysing Ecosystem Restoration for Climate Resilient Natural Capital and Rural Livelihoods in Degraded Forests and Rangelands of Nepal (GEF ID 5203)-strengthened local capabilities to construct low-cost conservation infrastructure, though primarily for conservation objectives rather than broader livelihoods.

There were also significant gains in social capital, with projects strengthening intra-community cohesion and improving local governance structures. In Chad, the International Union for Conservation of Nature (IUCN)-led RECONNECT

project empowered grassroots organizations-such as local surveillance committees-that now actively collaborate with municipal and subprefectural governments on natural resource conservation. In Mexico, the above-mentioned Sustainable Productive Landscapes project and a Conservation International-led project-Conservation and Sustainable Use of Biological Diversity in Priority Landscapes of Oaxaca and Chiapas (GEF ID 9445)-supported indigenous community organizations, resulting in stronger collective decision-making and expanded governance capacity. These efforts fostered partnerships with external stakeholders, including government agencies, universities, and technical support organizations. As a result, communities are now better positioned to advocate for and sustain local conservation initiatives such as forest protection, lagoon ecosystem management, and rangeland restoration.

GEF-funded projects have created promising opportunities for economic production and income generation, though many of these remain only partially realized and will require further investment to reach their full potential. Increases in agricultural productivity and revenues have been noted, as in Mexico, where the application of bio-fertilizers, improved cacao crop management, and better processing techniques enhanced yields and quality. In Chad, the restoration of local vegetation improved pollination and honey production.

Projects also supported diversification into new income streams. In Mexico, initiatives encouraged artisanal handicrafts using forest wood waste and promoted ecotourism in protected lagoon ecosystems, offering communities alternative sources of revenue. Some interventions have helped create enabling conditions for future economic gains. For instance, Conservation International-led efforts in Mexico registered conservation areas, potentially paving the way for sustainable forest tourism if supported by responsible investment. Similarly, in Chad, the community-based climate risk management project generated interest in off-season irrigated agriculture; realizing its full benefits will require continued financial support.

The integration of project beneficiaries into markets and value chains has generally been a weak area. In Nepal, the IUCN-led Lakhandei watershed projects in Restoring the Degraded Watershed and Livelihoods of Lakhandei River Basin through Sustainable Land Management (GEF ID 10469) made only limited progress on marketing. In Chad, the IFAD-led Enhancing the Resilience of the Agricultural Ecosystems (GEF ID 5376) project reported improvements in agricultural production, but weak market access undermined the sustainability of income gains. In Mexico, some marketing support was provided by the Small Grants Programme through participation in local fairs, though this remained modest.

Evidence of health and nutrition co-benefits is largely indirect and not robust, because of the lack of dedicated monitoring. More broadly, tracking of socioeconomic co-benefits in project documentation, including terminal evaluations, has been limited. The full range of benefits supported by GEF-funded projects may thus be underappreciated, increasing the risk that such co-benefits receive insufficient attention in future programming.

Factors affecting the sustainability of socioeconomic co-benefits

A key driver of sustainability is strong community ownership. In many cases, local organizations, indigenous groups, and grassroots committees demonstrated a clear commitment to continuing project initiatives beyond closure. In Mexico's Sierra Norte of Oaxaca, under the World Bank's Sustainable Productive Landscapes project, local leaders integrated conservation with revenue-generating mechanisms like payments for ecosystem services. In Chad, grassroots groups involved in protecting vegetation and fisheries and in preventing bushfires expressed confidence in sustaining their activities using skills gained during the project.

At the policy level, several projects helped operationalize existing frameworks, such as registering community-based protected areas in Mexico or incorporating natural resource management into cantonal development plans in Chad. However, the durability of these gains often depends on political stability. In Nepal, for example, sustainability varied: national parks and forestry agencies tended to follow centralized, top-down processes, while local governments—equipped with budgetary powers—showed more promise for continued support of project outcomes.

Sustainability is often undermined by the short duration of project support and lack of coordination across the GEF portfolio. Projects rarely include consolidation strategies or align with follow-up initiatives. Stronger sequencing—between GEF-funded projects, and with other donor and government programs—could help scale and sustain co-benefits. The absence of GEF country presence limits opportunities for ongoing coordination. While national governments and lead Agencies have the potential to foster synergies, such efforts are rarely institutionalized. Although the GEF's 2022 Country Engagement Strategy aims to enhance national ownership, coordination mechanisms like regular cross-project workshops or knowledge exchanges are still inconsistently applied.

Gaps in knowledge management are another weak link affecting sustainability. While some projects documented lessons and held informal knowledge-sharing events, such efforts were isolated and unstructured. As a result, new project teams often "start from scratch," lacking access to past experiences or proven practices. The absence of regular exchanges between GEF-funded projects limits the spread of innovation and reduces opportunities for collaboration and learning—ultimately weakening long-term impact.

3.3 Performance at the regional/country level

The GEF's interventions across drylands, the Lower Mekong River Basin, and Pacific SIDS demonstrate increasing relevance to regional ecological challenges and national development priorities. Over successive replenishment periods, programming has shifted from isolated, sectoral interventions to integrated, landscapewide approaches. This evolution is exemplified by initiatives such as the Dryland Sustainable Landscapes Impact Program, the Mekong Integrated Water Resources Management framework, and the Ridge to Reef (R2R) program in the Pacific. These interventions aligned well with existing institutional frameworks, including national adaptation strategies and regional platforms like the Mekong River Commission and the Pacific Community. Projects that built upon or complemented national policies and planning processes-such as biodiversity action plans and land use frameworks-were particularly effective in securing stakeholder alignment and institutional traction. The increasing focus on cross-sectoral integration also helped address complex linkages between land, water, climate, and livelihoods, enhancing strategic coherence and programmatic relevance.

The results achieved across these regions have been significant, particularly in environmental terms. In drylands, interventions contributed to improved vegetation cover, soil health, and water retention, with over 250,000 hectares restored in Niger alone. In the Lower Mekong, improved watershed and sediment management helped inform dam operations and hydropower planning, while participatory fisheries and floodplain management contributed to ecological resilience. Pacific SIDS projects recorded localized successes in watershed stabilization, marine protected area establishment, and coral reef recovery. However, these results were often limited in scale, and many interventions lacked mechanisms for broader replication or ecosystem-level impact. Biodiversity outcomes, although identified in planning documents, were underreported in several regions because of weak baseline data and inconsistent monitoring frameworks.

Socioeconomic co-benefits were most apparent in projects that paired environmental restoration with sustainable livelihoods and participatory governance. Interventions supported income diversification through agroforestry, ecotourism, sustainable fisheries, and nontimber forest products, helping to improve food security and reduce reliance on extractive practices. In many cases, projects empowered local communities through the formation of management committees, women's cooperatives, and indigenous land use mapping. These approaches not only enhanced the legitimacy of interventions but also contributed to more inclusive and equitable outcomes. Nonetheless, socioeconomic benefits remained largely anecdotal, as few projects systematically tracked changes in household income, well-being, or resilience. Benefits also tended to be concentrated in pilot areas and were not always designed with strategies for scale-up or market integration.

Sustainability of results varied significantly across the evaluated portfolio of projects. The most enduring outcomes were observed in projects that engaged deeply with local institutions, customary governance structures, and national policy frameworks. For example, land tenure commissions and village planning committees in drylands and forest co-management in Lao PDR contributed to lasting institutional arrangements. Projects that aligned closely with national priorities and secured government buy-in were more likely to be maintained postproject. Financial sustainability was a widespread weakness. Many initiatives continued to rely heavily on external donor funding and lacked embedded strategies for long-term domestic resource mobilization. Innovative mechanisms such as payments for ecosystem services, green finance, and conservation trust funds were introduced in isolated cases but remained the exception rather than the rule. Additionally, the lack of integration of project monitoring systems into national reporting frameworks often limited institutional learning and adaptive management beyond the project life cycle.

Despite progress, several persistent challenges constrained impact and scalability of project results. A key issue was the failure to systematically address trade-offs between environmental protection and economic development. In drylands, for example, income-generating activities occasionally increased pressure on fragile ecosystems-such as higher livestock grazing in Uzbekistan. Across all regions, project designs were often overambitious given institutional capacities, leading to implementation delays and reduced scope. Interagency and intersectoral coordination was weak in many cases, particularly between environment, agriculture, and infrastructure ministries. Climate resilience, although a critical priority in all three regions, was often insufficiently embedded in project activities, especially in Pacific SIDS where exposure to extreme events is high. M&E frameworks tended to focus on area-based indicators (e.g., hectares restored), rather than ecological quality or social impact, reducing the ability to track long-term progress or adapt interventions accordingly.

The GEF's evolving portfolio across drylands, river basins, and island ecosystems demonstrates clear gains in integration, local engagement, and cross-sectoral relevance. Yet persistent gaps in trade-offs management, long-term financing, and impact monitoring challenge the durability of outcomes. Strengthening tenure systems, embedding climate resilience, and investing in sustainable financing and adaptive learning will be key to unlocking long-term landscape resilience across these vulnerable regions.

Drylands

The GEF's dryland strategy has shown increasing relevance over time, transitioning from isolated, sector-specific projects in GEF-5 to integrated, landscapewide approaches by GEF-6 and GEF-7. Programs such as the Dryland Sustainable Landscapes Impact Program and TerrAfrica reflected this shift by promoting transboundary collaboration, policy coherence, and cross-sectoral alignment. These efforts were generally well attuned to both ecological conditions and national development priorities, particularly where projects engaged local institutions and governance structures. This localized integration enhanced the strategic fit of GEF interventions within broader environmental and policy frameworks.

RESULTS

Environmental benefits were notable across many dryland projects, especially those with strong community participation. In Niger, over 250,000 hectares were restored through successive GEF-supported initiatives. Projects also led to improvements in vegetation cover, reductions in soil erosion, and better soil health. Hydrological improvements were evident in degraded catchments across regions such as the Lower Mekong and Sub-Saharan Africa. Despite these positive developments, the reliance on area-based indicators limited the depth of understanding around actual ecological change. Socioeconomic outcomes were most significant where interventions were closely tied to governance reform and livelihood strategies. However, many projects lacked systematic mechanisms to assess or plan for trade-offs between environmental and economic goals, which weakened the long-term coherence and impact of the results.

SOCIOECONOMIC CO-BENEFITS

Dryland projects supported by the GEF generated a range of socioeconomic benefits, particularly in communities with strong participation and ownership. Interventions enabled income diversification through activities like agroforestry, ecotourism, and the harvesting of nontimber forest products. These efforts also contributed to improved food security and rural employment. Where restoration was closely linked to livelihood enhancement, communities were more likely to experience sustained and resilient outcomes. That said, these benefits were unevenly distributed and sometimes resulted in unintended consequences. For instance, in Uzbekistan, increased income from livestock led to higher grazing pressure on fragile ecosystems, highlighting the need to carefully balance socioeconomic goals with ecological sustainability.

SUSTAINABILITY

The sustainability of dryland interventions was closely tied to their integration with national policies and the strength of local institutions. Projects that built on customary authorities and engaged community governance structuressuch as those in Malawi and Niger-were more likely to deliver lasting outcomes. However, several critical factors undermined sustainability. Weak land tenure and conflict resolution frameworks meant that resource access and control were often insecure, reducing incentives for long-term stewardship. Postproject financing was also a major concern, with most initiatives heavily reliant on external funding. Efforts to adopt financial mechanisms such as green bonds or payments for ecosystem services were limited and largely confined to pilot activities. Furthermore, many monitoring systems focused narrowly on area-based metrics and failed to track broader ecological conditions, diminishing their utility for adaptive management or long-term planning.

CHALLENGES

Key implementation challenges were common across dryland interventions. One major gap was the limited attention to land tenure security—an issue addressed explicitly in fewer than one-third of projects in the evaluation portfolio, despite its central importance to sustainable land management. Projects often failed to anticipate or manage trade-offs between environmental protection and economic development, leading to outcomes that were sometimes at odds with long-term sustainability. Many interventions were overambitious, with project designs that did not align with the available institutional capacity, which led to implementation delays and reduced effectiveness. Adaptive management was also constrained by limited access to real-time data and weak learning systems, preventing timely course correction. Financial sustainability remained fragile, with few projects effectively embedding their activities within national development planning or securing long-term funding mechanisms.

Lower Mekong River Basin

GEF-supported projects in the Lower Mekong demonstrated strong relevance to regional ecological challenges and national development priorities. The interventions were well aligned with the goals of the Mekong River Commission, providing a platform for transboundary cooperation and shared management of river basin resources. Projects effectively addressed upstream-downstream linkages, sediment dynamics, and hydrological flows, reflecting a nuanced understanding of basinwide interdependencies. Their alignment with integrated water resource management principles and national climate adaptation strategies further enhanced their contextual appropriateness. By linking technical improvements with community engagement and regional governance structures, GEF interventions in the Lower Mekong responded meaningfully to both environmental and sociopolitical realities.

RESULTS

Environmental outcomes were largely positive in the Lower Mekong, particularly in the areas of watershed management, erosion control, and institutionalization of strategic environmental assessments. These tools helped integrate environmental considerations into broader infrastructure and hydropower planning. Interventions improved the understanding and monitoring of sediment flow and hydrological processes, contributing to more informed decision-making. However, ecosystem restoration results were mixed. Fisheries and wetlands rehabilitation showed promise in pilot areas but were constrained by commercial pressures and a lack of scale-up mechanisms. On the socioeconomic front, projects contributed to improved resilience in upland and flood-prone areas, and successfully engaged women and indigenous communities in planning and implementation. Nevertheless, benefits were unevenly distributed across countries and not consistently monitored, making it difficult to assess their broader impact.

SOCIOECONOMIC CO-BENEFITS

Projects generated important socioeconomic co-benefits by supporting alternative livelihoods, advancing gender equity, and fostering indigenous participation. In upland areas of Lao PDR and northeastern Cambodia, smallholder farmers adopted agroecological practices such as agroforestry and contour planting, which enhanced productivity and helped combat land degradation. Women's cooperatives and participatory land use mapping by indigenous groups contributed to improved equity and local empowerment. In some cases, community-based efforts in coastal protection, including mangrove planting, provided both employment and ecosystem services. Initiatives that supported ecotourism and handicraft development offered supplementary income. However, these benefits remained localized and often lacked clear pathways for scale-up due to weak market linkages and increasing commercial pressures on land and water resources. Socioeconomic data were often anecdotal, and the absence of strong baseline assessments and monitoring frameworks limited the ability to quantify or track long-term impacts.

SUSTAINABILITY

The sustainability of project outcomes in the Lower Mekong region was mixed. On the positive side, several interventions were institutionally embedded through partnerships with the Mekong River Commission and national ministries, which enhanced policy alignment and formal adoption of technical tools and practices. Local ownership was also a strong point in projects that worked through community governance structures or indigenous councils, contributing to continuity and legitimacy beyond the project life cycle. However, sustainability was frequently undermined by weak postproject financing strategies and an overreliance on a small number of technical champions or units. In several cases, technical tools-such as sediment analysis models-were adopted during the project but not maintained after donor funding ended, largely because of insufficient national budget allocation and capacity.

CHALLENGES

A number of recurring challenges limited the effectiveness and scalability of GEF interventions in the Lower Mekong. Delayed disbursements and bureaucratic bottlenecks, particularly in Viet Nam, slowed project rollout and reduced momentum. National institutions often operated in silos, hindering integrated planning across key sectors such as environment, agriculture, and infrastructure. Project designs were frequently overambitious relative to the institutional and technical capacity available at the country level, which led to implementation strain and diluted impact. Intersectoral coordination remained weak, limiting synergies across ministries and sectors. These challenges, combined with gaps in monitoring and scale-up strategies, constrained the full realization of project goals and long-term landscape resilience.

Pacific Islands

RELEVANCE

The GEF's R2R program in the Pacific was well conceived to address the region's unique ecological and socioeconomic context. Recognizing the interdependence of land, water, and marine ecosystems, R2R aimed to promote integrated management across terrestrial and coastal zones. Projects were generally aligned with national strategies and planning frameworks in countries like Fiji and Palau, and they reflected shared regional priorities such as biodiversity conservation and climate change adaptation. However, while the conceptual foundation for integrated land-sea management was strong, integration remained more theoretical than operational. Many projects maintained separate workstreams for terrestrial and marine components, which limited the realization of the R2R vision.

RESULTS

Environmental results were encouraging at the local level. Projects achieved success in watershed restoration, sediment control, and reef protection. The establishment of marine protected areas supported coral reef recovery and fish stock replenishment, demonstrating the ecological value of targeted community-based conservation. However, these achievements were spatially limited and lacked replication strategies, which constrained their broader ecological impact. Socioeconomically, the projects improved food security and provided local employment through initiatives such as coastal reforestation and ecotourism. Gender inclusion and indigenous participation were incorporated into several projects, although the depth and consistency of these efforts varied across contexts. Overall, the potential for wider impact was undermined by insufficient spatial coverage, lack of systematic scale-up, and limited integration of climate-resilience measures into project design and execution.

SOCIOECONOMIC CO-BENEFITS

Socioeconomic benefits of the R2R initiatives were visible in pilot areas, particularly through community-based conservation and livelihood efforts. Local employment was created through mangrove planting, shoreline stabilization, and small-scale sustainable enterprises, helping to boost food security and community cohesion. In some cases, women's groups and indigenous communities played active roles in conservation and alternative income-generating activities. However, these co-benefits were not consistently documented or monitored, and success depended heavily on local context and institutional support. Without robust baseline data and consistent socioeconomic indicators, it was difficult to evaluate the scale or durability of these outcomes across the wider portfolio.

SUSTAINABILITY

The sustainability of R2R interventions showed mixed outcomes. On the positive side, some projects were aligned with national development plans and leveraged donor synergies-for instance, in Samoa, Palau, and the Federated States of Micronesia-enhancing their visibility and institutional legitimacy. These connections helped embed environmental objectives into broader national planning processes. Sustainability was often threatened by the institutional fragility of many SIDS. Once GEF funding ended, many activities ceased as a result of limited domestic resources and the absence of follow-up support. Community governance structures established during project implementation frequently became inactive without continued incentives or technical assistance. Similarly, environmental monitoring systems were rarely institutionalized into national frameworks, limiting their use and continuity beyond the project cycle.

CHALLENGES

Implementation across the Pacific R2R portfolio faced several recurring challenges. Technical and administrative capacity was often limited at both the national and local levels, delaying implementation and reducing project efficiency. Geographic dispersion of islands increased transaction costs and complicated coordination, while overly ambitious project designs placed further strain on already stretched human and institutional resources. Interagency coordination was generally weak, with ministries of environment, fisheries, and planning often working in silos, which impeded integrated action across land and sea domains. Additionally, while climate risks were acknowledged, many projects lacked robust, embedded adaptation measures, despite the Pacific's extreme vulnerability to climate change. These limitations collectively hindered the projects' ability to scale, adapt, and sustain outcomes over time.

Focal area performance

his section presents an analysis of performance and key findings across the GEF focal areas. During GEF-8, the GEF IEO conducted two dedicated evaluations focused on the chemicals and waste and international waters focal areas; an evaluation of GEF interventions in climate change mitigation is ongoing. For the remaining focal areas—biodiversity, climate change adaptation, and land degradation—evidence is drawn from multiple evaluations completed during the GEF-8 period. Each focal area assessment covers key themes, including strategic alignment, relevance, performance, sustainability, socioeconomic co-benefits, innovation, and knowledge management.

For all focal areas, descriptive data on the project portfolio (approved up to December 2024) are sourced from the GEF Portal. Performance ratings are based on terminal evaluations validated by the IEO and completed by December 2024.

4.1 Biodiversity

These findings are primarily informed by IEO evaluations on sustainable forest management (SFM), the Global Wildlife Program, community-based approaches, and the GEF's response to COVID-19.

Portfolio and evolution since GEF-5

In the biodiversity focal area, the GEF has progressively transitioned from traditional conservation efforts to a more integrated, area-based approach. Since GEF-5, the strategy has evolved in response to the growing biodiversity crisis and the need for holistic solutions. GEF-5 prioritized strengthening protected area systems, mainstreaming biodiversity into productive landscapes, and supporting biosafety and access to genetic resources. GEF-6 expanded on these priorities by emphasizing the integration of biodiversity and ecosystem services into development and finance planning. By GEF-7, the strategy advanced further, promoting cross-sectoral mainstreaming through integrated programming and impact programs, addressing key drivers of biodiversity loss, and strengthening enabling policy frameworks.

GEF-8 builds on past strategies by expanding its focus beyond biodiversity conservation and sustainable use to include the restoration of globally important ecosystems. Key shifts in GEF-8 include a greater emphasis on integrated landscape and seascape management through area-based approaches, coupled with efforts to mobilize domestic resources for biodiversity conservation. The strategy emphasizes cross-sectoral, nature-positive economic development by integrating biodiversity actions into key sectors while deepening engagement with indigenous peoples and local communities (IPLC), civil society, and the private sector. The introduction of 11 integrated programs (discussed in section 5) enables more comprehensive and coordinated efforts to address the underlying drivers of biodiversity loss. Importantly, it supports the implementation of the post-2020 Global Biodiversity Framework through biodiversity focal area investments and programming designed to contribute to the framework's implementation.

The biodiversity portfolio represents the largest focal area within the GEF, both in terms of number of projects and volume of GEF financing. Since the pilot phase, the focal area has financed 2,302 biodiversity-related projects and allocated \$7.9 billion of financing from the GEF Trust Fund (table 4.1). The portfolio includes both biodiversity-only and multifocal area projects. Biodiversity projects accounted for 37 percent of total GEF projects in GEF-5, increasing to 52 percent in GEF-8; the share of biodiversity financing also increased-from 29 to 39 percent-over the same period. Regionally, while allocations have fluctuated over time, Latin America and the Caribbean-home to the largest number of megadiverse countries¹-has consistently received the largest share of biodiversity funding. Among the GEF Agencies, the United Nations Development Programme (UNDP) accounts for the largest share of financing in the biodiversity portfolio, although its share has almost halved from 50 percent before GEF-5 to 27 percent in GEF-8.

Cofinancing remains a persistent challenge. Focusing on the GEF Trust Fund, the biodiversity focal area has recorded the lowest cofinancing ratios across all focal areas since GEF-6. The recent IEO Evaluation of Cofinancing in the GEF highlights that many biodiversity projects do not generate revenue streams that can attract more cofinanciers, contributing to the consistently lower cofinancing levels (GEF IEO 2025a).

Main areas of intervention

GEF-funded biodiversity interventions focus on three main priority areas. The first category pertains to conservation, restoration, and the sustainable use of biodiversity resources. Key interventions include the establishment and effective management of protected areas, both terrestrial and marine. Additionally, targeted efforts related to wildlife conservation, through integrated programs such as the Global Wildlife Program, focus on combating illegal wildlife trade through antipoaching and enforcement measures, capacity building, and alternative livelihoods for local communities. These interventions are complemented by mainstreaming biodiversity into productive landscapes and seascapes, where conservation objectives are integrated into key productive sectors, including agriculture, forestry, fisheries, and tourism. GEF projects and programs also support landscape restoration

Metric	Up to GEF-4	GEF-5	GEF-6	GEF-7	GEF-8	Total
Number of approved projects ^a	1,071	352	302	329	247	2,302
GEF financing (million \$) ^b	3,201	1,049	1,034	1,225	1,394	7,903
Cofinancing ratio at approval ^c	2.7	4.1	4.7	5.2	3.9	3.4

TABLE 4.1	Overview of biodiversity GE	EF Trust Fund portfolio

a. Includes multifocal area projects; excludes dropped and canceled projects without a first disbursement. Integrated programing set-asides for GEF-6 and GEF-7 were prorated according to the programming directions of each replenishment period.

b. Includes Agency fees and project preparation grant funding and fees. Integrated programing set-asides for GEF-6 and GEF-7 were prorated according to the programming directions of each replenishment period. Financing figures correspond to biodiversity focal area resources only.

c. Excludes multitrust fund and multifocal area projects; GEF financing excludes Agency fees and project preparation grant funding and fees.

¹Source: United National Environment Programme–World Conservation Monitoring Centre Biodiversity A-Z website, <u>Megadiverse Countries</u>.

S O U R C E : GEF Portal data as of March 26, 2025.

to rehabilitate degraded ecosystems and restore ecosystem functions and services.

The second category of interventions is related to biosafety and access and benefit sharing. In addition to conservation in natural habitats, the GEF supports in situ and ex situ conservation of species and genetic diversity. It plays a key role in supporting countries to implement the Nagoya Protocol on Access and Benefit Sharing and the Cartagena Protocol on Biosafety through the development of national frameworks, institutional capacity, and risk assessment systems for living modified organisms. Invasive alien species management is another priority area, with interventions focusing on prevention, early detection, control, and eradication, as well as on strengthening national biosecurity systems.

The third category includes biodiversity-focused financial mechanisms, strengthening natural capital accounting, and expanding ecosystem services valuation to inform policy decisions, identify trade-offs, and guide investments toward more effective and equitable outcomes.

Additionally, cross-cutting interventions include the promotion of ecosystem-based approaches, SFM, and nature-based solutions for biodiversity conservation, climate adaptation, and disaster risk reduction. The GEF supports biodiversity-based livelihoods, particularly for IPLC, by supporting the sustainable use of biodiversity resources and the development of green enterprises. It also supports enabling policy and institutional reforms, national biodiversity monitoring systems, and knowledge management tools to improve decision-making and compliance with multilateral environmental agreements. GEF biodiversity investments through enabling activities support countries in developing biodiversity finance plans and updating their national biodiversity strategies and action plans to align with the Global Biodiversity Framework.

Relevance

GEF biodiversity interventions demonstrate strong alignment with the objectives of the Convention on Biological Diversity and national biodiversity strategies and targets, supporting the integration of conservation priorities into national policy frameworks and helping countries meet their global biodiversity commitments.

The GEF's biodiversity interventions are aligned with integrated approaches. These interventions are grounded in integrated landscape and seascape approaches that address the interconnected ecological, social, and economic drivers of biodiversity loss. Through its integrated programming, the GEF supports cross-sectoral action in areas such as food systems, urban development, and infrastructure, targeting the root causes of environmental degradation. Policy integration is further advanced through enabling activities such as national biodiversity strategies and action plans, helping countries embed biodiversity priorities into national planning frameworks. Additionally, the GEF promotes inclusive, multistakeholder engagement-emphasizing the leadership of IPLC-as essential to achieving equitable and lasting conservation outcomes.

Performance and effectiveness

GEF biodiversity projects have strong performance ratings for outcomes and monitoring and evaluation (M&E) implementation (figure 4.1). Biodiversity project outcome ratings are consistently strong (~82 percent) and have steadily improved across GEF replenishment periods since GEF-4. However, these projects continue to underperform in key areas such as sustainability, implementation and execution quality, and M&E design. While the overall proportion of projects rated as likely to be sustainable remains relatively low at 59 percent; this has risen significantly to 74 percent in GEF-6. Similarly, ratings for M&E design and implementation have shown progress over time, though both remain below 70 percent.

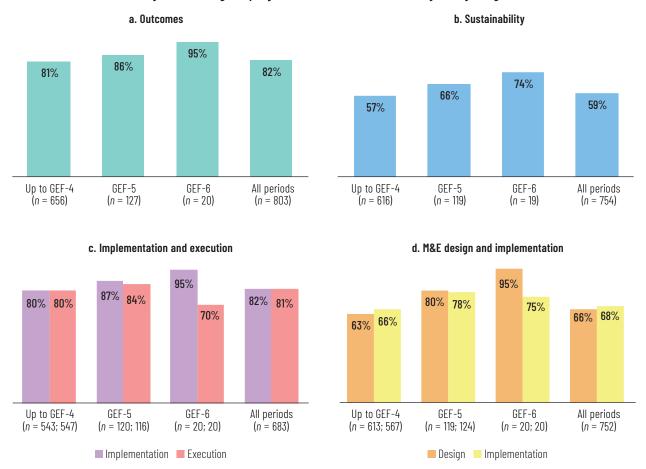


FIGURE 4.1 Biodiversity: Percentage of projects rated in the satisfactory/likely range

S O U R C E : GEF IEO Annual Performance Report 2025 data set, which includes completed projects for which terminal evaluations were submitted by June 30, 2024, and performance ratings were independently validated through December 2024.

NOTE: The number of projects for which validated performance ratings are available is shown in parentheses. Multifocal area projects involving biodiversity are not included.

GEF biodiversity projects have delivered effective conservation results despite a range of implementation challenges. These projects have achieved tangible biodiversity outcomes including habitat protection, species conservation, and reduced deforestation. However, progress has often been hindered by the absence of standardized indicators, data gaps, bureaucratic delays, and capacity constraints, further compounded by disruptions caused by COVID-19. In addition, weak law enforcement, shifting government priorities, and difficulties in securing cofinancing have affected overall implementation efficiency. For example, the Forest and Nature Conservation Project (GEF ID 3772, World Bank) supported 75 social responsibility contracts between concessionaires and communities in the Democratic Republic of Congo, directing \$15.1 million to community-led development over four years. These projects reportedly benefited over 580,000 people, but outcomes varied due to local fund management issues, resulting in modest overall short-term gains. Nonetheless, this model of local forest control holds promise for long-term sustainability.

Sustainability

Sustainability is hindered by gaps in governance, funding, and institutional capacity. The sustainability of biodiversity interventions has been low across the portfolio. Evidence from biodiversity-related evaluations indicates that weak governance, administrative and procedural delays, inadequate institutional and technical capacity, and political instability undermine sustainability. In some cases, the absence of secure tenure and rights, fragile contexts, or shifting government priorities away from biodiversity have further eroded the long-term viability of interventions. Even where scientific expertise or favorable policies exist, the lack of integration into national budgets and insufficient financial continuity pose ongoing risks to maintaining results beyond project lifespans.

Socioeconomic co-benefits

GEF biodiversity interventions have delivered socioeconomic co-benefits through various initiatives that support local livelihoods and increase income through ecotourism, sustainable harvesting, and the development of value-added products. Evaluations indicate that many projects have supported capacity building and the formalization of community roles in biodiversity management. However, the COVID-19 pandemic exposed the vulnerability of overreliance on nature-based tourism and a protected area-based economy, underscoring the need for more diversified and resilient income sources (box 4.1).

Despite intentions for inclusive design, implementation often falls short in ensuring equitable benefit sharing and meaningful IPLC participation. Findings from IEO evaluations reveal persistent challenges: insufficient financial inclusion, weak support for securing land and resource rights, and lack of indigenous peoples' plans in several biodiversity projects. Large-scale SFM projects, while designed to be inclusive, often provide limited oversight and direct engagement with marginalized groups during execution. These gaps

BOX 4.1 Involving indigenous communities

The GEF-supported project Improving the Conservation of Biodiversity in the Atlantic Forest of Eastern Paraguay (GEF ID 2690, World Bank) underwent a major turnaround after a low-performing midterm evaluation, largely due to a strategic shift toward empowering indigenous peoples and strengthening their role in biodiversity conservation. Originally focused on working with large landowners, the project was restructured to prioritize indigenous communities and small-scale farmers, supported by the Indigenous Peoples Planning Framework and the active engagement of the National Indigenous Peoples Institute. The project, executed by the Brazil-Paraguay energy partnership Itaipu Binacional, leveraged its financial, technical, and political capacity to restore forest corridors and deliver conservation results. Nearly 2,300 indigenous families benefited from restoration and livelihood subprojects, including honey production, agroforestry, and reforestation, with over 65,000 hectares under sustainable management and more than 750 hectares restored directly by indigenous communities. This shift toward inclusive implementation, combined with adaptive management and stakeholder consultation, enabled the project to successfully reestablish connectivity across one of the world's most threatened ecosystems.

reduce the effectiveness and equity of interventions, highlighting the importance of strengthening safeguards, accountability, and inclusive governance mechanisms.

Innovation

Technological innovation strengthens biodiversity monitoring, enforcement, and conservation across GEF projects. Innovation has played a key role in GEF biodiversity projects, particularly through the integration of advanced technologies to improve conservation outcomes. Biodiversity projects have used tools like Global Positioning System (GPS) tracking, drones, artificial intelligence (Al), forensic DNA analysis, and satellite monitoring to address illegal wildlife trade and human-wildlife conflict. Technologies such as eCITES, SMART, and W-MIS have enhanced data collection and enforcement capabilities, while projects in South Africa, Thailand, Mozambique, Ethiopia, and elsewhere have piloted cutting-edge solutions for monitoring wildlife and forest resources. Similarly, SFM projects have pioneered the use of satellite-based systems for tracking deforestation, land degradation, and carbon stocks, contributing to platforms like Global Forest Watch and the Food and Agriculture Organization of the United Nations (FAO) SEPAL. Although maintaining technological tools is challenging due to rapid shifts in platforms and data systems, GEF-supported projects have sought to encourage long-term use by integrating innovations into national planning, monitoring frameworks, and reporting systems.

Institutional innovations support biodiversity conservation effec-

tiveness. Institutional innovations have complemented these technological advances, particularly through the establishment of national wildlife enforcement units and improved coordination among law enforcement, customs, and judiciary bodies. Countries such as Thailand and Viet Nam have aligned institutional reforms with new technologies to enhance biodiversity governance and crime prevention strategies.

Knowledge management

GEF biodiversity-related projects have generated valuable knowledge and lessons, yet this information often remains fragmented and underutilized, limiting opportunities for collective action and the scaling up of effective practices. Many projects lack robust quantitative metrics to assess effectiveness, as well as mechanisms for adaptive learning, leading to recurring weaknesses in project design and limited uptake of successful outcomes. More recently, GEF investments—particularly through integrated programming—have supported the development of regional and global platforms aimed at enhancing knowledge sharing and communication on biodiversity. While these platforms have facilitated meaningful exchange, fully realizing their potential remains a challenge. For instance, the evaluation of the Global Wildlife Program recommended strengthening its knowledge platform by encouraging broader participation, addressing language barriers, and expanding dissemination through partner networks.

4.2 Climate change adaptation

Key sources of evidence include the evaluations on drylands countries, climate information and early warning systems (CIEWS), and the Least Developed Countries Fund/Special Climate Change Fund (LDCF/ SCCF) annual evaluation reports for 2023–25.

Portfolio and evolution since GEF-5

The evolution of GEF-supported interventions illustrates a shift over successive replenishment periods. During the earlier periods (GEF-5 and before), the approach to climate adaptation was primarily focused on reducing vulnerability and increasing adaptive capacity in vulnerable countries. However, as global understanding of climate risks deepened, it became clear that the complex, interconnected nature of climate impacts demanded a more systemic response that could address not just individual vulnerabilities but the underlying drivers of climate risk across scales and systems.

The transition from GEF-6 to GEF-7 and GEF-8 has seen a gradual shift toward integrated, system-level approaches to adaptation in GEF programming strategies on adaptation to climate change for the LDCF/SCCF. Each successive programming cycle expanded the scope of interventions to encompass both sectoral vulnerabilities and the broader socioeconomic and institutional contexts surrounding adaptation efforts. GEF-7 introduced more explicit attention to innovation and private sector engagement; GEF-8 further developed concepts of transformational adaptation and systems resilience. The later strategies incorporated mechanisms for linking adaptation interventions to national and local planning frameworks, as documented in the GEF-8 LDCF/SCCF programming strategy (GEF 2022a), which identifies specific priorities, such as scaling up finance, innovation, private sector engagement, and fostering partnerships for inclusion.

A key component of this strategic evolution has been the catalytic role projects are expected to play. While early projects under GEF-5 were primarily pilot initiatives, projects in GEF-7 and GEF-8 are leveraging additional investments from mechanisms such as the Green Climate Fund and other multilateral and bilateral sources. This approach aligns with the LDCF/SCCF programming strategy's emphasis on transformational adaptation and finance scaling.

Data on the portfolio on climate change adaptation show a decline in financing between GEF-5 and GEF-6, followed by a partial recovery from GEF-7 (table 4.2). The number of projects approved has continued to decline, while the ratio of expected cofinancing has remained stable. UNDP has been the main lead Agency. As a region, Africa has received by far the largest portion of financing, and this has further increased under GEF-8.

Main areas of intervention

The main interventions of climate change adaptation can be categorized under three groups:

- Agriculture. Interventions under this theme prioritize agroecological transformation, integrating climate-resilient crops, aquaculture, digital tools and social safety nets exploring crop insurance schemes.
- CIEWS. These are investments in adaptation aimed at modernizing meteorological infrastructure, expanding automated weather stations, and strengthening "last mile" communication channels.
- Water. Integrated water resource management interventions emphasize rainwater harvesting, drip irrigation, and hydrological modeling.

Relevance

GEF climate change adaptation interventions have remained aligned with international agreements, including the United Nations Framework Convention on Climate Change (UNFCCC), the Paris Agreement, and the Sustainable Development Goals (SDGs). As a financial mechanism for these frameworks, the GEF has continued to support countries in implementing national adaptation plans, ensuring that adaptation efforts are integrated into national and sectoral planning. Additionally, the GEF has contributed to biodiversity conservation and land degradation neutrality under the Convention on

Metric	Up to GEF-4	GEF-5	GEF-6	GEF-7	GEF-8	Total
Number of approved projects ^a	112	173	52	91	74	502
GEF financing (million \$) ^b	252	992	344	520	621	2,729
Cofinancing ratio at approval ^c	3.7	5.4	4.4	4.5	5.0	4.9

TABLE 4.2 Overview of climate change adaptation portfolio (LDCF/SCCF)

SOURCE: GEF Portal data as of March 26, 2025.

a. Includes multifocal area projects; excludes dropped and canceled projects without a first disbursement.

b. Includes Agency fees and project preparation grant funding and fees.

c. Excludes multitrust fund and multifocal area projects; GEF financing excludes Agency fees and project preparation grant funding and fees.

Biological Diversity and the United Nations Convention to Combat Desertification (UNCCD), reinforcing ecosystem-based adaptation approaches and sustainable resilience-building initiatives.

Over time, GEF-funded adaptation efforts have evolved to integrate both upstream investments in data collection and climate services with downstream applications that enhance preparedness and response. The IEO's CIEWS evaluation (GEF IEO 2025b) found that most interventions were concentrated at the local level (39 percent). These projects sought to equip vulnerable populations with the tools and knowledge to implement effective adaptation strategies, often focusing on livelihood resilience; ecosystem-based adaptation; and localized early warning mechanisms for farmers, fishers, and other at-risk groups. At the national level (33 percent), adaptation efforts have primarily focused on strengthening climate governance and integrating climate resilience into national policies and development plans.

At the state and regional levels (20 percent), interventions have facilitated transboundary adaptation responses and the harmonization of climate risk management across jurisdictions. These initiatives promote knowledge sharing, data harmonization, and coordinated action among multiple stakeholders, particularly in regions where climate risks transcend administrative boundaries, such as shared river basins or coastal zones. Finally, at the multicountry level (7 percent), cross-border adaptation efforts have highlighted the transnational nature of climate risks, fostering regional cooperation on challenges such as desertification, extreme weather events, and shared ecosystem vulnerabilities.

Performance and effectiveness

Data available for completed projects show different trends in outcome achievement and sustainability. The percentage of completed projects assessed moderately satisfactory or higher for outcome achievement increased from 81 percent under GEF-1 to GEF-4 cumulatively, to 83 percent under GEF-5, and 90 percent under GEF-6 (figure 4.2)—although in the latter period, the number of projects observed is smaller. The percentage of projects assessed at completion as moderately likely or above for sustainability dropped from 71 percent under GEF-1 to GEF-4 cumulatively, to 53 percent under GEF-5, and increased only slightly to 56 percent under GEF-6—again, with a smaller number of observations. The quality of implementation and execution and for M&E design and implementation show improving rating trends.

The CIEWS evaluation found that these interventions have significantly contributed to improving climate information systems, enhancing institutional capacity, and integrating adaptation measures into national policies. Investments in modernized meteorological infrastructure and expanded automated weather stations have contributed to a 30-50 percent increase in forecasting accuracy in target regions, enabling earlier disaster response. Early warning coverage reached over 60 percent of vulnerable populations in least developed countries (LDCs), correlating with reduced fatalities during cyclones and floods. In a UNDP-implemented project on Strengthening CIEWS in Cambodia (GEF ID 5318), 15 automated weather stations were installed, improving flood forecasting accuracy by 50 percent and reaching 1.2 million people. Regional projects, such as Climate Change Adaptation in the Eastern Caribbean Fisheries Sector (GEF ID 5667, FAO), significantly improved storm surge alerts, contributing to a 60 percent reduction in disaster-related fatalities.

The key achievements in agricultural adaptation included increased adoption of drought-tolerant crops and expanded extension services, which improved food security in vulnerable regions. Reduced postharvest losses were also noted through storage innovations and enhanced market access, though scaling pest surveillance systems remained challenging. Several country examples illustrate these impacts. In Niger and Burkina Faso,

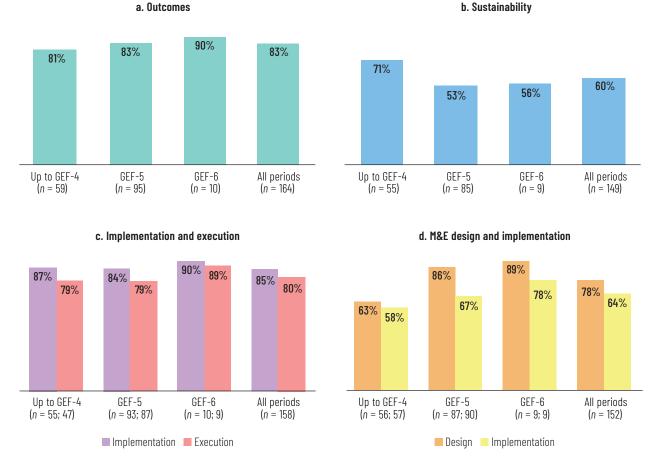


FIGURE 4.2 Climate change adaptation: percentage of projects rated in the satisfactory/likely range

S O U R C E : GEF IEO Annual Performance Report 2025 data set, which includes completed projects for which terminal evaluations were submitted by June 30, 2024, and performance ratings were independently validated through December 2024.

NOTE: The number of projects for which validated performance ratings are available is shown in parentheses.

FAO-led projects on farmer field schools trained over 15,000 farmers in drought-tolerant techniques, boosting yields by 25-40 percent. In Malawi's Climate Proofing Local Development Gains in Rural and Urban Areas of Machinga and Mangochi Districts (GEF ID 4797, UNDP), postharvest innovations such as improved grain storage systems reduced losses by 30 percent.

Integrated water resource management dominated interventions, emphasizing rainwater harvesting, drip irrigation, and hydrological modeling. The 2023 (GEF IEO 2024b) and ongoing 2025 LDCF/SCCF annual evaluation reports underscore improved water access in drought-prone regions, with projects in Sub-Saharan Africa and small island developing states (SIDS) enhancing agricultural yields through efficient irrigation. Policy reforms enabled equitable water allocation, reducing conflicts in transboundary basins. However, maintenance of water infrastructure and long-term financing gaps were recurring challenges. In Strengthening Capacities of Rural Aqueduct Associations to Address Climate Change Risks in Water Stressed Communities of Northern Costa Rica (GEF ID 6945, UNDP), drip irrigation increased water efficiency by 40 percent. Uganda's Building Resilience to Climate Change in the Water and Sanitation Sector (GEF ID 5204, African Development Bank) project introduced gender-inclusive sanitation infrastructure, boosting girls' school enrollment by 20 percent, but faced procurement delays that slowed implementation.

The integration of adaptation into broader development planning has shown mixed results. While some projects have successfully mainstreamed climate resilience, others have remained confined to their respective sectors. Despite this inconsistency, a key strength of GEF adaptation interventions has been their catalytic effect. Projects have effectively mobilized cofinancing and fostered multistakeholder partnerships, extending their impacts beyond initial funding cycles. The LDCF/SCCF annual evaluation reports for 2023 and 2025 highlight that adaptation projects have often laid the groundwork for scaling up investments from other climate funds, national governments, and the private sector, enhancing their overall effectiveness.

Sustainability

The sustainability of GEF-funded adaptation interventions has remained a key challenge. The latest assessments indicate a declining trend in sustainability ratings, with fewer projects rated as likely to sustain their outcomes over time. The LDCF/SCCF annual evaluation reports for 2023, 2024 (GEF IEO 2025c), and 2025 highlight that sustainability is particularly fragile in LDCs and SIDS because of financial constraints, institutional capacity gaps, and sociopolitical instability.

A persistent challenge has been the lack of long-term financial mechanisms to sustain project benefits beyond initial funding. Many adaptation interventions rely heavily on donor support, and, while some projects have successfully leveraged cofinancing, securing ongoing resources for maintenance, capacity building, and scaling remains difficult. Furthermore, institutional ownership and policy integration have been inconsistent across projects. Another key factor affecting sustainability is the implementation of exit strategies and follow-up commitments. Projects that incorporated clear transition plans, including capacity-building efforts, private sector engagement, and local community involvement, had better sustainability prospects.

Socioeconomic co-benefits

GEF adaptation interventions have contributed to improving livelihoods, reducing vulnerability, and strengthening economic resilience in communities most affected by climate change. Evaluations highlight that projects supporting climate-smart agriculture, water resource management, and ecosystem-based adaptation have helped diversify income sources, enhance food security, and create economic opportunities. One of the most tangible socioeconomic benefits identified in evaluations is the reduction in fatalities and economic losses due to improved climate information and disaster preparedness. By providing timely and accurate early warning information, CIEWS projects have enabled communities to better prepare for extreme weather events-ultimately saving lives and reducing the financial impact of disasters.

Evaluations indicate that, while many projects have included gender components and promoted inclusive adaptation strategies, systematic monitoring of socioeconomic impacts has been limited. In some cases, adaptation benefits have not been fully realized due to institutional barriers, lack of coordination with social protection programs, and difficulties in scaling up successful pilot initiatives. Marginalized groups, such as women, indigenous communities, and small-scale farmers, often face greater challenges in accessing the full range of benefits from adaptation interventions.

Innovation

Successful innovations have emerged primarily in information-sharing platforms and data utilization. Risk and

vulnerability platforms have improved connections between beneficiaries and policymakers in several regions. The SCCF portfolio for non-LDCs shows higher innovation rates, exemplified by the Southeast Europe and Caucasus Regional Catastrophe Risk Insurance Facility. Projects using spatial data analytics for climate risk assessment demonstrate where data-driven approaches work effectively.

Country-level implementation reveals both successes and limitations. Costa Rica's experience with rural aqueduct associations shows how low-maintenance sensor systems can effectively monitor water levels cost-efficiently. The integration of social networks and free messaging platforms for alerts demonstrates successful innovation in communication channels. However, these successes remain isolated rather than systematic across the portfolio.

A substantial disconnect exists between innovation in project design versus actual implementation. Data from CIEWS projects indicates that while 22 percent of evaluated projects incorporated innovative approaches during planning stages, only 5 percent demonstrated successful implementation by their terminal evaluation. This implementation gap represents a persistent challenge in the adaptation landscape.

Sector-specific innovation varies significantly. Climate-smart agriculture, early warning systems, and ecosystem-based adaptation show promising applications of remote sensing, digital platforms, and mobile technologies. Yet, lessons from the LDCF/SCCF annual evaluation reports consistently identify scaling barriers, including inadequate funding mechanisms, insufficient technical capacity, and weak private sector partnerships that prevent wider adoption.

Current funding structures, implementation support, and partnership models show significant gaps. The ongoing 2025 LDCF/SCCF annual evaluation report indicates that existing targeted funding mechanisms for innovation remain insufficient. Successful pilot projects often lack pathways to scale, and collaboration with private sector and research institutions is underdeveloped. These structural limitations constrain the potential impact of innovative climate adaptation approaches across GEF portfolios.

Knowledge management

Knowledge management has played a growing role in enhancing the effectiveness of GEF adaptation interventions, yet systematic learning and institutional memory remain areas for improvement. While knowledge-sharing platforms, workshops, and collaborative networks have been established, the integration of lessons learned into future programming is uneven, limiting the ability to replicate successful approaches across different contexts.

The LDCF/SCCF annual evaluation reports highlight that, while projects increasingly document experiences and disseminate good practices, mechanisms for capturing and institutionalizing knowledge remain fragmented. The CIEWS evaluation found that data and best practices generated by adaptation interventions are not always effectively transferred across activity cycles, leading to missed opportunities for scaling up proven strategies.

Progress has been made in leveraging workshops, webinars, and online platforms to disseminate findings and encourage collective learning. In several cases, adaptation lessons have been integrated into national policy frameworks and strategic adaptation plans, strengthening decision-making at multiple levels. However, ensuring the continuity of institutional knowledge as projects transition across GEF periods remains a challenge, particularly in maintaining long-term engagement with local institutions and stakeholders. By embedding knowledge sharing into project design and implementation, GEF adaptation interventions can become more responsive, evidence-based, and scalable in the long term.

4.3 Climate change mitigation

Key sources of evidence include the ongoing Evaluation of the GEF's Interventions in Climate Change Mitigation and the Evaluation of the Sustainable Cities Program.

Portfolio and evolution since GEF-5

Climate change is one of the most urgent global challenges, requiring a multipronged response, with mitigation as a key strategy. Since its establishment in 1991, the GEF has played a central role in climate change mitigation, adapting to shifting global priorities, UNFCCC guidance, and evolving climate finance mechanisms.

Over time, the GEF climate change mitigation portfolio has moved away from stand-alone projects, with GEF-5 marking a shift toward integrated programming, and greater attention to support for capacity building and enabling environment. GEF-8 continues this trend, emphasizing systemic mitigation strategies rather than large-scale emissions reduction investments. Performance of climate change mitigation projects remains at par with other projects in the GEF portfolio, While the mitigation portfolio has strengthened knowledge management and socioeconomic co-benefits, challenges persist in innovation uptake and balancing agriculture, forestry and other land use (AFOLU) and non-AFOLU mitigation efforts. Although GEF-8 figures remain provisional, early trends indicate a continued shift toward programmatic approaches and strategic partnerships.

The GEF climate change mitigation portfolio has seen a sharp decline in mitigation programming since GEF-5, alongside an increased reliance on the child project modality for resource allocation. The reduction in the number of projects and financing, as well as in the expected cofinancing ratio, is evident in table 4.3. Asia, Latin America and the Caribbean, and Africa have the largest shares of financing. The World Bank, once the top lead Agency in climate change mitigation, experienced a decline in funding. The largest focal area recipients are now UNDP, the United Nations Environment Programme (UNEP), and FAO.

Over the past two decades, the emergence of other multilateral climate funds has supported large-scale mitigation investments, contributing to a decline in the GEF's mitigation funding since GEF-5. Recent conference of the parties (COP) guidance has further shifted the GEF's focus on capacity development and enabling environment, shaping its evolving programming priorities. While GEF-8 is still ongoing and figures remain provisional, current trends indicate a shift toward capacity building, enabling environment,

TABLE 4.3 Overview of climate change mitigation GEF Trust Fund portfolio

Metric	Up to GEF-4	GEF-5	GEF-6	GEF-7	GEF-8	Total
Number of approved projects ^a	755	322	309	267	238	1,892
GEF financing (million \$) ^b	2,894	1,123	905	698	518	6,138
Cofinancing ratio at approval ^c	6.9	10.0	15.7	8.3	4.2	8.4

S O U R C E : GEF Portal data as of March 26, 2025.

a. Includes multifocal area projects; excludes dropped and canceled projects without a first disbursement. Integrated programing set-asides for GEF-6 and GEF-7 were prorated according to the programming directions of each replenishment period.

b. Includes Agency fees and project preparation grant funding and fees. Integrated programing set-asides for GEF-6 and GEF-7 were prorated according to the programming directions of each replenishment period.

c. Excludes multitrust fund and multifocal area projects; GEF financing excludes Agency fees and project preparation grant funding and fees.

and integrated mitigation strategies, rather than large-scale emissions reduction investments.

Another major driver of the shift in GEF climate change work has been a broader shift to the use of integrated approaches for achieving global environmental benefits, including climate change mitigation benefits. The GEF's emphasis up to GEF-6 was on sectoral programming focused on technology deployment, urban transport, and land use. Integrated programming was introduced in GEF-6, promoting synergies across focal areas, private sector engagement, and innovative financing approaches.

The GEF-8 approach to climate change mitigation builds on GEF-7, emphasizing rapid decarbonization, coherence in mitigation efforts, and private sector engagement in line with the 2020 Private Sector Engagement Strategy. It gives attention to a transformational shift toward net-zero greenhouse gas emissions and climate-resilient development pathways. As outlined in the GEF-8 Programming Directions (GEF Secretariat 2022a), the GEF-8 Climate Mitigation Strategy consists of two pillars:

- Mitigation with systemic impacts. This focuses on innovation, technology development and transfer, and enabling policies to drive transformative mitigation actions by
 - Accelerating efficient use of energy and materials to reduce emissions;
 - Enabling the transition to decarbonized power systems through renewable energy expansion and storage solutions;
 - Scaling up zero-emission mobility for both people and goods; and
 - Promoting nature-based solutions with high mitigation potential.
- Enabling conditions for mainstreaming mitigation. This pillar aims to integrate mitigation into sustainable development strategies by

- Supporting capacity-building for transparency under the Paris Agreement through the Capacity-Building Initiative for Transparency; and
- Fulfilling convention obligations and enabling activities, including the enhanced transparency framework.

Relevance

The GEF's climate change mitigation strategy has evolved in response to UNFCCC guidance, national priorities, and the need for cost-effective delivery of global environmental benefits. Over the past two decades, the emergence of better-resourced multilateral climate funds has enabled large-scale mitigation investments, resulting in a decline in GEF mitigation funding since GEF-5. More recent COP guidance has shifted the GEF's focus toward capacity building and creating enabling environment. Additionally, parties to the Paris Agreement have called for support in implementing the enhanced transparency framework, as required under Article 13. The GEF responds to this through its enabling activity pillar. Further, the projects through which climate change mitigation-related results are delivered generate co-benefits that address several SDGs that go beyond climate change mitigation benefits.

Integration

Of the 11 GEF-8 integrated programs, 10 receive funding from the climate change mitigation focal area and 6 are expected to contribute significantly to mitigation. Two—the Net-Zero Nature-Positive Accelerator and Sustainable Cities—have been explicitly designed for climate change mitigation and are committed to tracking mitigation results. Under the Net-Zero Nature-Positive Accelerator, 13 child projects totaling \$107.6 million in GEF funding have been approved and 12 have received Chief Executive Officer (CEO) endorsement. Sustainable Cities, with 21 approved child projects totaling \$165.6 million, is at an earlier stage. None of its projects have yet reached CEO endorsement given the recent approval of its project framework document (June 2024).

While GEF-8 integrated programs leverage AFOLU for significant mitigation benefits, they do not have a strong focus on fossil fuel reduction. Most climate change mitigation-funded programs prioritize AFOLU mitigation, with Sustainable Cities being the only program primarily focused on non-AFOLU activities. While integrated programs set ambitious AFOLU mitigation targets, they largely overlook fossil fuel reduction opportunities, such as the following:

- The Greening Transportation Infrastructure Development Program (GEF ID 11467, World Wildlife Fund-US) integrates biodiversity and landscape concerns but does not address transportation modes or embedded emissions from construction materials.
- SIDS-related programs fail to address high diesel dependency, despite its cost, pollution risks, and ocean transport hazards.

Fossil fuel-focused mitigation is more likely to be addressed through stand-alone projects than integrated programs. Coal mining and coal-bed methane, infrastructure planning, and e-waste management would provide important climate change mitigation opportunities with benefits in biodiversity, chemicals, and land degradation. But such ideas have not been adequately incorporated into GEF-8 programs. This gap may partly stem from the shrinking climate change mitigation funding envelope, limiting the scope for diverse mitigation activities.

Performance and effectiveness

Effectiveness and sustainability have improved for projects approved in more recent GEF cycles where a substantial number of projects have been completed.² The percentage of completed projects assessed moderately satisfactory or higher for outcome achievement increased from 77 percent under GEF-1 to GEF-4 cumulatively, to 83 percent under GEF-5 and GEF-6 (figure 4.3). Similarly, the percentage of projects assessed at completion as moderately or above for likelihood of sustainability of outcomes increased from 69 percent under GEF-1 to GEF-4 cumulatively, to 73 percent and 79 percent under GEF-5 and GEF-6, respectively. Similar trends are visible for the quality of implementation and execution and for M&E design and implementation.³

According to the available terminal evaluations, climate change mitigation projects in GEF-6 have supported broader socioeconomic benefits related to several SDGs. A review of 34 completed GEF-6 climate change mitigation projects suggests that they have contributed to multiple SDGs, including ending hunger (SDG 2), energy access (SDG 7), sustainable cities (SDG 11), responsible consumption and production (SDG 12), marine conservation (SDG 14), and terrestrial ecosystems and forests (SDG 15). Additionally, a few projects explicitly pursued benefits related to gender equality (SDG 5), water and sanitation (SDG 6), employment (SDG 8), and infrastructure (SDG 9).

² In GEF-8, current measurement methodologies indicate that mitigation benefits are expected to be greater in AFOLU sectors, with relatively fewer in non-AFOLU sectors. However, differences in how AFOLU mitigation is estimated make direct comparisons with non-AFOLU sectors challenging. Resolving these methodological issues is crucial for a more accurate assessment of value for money.

³ In addition, an analysis of the results measurement framework of completed GEF-6 projects that was carried out as part of the results-based management evaluation (GEF IEO 2025 forthcoming), shows that at the indicator level of the 61 discrete greenhouse gas mitigation targets spread over 15 projects, 65 percent were fully or substantially met. The majority of these indicators (63 percent, n = 56) pertained to AFOLU benefits; the remainder were related to non-AFOLU benefits.

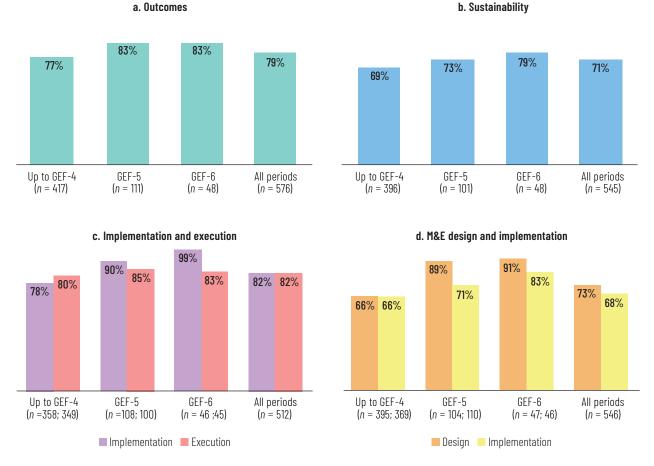


FIGURE 4.3 Climate change mitigation: percentage of projects rated in the satisfactory/likely range

S O U R C E : GEF IEO Annual Performance Report 2025 data set, which includes completed projects for which terminal evaluations were submitted by June 30, 2024, and performance ratings were independently validated through December 2024.

NOTE: The number of projects for which validated performance ratings are available is shown in parentheses.

Innovation

Despite adopting a risk-friendly approach, GEF-8 projects prioritizes commercial technology over novel innovations, while other funding mechanisms lead in advancing emerging climate technologies. The GEF Council's adoption of a risk-friendly approach encourages institutional, policy, technological, and financial risk-taking (GEF 2024a). However, this is not yet evident in the climate change mitigation portfolio. The GEF-8 Programming Directions make funding available for innovative and noncommercial technologies such as sustainable cooling, digital technologies, industrial

a. Outcomes

decarbonization and renewable energy integration technologies, vehicle-to-grid, and the decarbonization of the shipping and aviation sectors (GEF Secretariat 2022a), which are also supported by other funds such as the Climate Investment Funds or the UK's Ayrton Fund. However, none of these technologies have been funded so far in GEF 8.

Several innovation opportunities, such as integrated energy efficiency, circular economy solutions, smart grids, and vehicle-to-grid technologies, have yet to be widely adopted. The electric vehicle and hydrogen programs piloted in GEF-7 and expanded in GEF-8 demonstrate how the GEF can support global technology deployment. However, for more established technologies with large market potential, such as sustainable cooling, a project-by-project approach may be less effective than a programmatic approach, as seen with electric vehicles and minigrids. Opportunities for synergies by linking to other large-scale funding efforts like the ones above cannot be exploited in a project-by-project approach. While the portfolio does not exhibit a high risk appetite for new technologies, process and business model innovations-such as platforms, guarantee mechanisms, and circular economy approaches-offer alternative ways to scale up mitigation efforts, aligning with the GEF's stated high-risk tolerance in financial and business models.

Knowledge management

The expansion of the GEF partnership has facilitated the involvement of more Agencies in knowledge sharing, but has also increased coordination costs. In earlier replenishment periods where projects were developed and implemented individually, GEF Agencies served as the primary hubs for knowledge management, overseeing both technical mitigation approaches and implementation science. With the expansion of the GEF partnership, knowledge is now distributed across a broader set of Agencies, improving accessibility but also increasing coordination costs.

Nearly all GEF projects endorsed from July 2023 to June 2024 prioritized knowledge sharing, with 97 percent incorporating dedicated components. Analysis of the 60 GEF projects that were CEO endorsed from July 2023 to June 2024, including 11 climate change mitigation-focused projects, shows that 97 percent included a component that specifically addressed knowledge sharing.

The GEF-8's programmatic approach enhances knowledge management and dissemination but comes with trade-offs in

cost and country drivenness. The shift toward programmatic approaches has strengthened knowledge management by embedding it within program framework documents, which outline technical challenges and solutions. Additionally, global child projects serve as knowledge hubs, consolidating both thematic and implementation knowledge for country-level projects. In GEF-8, both climate change mitigation-focused integrated programs-Net-Zero Nature-Positive Accelerator and Sustainable Cities-feature global platforms for knowledge sharing. Other climate change mitigation focal area programs such as the Global CleanTech Innovation Program also include global child projects that perform a similar function. This structured approach enhances resources, establishes dedicated performance indicators, and facilitates broader knowledge dissemination, potentially improving project outcomes. However, trade-offs exist, including reduced country drivenness and increased costs for knowledge management components.

4.4 International waters

Portfolio and evolution since GEF-5

Since the adoption of the GEF Operational Strategy in 1995, the international waters focal area has promoted international cooperation through evolving strategic priorities. The strategic objectives of GEF-5 and GEF-6 addressed surface and groundwater basins, marine fisheries, coastal pollution reduction, large marine ecosystems, foundational capacity building, research, and portfolio learning. In GEF-7 and GEF-8, attention has also been given to the blue economy, areas beyond national jurisdiction (ABNJ), and water security as strategic priorities. The transboundary diagnostic analysis and strategic action program (TDA-SAP) have remained central to fostering cooperation among stakeholder countries. As shown in table 4.4, the number of projects approved hovered around 70 between GEF-5 and GEF-8, with some increase in the latter period. The GEF financing per period remained stable, while the expected cofinancing at approval has increased since GEF-5. More disaggregated data show that the World Bank's share of funding has declined significantly; the lead Agencies with the highest share of financing are now UNEP, FAO and UNDP. Under GEF-8, Latin America and the Caribbean has the highest share of financing, followed by Africa.

The international waters focal area underwent a significant shift from GEF-7 to GEF-8, marked by a rise in child projects within integrated programming while reducing Agency concentration. Up to GEF-7, stand-alone projects consistently formed the majority of the international waters portfolio. In GEF-8, however, child projects within integrated programs have accounted for over \$137 million of international waters focal area resources. This transformation reflects international waters' active participation in integrated programs such as Clean and Healthy Ocean; Circular Solutions to Plastic Pollution; Eliminating Hazardous Chemicals from Supply Chains; and Amazon, Congo, and Critical Forest Biomes.

The international waters focal area addressed pollution reduction and sustainable fisheries as the most common thematic issues from GEF-5 to GEF-8, while promoting integrated programming approaches and strengthening the enabling environment. Available terminal evaluations indicate that the majority of GEF-5 and GEF-6 projects incorporated at least one integrated approach, such as integrated water resource management, integrated coastal management, and ridge to reef (R2R). Among currently active projects, key intervention areas include knowledge management, institutional capacity building, and policy and regulatory strengthening. An emerging area of work led by the international waters focal area is providing technical support to countries on the Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction (BBNJ Agreement). While the international waters focal area had not served as a financial mechanism for any specific international convention previously, adoption of this agreement in 2023 presented an opportunity for the GEF focal area to fund related enabling activities.

Relevance

GEF international waters programming was highly relevant to national, regional, and global priorities. Almost all (98 percent) terminal evaluations from GEF-5 and GEF-6 rated GEF-supported international waters interventions as relevant. This finding aligns with previous GEF IEO evaluations on water security and the Lower Mekong River Basin, which highlighted the strong relevance of international waters activities to other GEF

Metric	Up to GEF-4	GEF-5	GEF-6	GEF-7	GEF-8	Total
Number of approved projects ^a	198	72	57	65	83	475
GEF financing (million \$) ^b	1,258	389	310	438	376	2,770
Cofinancing ratio at approval ^c	4.9	8.5	11.3	8.1	9.8	6.9

TABLE 4.4 Overview of international waters GEF Trust Fund portfolio

SOURCE: GEF Portal data as of March 26, 2025.

a. Includes multifocal area projects; excludes dropped and canceled projects without a first disbursement.

b. Includes Agency fees and project preparation grant funding and fees.

c. Excludes multitrust fund and multifocal area projects; GEF financing excludes Agency fees and project preparation grant funding and fees.

focal areas and national priorities, including irrigation, drinking, and fisheries. For example, a project in Zimbabwe and Mozambigue led by the International Union for Conservation of Nature (IUCN) addressed water security and flooding in the Buzi, Pungwe, and Save (BUPUSA) Basin, aligning with key development priorities of both countries. Support for the BUPUSA Commission facilitated transboundary cooperation. However, evidence from the Transboundary Waters Assessment Programme (GEF ID 4489, UNEP) and other research indicates that GEF international waters projects do not always cover transboundary waterbodies facing the highest environmental risks (Lee, Seitzinger, and Mayorga 2016). Although the international waters focal area used Transboundary Waters Assessment Programme findings to inform GEF-8 programming, some remaining gaps were identified. This presents an opportunity to enhance portfolio targeting and ensure that international waters interventions address the most relevant and pressing issues, while recognizing the importance of country ownership and demand.

Performance and effectiveness

Evidence suggests that international waters focal area performance improved in GEF-5 and GEF-6. The proportion of international waters projects rated in the moderately satisfactory or above range for outcome achievement was higher in GEF-5 than for all projects approved up to GEF-4 (figure 4.4); a small decrease is observed for GEF-6, but this is based on a small number of project observations. Similar trends are observed for sustainability, quality of implementation and execution, as well as M&E design and implementation.

Several international waters projects have demonstrated catalytic effects for sustaining and scaling up interventions beyond the GEF project period. One notable example is the UNDP-led Global Maritime Energy Efficiency Partnerships (GloMEEP) project, which aimed to reduce greenhouse gas emissions by supporting more energy efficient shipping. A key outcome of GloM-EEP was the establishment of the Global Industry Alliance in 2017-a public-private partnership where 16 private companies each committed \$20,000 per year (totaling \$320,000) to facilitate low-carbon shipping. The alliance has supported research and development, technology demonstration, global dialogues, and capacity-building activities, creating a self-sustaining model that attracted additional private sector participation. Following the completion of the GEF project, the International Maritime Organization and the government of Norway continued support through the GreenVoyage2050 Project in 2019, ensuring the long-term impact of GloMEEP's initiatives. Another project, Enabling Transboundary Cooperation and Integrated Water Resources Management in the Chu and Talas River Basins (GEF ID 5310, UNDP), focused on TDA-SAP development for Kazakhstan and Kyrgyzstan from 2014 to 2018. By leveraging the existing partnerships and follow-up support from the United Nations Economic Commission for Europe, the Chu-Talas Water Commission was able to continue facilitating SAP approval processes without additional GEF investment.

Despite some success at the individual project level, the international waters focal area has generally struggled to engage private sector partners. This is based on responses to a survey conducted as part of the evaluation, as well as from project evaluations. Conference participants perceived the lack of private sector engagement as the major weakness of the international waters focal area. Stakeholder interviews highlighted several factors as potentially contributing toward this challenge: (1) limited private sector expertise within the GEF Secretariat; (2) time-consuming processes to approve some private companies for project participation; and (3) the long-term nature of international waters projects without early economic returns on investments.

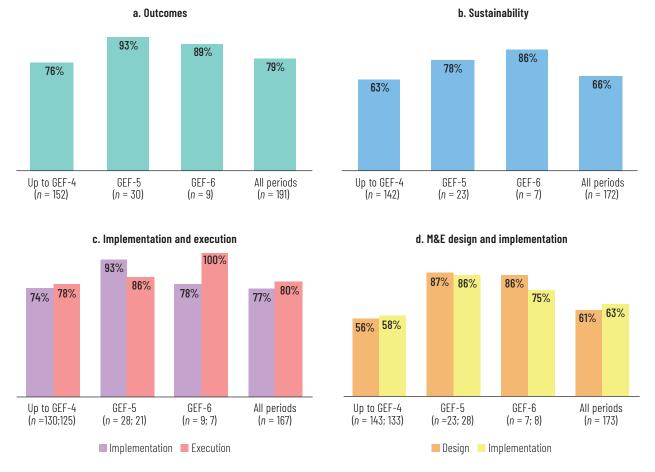


FIGURE 4.4 International waters: percentage of projects rated in the satisfactory/likely range

S O U R C E : GEF IEO Annual Performance Report 2025 data set, which includes completed projects for which terminal evaluations were submitted by June 30, 2024, and performance ratings were independently validated through December 2024.

NOTE: The number of projects for which validated performance ratings are available is shown in parentheses.

Sustainability

The development of sustainability plans in international waters projects has often been limited or initiated too late. A review of 42 terminal evaluations from GEF-5 and GEF-6 projects suggested that less than 30 percent developed sustainability or exit plans. Among the 52 ongoing international waters projects assessed, 56 percent did not explicitly include plans to develop sustainability strategies, and 34 percent would develop sustainability or exit plans in the latter half of GEF support—which does not provide enough time to take concrete actions or support the development and strengthening of necessary institutions. However, more recent projects are designed to prepare sustainability plans earlier. For example, an ABNJ project led by UNDP in the Sargasso Sea—Strengthening the Stewardship of an Economically and Biologically Significant High Seas Area (GEF ID 10620)—commits to developing its exit strategy and sustainability plan before its midterm review. Similarly, under the SAPs in Ecuador and Peru (GEF ID 10700, UNDP), there is an attempt to develop a postproject sustainability strategy during the second year of implementation. A critical aspect of the sustainability of benefits concerns financial aspects. Several projects under implementation have committed to developing detailed financial sustainability plans. One example of this development is Enhancing Capacity for the Adoption and Implementation of EAF [Ecosystem Approach to Fisheries] in the Shrimp and Groundfish Fisheries of the North Brazil Shelf Large Marine Ecosystem (GEF ID 10919, UNDP). This project will prepare a financial sustainability plan during its final year. Similarly, the Integrated Transboundary River Basin Management for the Sustainable Development of the Limpopo River Basin (GEF ID 10182, UNDP) project will develop a financial sustainability plan for the Limpopo River Basin Commission Secretariat by the end of the project.

Socioeconomic co-benefits

As with the other focal areas, evidence from specific terminal evaluations suggests that socioeconomic co-benefits have been generated. For example, a terminal evaluation on Implementation of Global and Regional Oceanic Fisheries Conventions and Related Instruments in the Pacific SIDS (GEF ID 4746, UNDP and FAO) reported that it had contributed toward an average increase in fisheries sector employment of 6.25 percent from 2010 to 2019. Other terminal evaluations highlighted socioeconomic co-benefits, such as increased employment and learning opportunities for women, improved economic conditions for fishers, and improved food security. Again as with the other focal areas, measurement of socioeconomic co-benefits lacked a systematic approach: indicators are often inconsistent across projects, making it difficult to compare results or aggregate findings.

Innovation

Terminal evaluations of GEF-5 and GEF-6 projects highlighted several examples of innovative technologies used in international waters projects to reduce environmental stress. The Yellow Sea Large Marine Ecosystem SAP for Adaptive Ecosystem-Based Management (GEF ID 4343, UNDP) project, for instance, employed integrated multitrophic aquaculture technology. This technology enhances aquaculture productivity and reduces water pollution by utilizing a food chain in the ocean. Knowledge and experience from this project were shared with three Caribbean countries through a learning exchange facilitated by IW:LEARN, a network established to share good practices, lessons learned, and innovative solutions to common problems across the international waters portfolio. Additionally, three projects involving the Yellow Sea, the Kura River Basin in the South Caucasus, and the Drin Basin in the West Balkans utilized constructed wetlands, where polluted water is naturally treated through physical filtration and biological purification. The project in the Kura River Basin reported that a pilot site of constructed wetlands achieved an 85 percent reduction in nitrogen levels.

Knowledge management

The results, successful practices, and key lessons of international waters projects have been disseminated through IW:LEARN. This platform has served as a knowledge management hub for the international waters focal area by facilitating training and learning exchanges, and providing a repository for knowledge products. A recent experience note, for example, summarized key processes through which the Central American Commission for Sustainable Development and the Global Water Partnership initiated annual regional multistakeholder dialogues in 2019 and facilitated the preparation of regional guidelines in 2023 to guide transboundary water management in Central America (Yasuda and Tabora 2024). Regional dialogues in Central America have resulted in the creation of communities of practice for further cooperation and information sharing on transboundary water management. Overall, the experience note suggests that regional dialogues have promoted transboundary cooperation and knowledge dissemination, specifically building on experiences of GEF international waters activities, shared through IW:LEARN.

International waters programs have faced challenges because of inadequate project design of communications and knowledge management and scope. More specifically, three terminal evaluations of the Common Oceans ABNJ Program have reported that limited communications and knowledge sharing within and between child projects present a missed opportunity for programmatic synergy and stakeholder engagement. The terminal evaluation of the Deep-Sea project concluded that collaboration on monitoring, surveillance, and capacity development activities was limited. The Common Oceans terminal evaluation also suggested that tailored communications and knowledge sharing to specific interest groups and stakeholders in a tuna fishery and capacity-building project (e.g., regional fisheries management organizations) did not occur due to the lack of a communication strategy and a dedicated knowledge management mechanism. Two terminal evaluations of the R2R child projects also highlighted the issue of overly ambitious project designs. For example, the project scope of an R2R project in Cook Islands was too broad to be strategic or realistic to achieve project outcomes on water, land, and coastal management in one project. Sustainability was in serious question, because unfinished work from the project had to be listed in the exit strategy.

A persistent challenge is how to achieve a balance between the quality and efficiency of international waters project planning and implementation. Stakeholder interviews emphasized that an excessive focus on time dimensions of efficiency has adversely affected planning for project quality by preventing adequate stakeholder engagement and country ownership, a finding observed across other focal areas as well. On the other hand, the timely development and approval of international waters projects was reported to be important for continuity of knowledge and momentum on the ground. For example, the UNDP-led Caribbean Large Marine Ecosystems and PROCARIBE+ initiatives experienced significant gaps between project phases, resulting in staff turnover and loss of institutional memory.

Policy coherence

The TDA-SAP projects in the international waters focal area have continued to facilitate coherent policies and actions in more than 90 countries. Forty-eight percent of completed projects and 60 percent of ongoing projects include TDA-SAP development or implementation. This finding suggests that the focal area has promoted coherence on transboundary water management at regional levels, with associated national-level benefits. A case study of the Kura River (highlighted in figure 6.5 in section 6) provides a specific example of GEF contributions to policy coherence through TDA-SAP implementation. As a result of these activities, Georgia and Azerbaijan agreed on monitoring standards for water quality and quantity for the first time, thereby strengthening cooperation and promoted shared understanding.

Recent strategic shifts by the GEF to integrated programming highlight the importance of national-level policy coherence to address key environmental issues with transboundary implications. For example, a pollution reduction project in the Black Sea—Blueing the Black Sea (GEF ID 10563, World Bank)—explicitly included an output to promote policy harmonization on pollution prevention in Georgia, Moldova, and Türkiye. The global platform child project of the Circular Solutions to Plastic Pollution Integrated Program implemented jointly by UNEP and the World Wildlife Fund–US (GEF ID 11197) identified the absence of policy instruments and frameworks as key barriers to addressing plastic pollution and included a policy framework to facilitate alignment of economic, social, and environmental policies in project countries.

Inclusion

The international waters focal area has maintained gender inclusion and mainstreaming across GEF periods. Terminal evaluations of projects in the Drin River Basin reported that approximately 30 percent of the decision-making body or Drin Core Group and 60 percent of its expert working groups were women. An ABNJ capacity-building project similarly highlighted that women accounted for 43 percent of the regional leaders' program, which aimed to strengthen the capacity of leaders from SIDS and developing countries. The terminal evaluation on the Pacific SIDS fisheries cited earlier highlighted the publication of Moana Voices, a collection of women's first-hand experiences and narratives to mainstream gender in the fisheries sector.

The ongoing GEF international waters projects also provide examples of how youth engagement, gender mainstreaming, and local community participation can be achieved. The Groundwater for Deep Resilience in Africa (GEF ID 10970, FAO) project facilitates a pan-continental vouth forum on groundwater management in Africa by engaging young people in dialogues, and capacity-building, networking, and communication activities. Youth ambassadors will be identified to ensure that various social media platforms are used to disseminate groundwater-related information and news to young populations. The PROCARIBE+ project in Latin America and the Caribbean includes specific measures to address gender mainstreaming and youth participation, aiming to benefit at least 30 percent and 10 percent, respectively, of womenand youth-led projects through the SGP. An IUCN-led project in Côte d'Ivoire, Ghana, and Togo-Using Marine Spatial Planning in the Gulf of Guinea for the Implementation of Payment for Ecosystem Services and Coastal Nature-based Solutions (GEF ID 10875)-has also demonstrated gender mainstreaming efforts through dedicated engagement of women in income-generating activities.

4.5 Land degradation

Key sources include evaluations of GEF interventions in dryland countries, SFM, and the Lower Mekong River Basin.

Portfolio and evolution since GEF-5

The GEF has progressively refined its approach to land degradation, shifting from sector-specific solutions to integrated, large-scale strategies. From GEF-5 to GEF-8, the GEF has progressively shifted from sector-specific approaches to land and forest management toward integrated, cross-sectoral approaches addressing biodiversity, climate, and land degradation. GEF-6 marked the beginning of this integration. GEF-7 further advanced the shift through the launch of the Dryland Sustainable Landscapes Impact Program, which emphasized regional cooperation, resilience building, and nature-based solutions. GEF-8 continues this evolution by scaling up proven approaches and promoting long-term sustainability through policy reform, governance improvements, and innovative financing mechanisms such as public-private partnerships.

Drought issues receive increasing attention in the GEF portfolio. The drylands strategic country cluster evaluation found that while attention to water scarcity and drought have been gaps relative to other environmental challenges in drylands, these issues are starting to be identified and addressed through a GEF-8 programming directions' focus on drought issues. GEF investments include planned support to the implementation of relevant aspects of national drought plans and land degradation neutrality target setting, among others.

The GEF land degradation portfolio remained stable over the GEF periods both in number of projects and financing volume (table 4.5). Expected cofinancing at approval increased from GEF-5 to GEF-6, but

Metric	Up to GEF-4	GEF-5	GEF-6	GEF-7	GEF-8	Total
Number of approved projects ^a	180	207	189	198	192	966
GEF financing (million \$) ^b	450	337	402	487	468	2,143
Cofinancing ratio at approval ^c	5.2	4.7	10.3	6.0	4.1	5.7

TABLE 4.5 Overview of land degradation GEF Trust Fund portfolio

SOURCE: GEF Portal data as of March 26, 2025.

a. Includes multifocal area projects; excludes dropped and canceled projects without a first disbursement. Integrated programing set-asides for GEF-6 and GEF-7 were prorated according to the programming directions of each replenishment period.

b. Includes Agency fees and project preparation grant funding and fees. Integrated programing set-asides for GEF-6 and GEF-7 were prorated according to the programming directions of each replenishment period.

c. Excludes multitrust fund and multifocal area projects; GEF financing excludes Agency fees and project preparation grant funding and fees.

decreased under GEF-7 and GEF-8. More disaggregated data show that FAO and UNDP are the largest lead Agencies in terms of financing; the World Bank's share declined steadily. The Africa region has maintained the highest share of financing, followed at some distance by Latin America and the Caribbean.

Main areas of intervention

GEF-supported land degradation focal area projects and programs have concentrated on three intervention typologies. The first and most prevalent is sustainable land and/or forest management, encompassing diverse practices such as community-led afforestation, agroforestry, and fire management. These efforts have aimed to reduce deforestation, enhance soil fertility, and promote conservation agriculture, thereby alleviating land degradation pressures. Forest governance has also been promoted through policy alignment and institutional capacity building, aiming to improve the sustainable management of protected areas and community-managed forests.

The second intervention typology is integrated watershed and river basin management. Recognizing the intricate interconnections between land and water systems, projects have focused on restoring hydrological cycles, improving land use practices in catchment areas, and strengthening local participation in water governance. In regions such as the Lower Mekong River Basin, where extensive deforestation and unsustainable agricultural expansion have destabilized hydrological systems, interventions have targeted resilience building through reforestation, soil conservation, and enhanced water management practices.

The third intervention typology is based on the concept of land degradation neutrality,⁴ aligning with global efforts to restore degraded lands while simultaneously addressing socioeconomic development goals. Land degradation neutrality projects emphasize the restoration of agricultural lands, the promotion of regenerative farming practices, and the adoption of carbon sequestration strategies such as conservation tillage and cover cropping. By incorporating such climate adaptation measures, these initiatives aim to establish resilient landscapes capable of withstanding environmental shocks while sustaining local livelihoods.

⁴ Land degradation neutrality refers to a state where the amount and quality of land resources needed to support ecosystem services remain stable or increase over time, essentially meaning no net loss of healthy and productive land, achieved through practices such as sustainable land management and restoration efforts to counterbalance land degradation; it is a key goal within the UNCCD.

Relevance

GEF interventions historically demonstrated strong alignment with national and regional land management priorities by integrating interventions within government policies and international environmental commitments. Many projects have been strategically designed to complement existing national action plans, thereby strengthening the likelihood that land degradation control efforts are seamlessly embedded within broader sustainable development agendas. In drylands, improvements in data and information systems, as well as advancements in management planning, have helped strengthen the foundation for more effective governance of sustainable land and forest use. Land and resource use rights are especially weak in communally managed drylands and strengthening them is a critical component of ensuring both environmental and socioeconomic benefits, including for the most vulnerable. Yet less than a third of GEF dryland projects have addressed conflict or land tenure. Land tenure is highlighted in GEF programming directions and plays an important role in the framework of the UNCCD, whose Decision 26/COP.14 puts additional emphasis on this issue, providing a basis for deeper consideration in future GEF projects.

A significant contribution of GEF interventions in land degradation has been the promotion of cross-sectoral integration. By linking land restoration efforts with climate adaptation, biodiversity conservation, and sustainable agriculture, these projects have created synergies that enable maximizing both environmental and socioeconomic benefits. Strategic partnerships with international donors, regional organizations, and multilateral development banks have facilitated a more coherent and coordinated approach to land degradation control. However, challenges remain in achieving policy coherence across different sectors, especially at the subnational level, and in effectively integrating private sector engagement into national land restoration efforts.

Performance and effectiveness

Outcome achievement in land degradation projects has improved over time (figure 4.5). Among projects approved up to GEF-4, 72 percent received satisfactory outcome ratings at completion. This figure increased to 94 percent for GEF-5. A further increase is visible under GEF-6, but the number of observations is small. The likelihood of sustainability of outcomes rose from 55 percent for GEF-4 to 63 percent for GEF-5. Similar positive trends are observed in project implementation and execution quality, as well as in M&E design and implementation—again, with a limited number of observations for GEF-6.

The effectiveness of GEF-supported land degradation projects has varied depending on the specific context, scale, and design of interventions. One common finding is that projects incorporating strong community engagement mechanisms tend to yield the most significant and enduring results. For example, community-led restoration initiatives, where local stakeholders actively participate in decision-making and implementation, have demonstrated higher success rates in sustaining positive environmental and economic outcomes. Demonstrating immediate benefits to smallholders also helped them sustain behavioral change in terms of adoption of sustainable land management and land restoration. In Niger, three successive GEF-cofinanced World Bank community action projects/programs delivered over 250,000 hectares under improved soil and water management practices, with 700 local management committees established and land tenure commissions set up in 160 communities. In these areas, one of the three projects reported substantially improved vegetation coverage and reduced erosion and soil salinity through a variety of sustainable land managementrelated activities and microinvestments, including assisted natural regeneration, agropastoral land restoration, conservation agriculture practices, livestock corridors, and improved cookstoves.

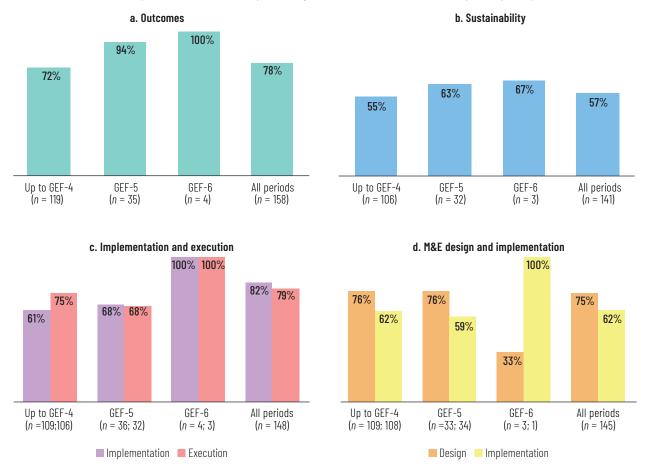


FIGURE 4.5 Land degradation: percentage of projects rated in the satisfactory/likely range

S 0 U R C E : GEF IEO Annual Performance Report 2025 data set, which includes completed projects for which terminal evaluations were submitted by June 30, 2024, and performance ratings were independently validated through December 2024.

NOTE: The number of projects for which validated performance ratings are available is shown in parentheses.

By addressing land degradation within a landscapewide framework, these programs have tackled multiple drivers of degradation simultaneously, leading to more substantial ecosystem restoration and improved livelihoods. There are multiple examples of integrated programming support relevant to drylands in the GEF portfolio over time, including TerrAfrica, the Central Asian Initiative for Land Management (CACILM), the Sahel and West Africa Program in Support of the Great Green Wall Initiative, the Resilient Food System Integrated Approach Pilot, and—most recently—the Dryland Sustainable Landscape Integrated Program. Programmatic approaches are seen by GEF stakeholders as important for drylands to help countries break down ministerial silos, identify region-specific challenges and support learning, provide clustered support (e.g., on value chains), address transboundary issues, and incentivize governments to direct funding to marginalized drylands.

Challenges persist in monitoring long-term impacts. In certain cases, projects have lacked robust adaptive management systems, making it difficult to track progress, refine strategies, and ensure continuous improvements. The absence of consistent impact assessment frameworks has also constrained the ability to draw

conclusive evidence on intervention effectiveness across different ecological and socioeconomic settings. The GEF's reliance on area-based indicators is a matter of concern (box 4.2).

Sustainability

The long-term sustainability of land degradation control efforts has shown mixed results. Sustainability has been strongest in cases where interventions have been embedded within national policy frameworks and where local institutions have been empowered to manage land resources effectively. Projects that have successfully established community governance structures and secured long-term financing have demonstrated better prospects for sustaining their outcomes.

BOX 4.2 Area-based indicators

The GEF's reliance on area-based indicators limits its ability to fully track changes in environmental status. Environmental outcomes in GEF dryland projects are mostly reported in hectare terms, with fewer cases of robustly measured improvements in biophysical indicators that would verify relevant changes in environmental status, such as analysis of vegetation cover or soil organic carbon. The gap is partly due to the dynamic nature of landscapes and the time scale for registering improvements. It is also related to how global environmental benefit indicators are defined and interpreted, where the reported number of hectares under improved management does not always specify the type or quality of change. Monitoring, quantifying, and evaluating benefits and trade-offs is an ongoing challenge for the GEF, as well as for other development agencies. The integration of land degradation neutrality indicators into national land use monitoring is a promising development that could be leveraged to better measure the environmental changes to which GEF projects are contributing.

Financial sustainability remains a challenge. Many interventions continue to rely heavily on external donor funding, making them vulnerable to disruptions once project financing ends. While market-based incentives, such as payments for ecosystem services and green investment mechanisms, have been explored as potential solutions, their integration into national land management strategies remains limited.

Socioeconomic co-benefits

A major impact of GEF-supported interventions in land degradation has been their contribution to rural and forest-dependent communities' livelihoods. Many projects have facilitated the diversification of income sources through agroforestry, ecotourism, and sustainable agricultural practices. These efforts have enhanced food security, improved economic stability, and reduced dependence on environmentally degrading activities—although in harsh conditions such as drylands, GEF consideration of environmental and socioeconomic synergies greatly outweighed trade-offs (box 4.3).

Land degradation projects have actively engaged indigenous communities and women in natural resource management, fostering greater social equity and inclusion. Through targeted training programs and participatory governance models, local populations have been empowered to take ownership of land restoration efforts, further enhancing the sustainability of interventions. Benefits are more sustainable when projects are closely aligned and engaged with local governance structures, authorities, and other stakeholders. In Malawi, most project interventions were implemented through village structures and traditional authorities, which increased project ownership-a key factor for sustainability. The Private-Public Partnership for SLM [Sustainable Land Management] in the Shire River Basin (GEF ID 3376, UNDP) project illustrated the detrimental effects of lack of local buy-in. The project planned to promote sustainable, certified charcoal

BOX 4.3 Synergies and trade-offs

Trade-offs between socioeconomic and environmental benefits have been underconsidered in GEF dryland projects. While synergies are mentioned prominently in GEF dryland projects, only one project referred to analyzing trade-offs, and only 15 percent of newly approved projects mentioned in their design the need to identify and address trade-offs. GEF dryland projects on pasturelands have exemplified the risks when potential trade-offs between socioeconomic and environmental goals are insufficiently considered or managed. In some projects, certain measures supported could have an actual or potential unintended negative impact on natural resources. For example, a project in Uzbekistan focused on reducing pressures on land featured no explicit arrangements with local beneficiaries or safeguards that additional income generated by the project could not be used to increase the number of livestock.

production through community woodlots in partnership with licensed private sector companies for marketing the charcoal—an effort that was supported at the national level. Eleven charcoal producer associations were formed in major charcoal-producing areas, but the project did not garner support among district government and local officials in agreeing on sustainable wood sources. Postcompletion, the charcoal associations formed by the project are no longer operational.

Innovation

Innovation has enhanced the effectiveness of land degradation interventions. Advances in remote sensing and geographic information system (GIS) technologies have improved monitoring and assessment capabilities, allowing for more precise tracking of land use changes and degradation patterns. The implementation of green bonds and payments for ecosystem services schemes has shown promise in incentivizing sustainable land use, though these mechanisms have yet to be fully scaled up. Additionally, the integration of modern restoration techniques with traditional knowledge systems has proven effective in multiple regions, particularly in Africa and South Asia. The Green Finance and Sustainable Agriculture in the Dry Forest Ecoregion of Ecuador and Peru (GEF ID 10852) project, implemented by the Development Bank of Latin America and the Caribbean (CAF), is seen as highly innovative in seeking to mobilize private sector resources. It is issuing two green bonds for sustainable land use and conservation in Ecuador's and Peru's capital markets, with the GEF and CAF providing guarantees.

Knowledge management

The establishment of regional knowledge-sharing platforms has facilitated the exchange of practices among countries. However, the effectiveness of knowledge management has been hindered by inadequate data-sharing mechanisms and the absence of structured learning frameworks within certain land degradation multicountry projects. Ensuring that knowledge gained from successful interventions is systematically documented and applied to future initiatives remains a key priority moving forward. The design of the FAO-implemented CACILM2 in Central Asia and Turkey (GEF ID 9094) improved on its predecessor, the CACILM1 partnership, in seeking to address bureaucratic governance, reliance on international funding, limited country buy-in, absence of strategy to scale integrated natural resource management, weak integration of resilience into policy- and decision-making, poor technical capacities of institutions and agricultural extension services, and inadequate knowledge sharing. CACILM2 was designed with a focus on knowledge management, intended to secure more sustained support from participating countries, relying more on in-country cofinancing through links with ongoing national programs, nongovernmental organizations, and land and water user associations. The partnership still grappled with a complex and cumbersome chain of command, though helped by good interactions among project staff and FAO staff. While GEF-supported regional projects sometimes serve as clusters of largely nationally designed and implemented national subprojects, CACILM2 has featured more collaboration between countries to address transboundary issues.

4.6 Chemicals and waste

Portfolio and evolution since GEF-5

The GEF has made progress in addressing many of the most relevant chemicals and waste-related issues. For example, the GEF supported countries with significant industries in textiles, dental amalgam, and skin-lightening products, reflecting its alignment with key sectoral priorities. However, gaps remain in addressing other critical areas, in part due to limited demand from the countries. For instance, despite the importance of e-waste recycling in Uruguay, the country has not proposed to the GEF a project focused on safe e-waste dismantling.

The GEF has moved from focusing on individual chemicals, such as PCBs, pesticides, and mercury, toward a broader, sectorwide approach. The GEF chemicals and waste portfolio shows a clear shift toward integrated programming, as seen by the increasing allocation of funding to programs and child projects from GEF-5 to GEF-8. The GEF-5 and GEF-6 strategies focused on a chemical-by-chemical approach. With the programmatic strategies of GEF-7 and GEF-8, the GEF shifted from a single-chemical focus, such as persistent organic pollutants (POPs) or mercury, to an integrated, sectoral approach that addresses chemicals throughout their entire life cycle and supply chains.

Table 4.6 shows the evolution of projects and funds approved for the chemicals and waste focal area. It highlights the decline in the number of projects approved from GEF-5, concurrent with the increase of financing approved and the increase in expected cofinancing at project approval. At a more disaggregated level, it can be seen that the share of funding to the World Bank declined since GEF-5; the main lead Agencies in terms of financing are now UNDP, UNEP, and the United Nations Industrial Development Organization. The Africa region has the highest share of financing, closely followed by Latin America and the Caribbean and Asia.

Main areas of intervention

Capacity-building and environment improvement investments have been the main areas of intervention in a portfolio of 439 closed and ongoing projects. In closed projects, the most frequently reported interventions are capacity building, environmental improvement investments in machinery or removal of contaminated soil, and knowledge management. In contrast, the portfolio of ongoing projects shows considerable increases in interventions aimed at achieving socioeconomic results; implementing legal, policy, and regulatory measures; and conducting environmental monitoring.

Relevance

The GEF plays a key role in supporting implementation of the Stockholm and Minamata Conventions, with recipient countries generally recognizing its alignment with convention guidance.⁵ Many countries report positive experiences. The GEF's responsiveness to Stockholm Convention COP guidance received a strong average rating of 4.3 out of 5, according to a survey of recipient countries conducted

⁵At COP-5 in 2023, the Minamata Convention COP conducted the second review of the financial mechanism, confirming its alignment with the convention's guidance outlined in <u>Decision MC-4/7</u>.

Metric	Up to GEF-4	GEF-5	GEF-6	GEF-7	GEF-8	Total
Number of approved projects ^a	242	158	148	108	85	741
GEF financing (million \$) ^b	609	396	436	573	555	2,569
Cofinancing ratio at approval ^c	1.4	3.8	5.0	7.7	7.1	4.9

TABLE 4.6 Overview of chemicals and waste GEF Trust Fund portfolio

SOURCE: GEF Portal data as of March 26, 2025.

a. Includes multifocal area projects; excludes dropped and canceled projects without a first disbursement.

b. Includes Agency fees and project preparation grant funding and fees.

c. Excludes multitrust fund and multifocal area projects; GEF financing excludes Agency fees and project preparation grant funding and fees.

by the Stockholm Convention (UNEP 2024). Challenges persist, however, in low-income economies, because of the high costs of alternatives, limited access to resources, funding delays, and narrow project scopes.

The GEF's efforts to address chemical pollution are relevant both to countries and to the objectives of the Stockholm Convention, particularly in tackling major challenges related to PCBs, pesticides, and DDT. However, while the GEF has supported countries with significant stockpiles, its reach has been limited. For example, of the 21 countries identified as having the largest PCB stockpiles, only 1—Antigua and Barbuda—benefited from targeted GEF interventions in GEF-5 and GEF-6. Similarly, among the 11 countries with the largest DDT stockpiles, only 3 received GEF support, leaving the needs of several countries unaddressed.

The shift from a chemical-by-chemical to a sector-based approach in GEF-7 has enhanced integrated chemical management across industries, but risks neglecting legacy chemicals. An integrated approach to programming is essential for effective chemicals and waste management, particularly in sectors like garment and food packaging where chemicals are used extensively throughout the supply chain. The GEF's focus on addressing chemicals at every stage is appropriate and crucial to prevent the proliferation of harmful substances and ensure sustainable practices across industries. While this shift presents substantial advantages, it has also led to a reduced focus on legacy chemicals in recent projects. Despite the decrease in single-chemical initiatives, many countries still urgently need assistance in safely managing and disposing of PCBs to meet the 2028 Stockholm Convention deadline, as well as help with other legacy chemicals to combat pollution and enhance public health. In the meantime, and in response to COP-10, the GEF took action on the PCB deadline by approving a global PCB management program at its December 2024 Council meeting. The shift to a sectorwide approach risks creating a critical gap in targeted chemical management support at a time when it is most essential.

Performance and effectiveness

Chemicals and waste projects have shown positive performance overall. Up to GEF-4, 83 percent of the completed projects were rated moderately satisfactory or higher for outcome achievements, a percentage that remained almost unchanged under GEF-5 (figure 4.6). A further increase is visible under GEF-6, but based on a smaller number of observed projects. Similar improved trends are visible for quality of implementation and execution and for M&E design and implementation.

The effectiveness of GEF-supported chemicals and waste projects has varied based on how effectively they engaged with national legislation—both by aligning with existing laws and by supporting efforts to improve them. Strong legislative frameworks have been instrumental in the success of

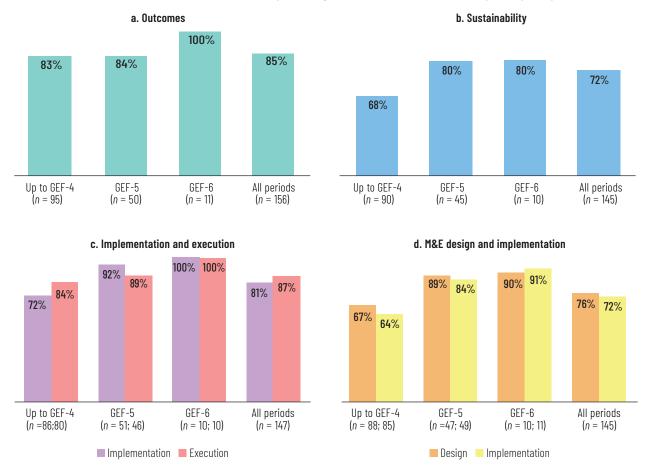


FIGURE 4.6 Chemicals and waste: percentage of projects rated in the satisfactory/likely range

S 0 U R C E : GEF IEO Annual Performance Report 2025 data set, which includes completed projects for which terminal evaluations were submitted by June 30, 2024, and performance ratings were independently validated through December 2024.

NOTE: The number of projects for which validated performance ratings are available is shown in parentheses.

chemicals and waste management projects. However, enforcement and outcomes have shown significant variability across countries. Laws such as extended producer responsibility play a key role in securing private sector engagement, while setting adequate tariffs for waste collection companies helps maintain consistent service delivery. Legislation has played a crucial role in scaling up pollution prevention in some countries. Additionally, formalizing the role of informal waste pickers or banning their involvement in e-waste collection reduced health risks and environmental harm. However, inconsistent enforcement of these legal measures in some countries has posed significant challenges, ultimately affecting the effectiveness and sustainability of project outcomes.

In the Arab Republic of Egypt, the Protect Human Health and the Environment from Unintentional Releases of POPs (GEF ID 4392, UNDP) project met its e-waste collection targets through a pioneering initiative led by multinational mobile phone companies, with an online platform for household e-waste collection; it laid the groundwork for national waste electrical and electronic equipment facilities. Legislation banning informal e-waste collection and dismantling addressed pollution risks, reduced unintentional POPs emissions, and enabled the formalization of the sector through licensed waste managers. This shift fostered safer, more sustainable e-waste management, while creating formal employment opportunities and improving public health.

The GEF's experience in promoting policy coherence has been mixed. In Viet Nam and Indonesia, the GEF played an important role in fostering policy coherence by promoting interministerial collaboration and enhancing enforcement and coordination among government agencies. However, in some smaller countries, such as Senegal and Trinidad and Tobago, the GEF has been less successful in driving policy coherence, primarily because of government departments feeling overstretched in taking on the coordination.

Smaller firms and chemical suppliers are often overlooked in broader interventions. In developing countries, the textile and apparel industry is predominantly made up of small and microenterprises, which face significant challenges in adopting sustainable practices due to limited financial resources and technical expertise. For industrywide transitions to ecofriendly practices, targeted support for these smaller players is essential. Addressing high-cost barriers and involving suppliers more actively could have enabled smaller firms to better manage chemicals and adopt sustainable practices across the supply chain. Additionally, there are gaps in certification and labeling of chemicals produced by suppliers.

The evaluation found that the quality of M&E systems was variable. While M&E frameworks are mandatory for all GEF projects, the chemicals and waste portfolio reveals persistent challenges in setting clear, measurable indicators and ensuring their consistent application. Historically, many projects focused heavily on outputs—such as the volume of hazardous chemicals disposed of or the number of facilities upgraded—without adequately capturing long-term environmental or socioeconomic impacts. An improvement occurred with the introduction of core indicators 9 and 10 during GEF-7, which focus on the reduction and disposal of chemicals and waste. However, these indicators were introduced after many GEF-5 and GEF-6 projects had already been designed, resulting in limited retrospective application. Despite the introduction of new indicators, the evaluation notes persistent inconsistencies in data collection— particularly regarding the socioeconomic co-benefits and health outcomes of chemicals and waste interventions—although the GEF has recently begun to address this gap.

Sustainability

The GEF's focus on the food and beverage supply chain, particularly at the end-of-life stage, highlights the sustainability of prevention over remediation.⁶ The GEF's progression toward upstream prevention represents a significant evolution from GEF-5 to GEF-8. Allowing plastics and packaging waste to accumulate in landfills leads to carbon dioxide and methane emissions, costly geoengineering, and the risk of toxic leakage. The GEF's preventative approach, including recycling, composting, and waste reduction, has proven to be sustainable when the introduction of technology is accompanied by technical capacity and financing-for example, accompanying the adoption of new non-incineration technologies (such as autoclaves) with efforts to strengthen the national regulatory environment and build capacities to utilize the new technologies. Additionally, integrating informal waste pickers into formal waste management systems enhances both environmental outcomes and social equity, creating a more comprehensive and inclusive strategy for waste management.

⁶This example is drawn from the integrated program on Circular Solutions for Plastic Pollution, one of several recycling and plastic pollution projects reviewed as part of the chemicals and waste evaluation portfolio.

Private sector involvement has been vital for the sustainability of GEF chemicals and waste outcomes. The GEF's market-oriented strategies, combined with local business participation and technology transfer, have laid the groundwork for transformational change. In some instances, sustainability was supported through a combination of GEF financing, government legislation or subsidies, certification schemes, or partnerships with international firms. For instance, in Viet Nam, the introduction of ecoindustrial park legislation facilitated the nationwide adoption of a resource-sharing model, which encourages interconnected industries to optimize resource efficiency by sharing resources, implementing recycling systems, and collectively reducing carbon dioxide emissions.

Socioeconomic co-benefits

Efforts to prevent and remediate chemical pollution in GEF projects are likely to generate socioeconomic and health co-benefits. However, these benefits remain underappreciated, due to the absence of systematic tracking. Quantifying health co-benefits is challenging, due to the lack of standardized indicators and the long-term nature of health impacts, which often extend beyond project timelines. Socioeconomic indicators are inconsistently integrated into project design and monitoring, making it difficult to capture the full extent of these benefits. A case in point is the Indonesia's Reducing Environmental and Health Risks to Vulnerable Communities from Lead Contamination from Lead Paint and Recycling of Used Lead Acid Batteries (GEF ID 5701, UNDP) project, which successfully remediated a contaminated site where local communities had been dismantling electronic waste and batteries, unaware of the associated health risks. Despite these significant interventions, no formal assessment of health outcomes was conducted, leaving potential long-term benefits undocumented.

GEF-funded projects show progress in gender awareness but need stronger support for women's health and safety. There has been an increase in gender-aware GEF projects that recognize distinct roles and address gender inequalities, but progress in fully gender-mainstreamed projects remains limited. Gender-disaggregated data highlight the heightened vulnerability of women, especially pregnant women, to chemical pollution. While women's participation in workshops and training is noted, there is a need for stronger measures, including health checkups, safety equipment, and stricter regulatory enforcement, particularly for informal female workers.

Innovation

GEF-funded projects show that successful technological innovation in chemicals and waste management requires more than installing new equipment. While advances in green chemistry—substituting harmful chemicals with safer alternatives—have been implemented, investments in imported machinery designed to reduce or eliminate harmful chemicals have faced a problem of underutilization, due to insufficient training, lack of technical knowledge, inadequate budgets for maintenance, and supply chain constraints.

section 5 Integrated programming

his section presents evaluative evidence on GEF-funded integrated programming.¹ Integrated programming refers to initiatives that tackle environmental challenges through holistic, cross-sectoral approaches. In the context of the GEF, this term encompasses both the GEF-8 integrated programs and other GEF initiatives that employ integrated strategies. Key dimensions of integrated programming include the use of multiple funding sources, the involvement of diverse stakeholders in program and project management, and the coordination of activities designed to deliver multiple environmental and socioeconomic benefits. Each of these dimensions plays a critical role in achieving effective integration-and therefore warrants careful assessment (box 5.1).

The section begins with descriptive statistics on the integrated programming portfolio that began with the integrated approach pilots (IAPs) of GEF-6, followed by the impact programs of GEF-7 and the integrated programs of GEF-8, along with an analysis of available data on the performance of child projects. It also covers findings related to the governance, program implementation, environmental results, socioeconomic co-benefits, private sector engagement, knowledge management, and key factors affecting

sustainability of results for these programs and projects. The section concludes with findings on GEF support to nature-based solutions (NbS). Although NbS is not an integrated program, it is an approach/ tool for the GEF to integrate investments across various focal areas to deliver global environmental benefits and socioeconomic benefits.

The analysis draws on completed evaluations, including those on sustainable forest management (SFM), the Global Wildlife Program (GWP), the Pacific Ridge to Reef (R2R) program implemented in small island developing states (SIDS),² and GEF support to NbS. It also incorporates insights from ongoing evaluations, such as those focused on food systems and sustainable cities, as well as findings from earlier independent evaluations conducted by the GEF IEO (e.g., GEF IEO 2018b, 2022c).

5.1 Historical overview

Integrated approaches to addressing environmental challenges have a long history. Originating in the 1960s, systems theory began to influence development theory and

¹Note that some of the findings presented here are based on preliminary evidence, as some evaluations drawn on here are ongoing. Evidence available to date refers to the experience of completed projects, as well emerging evidence from ongoing projects under integrated programming.

²The R2R program is a multifocal area parent program with a number of child projects designed to contribute to the overall program objective. It is considered here with other integrated programming because, within the Pacific subregions, it epitomizes salient characteristics of an integrated approach, such as the presence of coordination structures at the national and regional levels, as well as integrated funding.

BOX 5.1 Key dimensions of integrated programming to assess in the GEF

Integrated funding. Within the GEF, the integration of different funding sources refers to the pooling of the different focal area allocations to implement a project or program. Other funds that the GEF administers, such as the Least Developed Countries Fund and the Special Climate Change Fund, may be integrated with the GEF Trust Fund to create multitrust fund projects. Different funds may have different envelope sizes, project proposal requirements, timelines, approval processes, and reporting requirements, which require coordination.

Integrated program and project management. An integrated approach to managing interventions involves the coordination of multiple activities by multiple stakeholder groups. In the GEF, integrated intervention management at higher levels refers to the coordination needed between multiple Agencies implementing child projects under a single program. At the country level, responsibility for coherence across projects in the GEF portfolio often falls to the operational focal point.

Integrated interventions. These are coordinated activities that require implementation within the same time period, in a specific sequence, in specific locations, and/or within the same geographical unit to achieve a single outcome. Examples are sustainable land management and integrated water resource management.

Integrated benefits. Activities aiming to simultaneously achieve outcomes for multiple environmental focal areas—and often also social and economic outcomes—can generate integrated benefits. These may be individual activities that can create benefits for biodiversity, climate, land, and community incomes at the same time, depending on the context.

practice, promoting cross-sectoral program design and implementation (GEF IEO 2022a). An integrated approach enables the development of solutions that recognize the interrelationships among environmental factors, as well as the dynamic interactions between human and natural systems. Within the GEF, the concept of integration encompasses several dimensions (box 5.1).

By the second replenishment period, the GEF recognized that a siloed approach—focused narrowly on individual focal areas aligned with specific environmental conventions—could limit the potential to generate multiple global environmental benefits. In response, the GEF began to emphasize more integrated programming, which culminated in the launch of three IAPs during GEF-6. These pilots were designed to help recipient countries address the root causes of environmental degradation while advancing their commitments under multiple conventions:

- The Resilient Food Systems IAP targeted food insecurity and sought to strengthen the resilience of ecosystems and households in the drylands of Sub-Saharan Africa.
- The Sustainable Cities IAP tackled the environmental pressures linked to rapid urbanization.
- The Good Growth Partnership IAP focused on reducing commodity-driven deforestation by promoting more sustainable and responsible supply chains.

Advancing integrated programming through impact and integrated programs

Building on the experience of the IAPs, GEF-7 launched three full-scale impact programs aimed at addressing major environmental challenges through systems-level solutions and transformative change at scale. The Food, Land Use, and Restoration Impact Program (FOLUR), building on the foundations of the Resilient Food Systems and Good Growth Partnership IAPs, focused on advancing sustainable food production and land use systems. The Sustainable Cities Impact Program expanded the earlier Sustainable Cities IAP by more deeply integrating biodiversity conservation and NbS into urban sustainability efforts.

The GEF launched an SFM program in GEF-4, the GEF's earliest concerted effort toward integration that pooled funding from various focal areas. Since then, the SFM initiative has evolved through various modalities. In GEF-7, the SFM program consisted of three program framework documents targeting transboundary forest ecosystems—specifically, the Amazon, the Congo Basin, and global drylands. These initiatives promoted integrated forest management to strengthen ecosystem protection across national borders.

Under GEF-8, the integrated approach continues with the approval of 11 integrated programs. These aim to address the drivers of environmental degradation and accelerate systems transformation. They sustain focus on key areas—such as food systems, sustainable cities, and forest management—while introducing new themes, including circular economy solutions and net-zero transitions. Each program includes a global or regional coordination project supported by a portfolio of related child projects. The programs continue to support the objectives of the global conventions; their alignment with GEF focal areas is detailed in table 5.1.

Findings from previous evaluations

A 2018 formative review by the GEF IEO found that the IAPs effectively supported multiple global environmental conventions while aligning with national environmental priorities (GEF IEO 2018b). However, challenges included a lack of standardized indicators, making it difficult to aggregate results across programs, and significant organizational complexity due to the involvement of multiple Agencies. The review also pointed to unclear roles, nontransparent project selection, and limited coordination by the GEF Secretariat. It recommended improving the consistency of indicators and better assessing the impact of knowledge platforms.

A follow-up evaluation in 2022 found early signs of environmental and institutional progress in the IAPs, particularly in the Resilient Food Systems and Good Growth Partnership programs (GEF IEO 2022a). While Resilient Food Systems

Program	Biodiversity	Climate change	Land degradation	International waters	Chemicals and waste
Food Systems					
Sustainable Cities					
Amazon, Congo, and Critical Forest Biomes					
Wildlife Conservation for Development					
Net-Zero Nature-Positive Accelerator					
Greening Transportation Infrastructure Development					
Ecosystem Restoration					
Clean and Healthy Ocean					
Circular Solutions to Plastic Pollution					
Blue and Green Islands					
Eliminating Hazardous Chemicals from Supply Chains					

TABLE 5.1 GEF-8 programming and the contribution of integrated programs to focal areas

SOURCE: GEF Secretariat 2022a.

N O T E : 📃 = major contribution to focal area; 📒 = moderate contribution; 🔜 = minor contribution.

showed greater progress toward global environmental benefits (77 percent) compared to the Good Growth Partnership (40 percent), monitoring and reporting at the program level remained a persistent challenge. Most child projects contributed to legal or policy changes, although political shifts and governance constraints sometimes slowed implementation. Knowledge platforms—central to the IAP model—were underutilized because of limited budgets and low prioritization among projects.

The evaluation also noted that the GEF-7 impact programs marked a more structured evolution of the IAPs. These newer programs introduced clearer theories of change, more transparent and competitive country and Agency selection processes, and earlier establishment of knowledge and coordination mechanisms, backed by stronger funding. While integrated programming continued to align with global conventions, coordination across multiple Agencies remained a challenge. Key recommendations included improving program-level reporting by lead Agencies, increasing the inclusion of least developed countries (LDCs) and SIDS, and ensuring better use and resourcing of knowledge platforms.

5.2 Portfolio

The progression from the GEF-6 IAPs to the GEF-7 impact programs, and subsequently to the GEF-8 integrated programs, reflects a significant expansion in financing, scope, and scale. Total GEF financing increased more than fivefold from \$314.1 million in GEF-6 to \$1,657 million in GEF-8.

The number of child projects more than doubled, rising from 30 in GEF-6 to 65 in GEF-7, and tripled to 199 in GEF-8 (table 5.2). Notably, the average number of integrated programming child projects per program also increased—from 10 under GEF-6 to 22 in GEF-7, and to 18 in GEF-8. This trend suggests a growing need for coordination and monitoring efforts to ensure that all child projects align under a coherent programmatic framework.

The average financing per program and per child project shows a declining trend from GEF-6 to GEF-8. While GEF-financing per program increased by 44 percent in nominal terms over this period, average GEF financing by child project declined by 20 percent, from \$10.5 million to \$8.3 million (table 5.3), and does not account for inflation. This amount remains only slightly above the GEF-8 average

Period/program	No. of programs	No. of child projects	Total GEF financing (mil. \$)	Cofinancing (mil. \$)	% of total targeted allocation in respective GEF period
GEF-6 IAPs	3	30	314.1	3,466.4	7ª
GEF-7 impact programs	3	65	769.6	6,418.2	20 ^b
GEF-8 integrated programs	11	199	1,657.0	11,254.6	32°
% change GEF-6 to GEF-8	+267	+563	+428	+225	_

TABLE 5.2 Overview of GEF integrated programming
--

SOURCE: GEF Portal.

N O T E : The financial figures for each program are calculated as the sum of its child projects. Total GEF financing includes GEF grant, Agency fee, and project preparation grant and fee. The cutoff date is March 26, 2025.

a. Total resources programmed exclude the Country Support Program (\$23 million), cross-cutting capacity development (\$34 million), and the corporate budget (\$125 million), which were all part of the total GEF-6 replenishment of \$4.434 billion.

b. Targeted allocations in GEF-7 exclude the Country Support Program (\$21 million) and the corporate budget (\$151.9 million), which were part of the total GEF-7 replenishment of \$4.052 billion.

c. Targeted allocations for GEF-8 exclude the Country Engagement Strategy (\$28 million) and the corporate budget (\$187 million), which were part of the total GEF-8 replenishment of \$5.33 billion.

	GEF funding		Expected o	cofinancing	Total funding		
Period/program	Program	Child project	Program	Child project	Program	Child project	
GEF-6 IAPs	104.7	10.5	1,155.5	115.5	1,260.2	126.0	
GEF-7 impact programs	256.5	11.8	2,139.4	98.7	2,395.9	110.6	
GEF-8 integrated programs	150.6	8.3	1,023.1	56.6	1,173.8	64.9	
% change GEF-6 to GEF-8	+44	-20	-11	-51	-7	-49	

TABLE 5.3 Average GEF integrated programming funding by program and child project (million \$)

SOURCE: GEF Portal data as of March 26, 2025.

of \$7.6 million for all projects, including stand-alone projects. When factoring in the expected cofinancing, the decline in total notional financing per program and per child project becomes even more pronounced. The most significant drop is observed in average expected cofinancing and total funding per child project, both of which were halved between GEF-6 and GEF-8. This decline is in part driven by the increasing participation of LDCs and SIDS in the integrated programs where absorptive capacity is limited. The reduction in the average nominal funding envelope for child projects may have potential implications for program coordination and level of support required by child projects.

Lead Agency participation

There are two types of Agencies in GEF programs—the overall program lead Agency and the child project Agencies. While the total number of both types has increased over time, the concentration of child project Agencies rose slightly from GEF-6 to GEF-7 and declined in GEF-8. The number of overall program lead Agencies increased from three in GEF-7 to seven in GEF-8. As shown in table 5.4, the distribution of GEF financing among lead Agencies has varied across replenishment cycles. In the GEF-6 IAPs, the top three Agencies—the World Bank (\$76.6 million, 24 percent), the International Fund for Agricultural Development (IFAD) (\$68.4 million, 22 percent), and the United Nations Development Programme (UNDP) (\$63.5 million, 20 percent)—accounted for 66 percent of GEF financing. In GEF-7, the concentration increased, with the top three Agencies—the World Bank (\$248.6 million, 32 percent), the Food and Agriculture Organization of the United Nations (FAO) (\$174.3 million, 23 percent), and UNDP (\$142.2 million, 18 percent)—receiving 73 percent of total financing. In GEF-8, this concentration declined, with the top 3 Agencies—UNDP (\$429 million, 26 percent), FAO (\$367.9 million, 22 percent), and the United Nations Environment Programme (UNEP) (\$230.6 million, 14 percent), accounting for 62 percent of GEF financing.

Country participation

GEF-8 integrated programs demonstrate broader country participation compared to **GEF-7** and **GEF-6**, with a stronger emphasis on engaging LDCs and SIDS. The total number of participating countries increased from 22 to 98, including a rise in LDCs from 8 to 31 and in SIDS from 0 to 26, particularly through the Blue and Green Islands Program. The Food Systems and Sustainable Cities programs have the highest number of participating countries (table 5.5).

The increased participation of LDCs and SIDS indicates that child projects may require additional support and enhanced coordination efforts. The shift in the top 10 country participants in integrated programming highlights both changes in funding scale and an increased focus on vulnerable states in GEF-8.

	GEF-6	6 IAPs	GEF-7 impact programs		GEF-8 integrated programs	
Agency	Mil. \$	%	Mil. \$	%	Mil. \$	%
African Development Bank (AfDB)	6.0	2	0.0	0	0.0	0
Asian Development Bank (ADB)	9.0	3	0.0	0	16.0	1
Conservation International	0.0	0	8.0	1	99.7	6
Development Bank of Latin America (CAF)	0.0	0	11.2	1	0.0	0
Development Bank of Southern Africa (DBSA)	9.0	3	0.0	0	8.0	0
European Bank for Reconstruction and Development (EBRD)	0.0	0	0.0	0	3.0	0
Food and Agriculture Organization of the UN (FAO)	8.3	3	174.3	23	367.9	22
Inter-American Development Bank (IDB)	22.0	7	0.0	0	3.3	0
International Fund for Agricultural Development (IFAD)	68.4	22	0.0	0	48.7	3
International Union for Conservation of Nature (IUCN)	0.0	0	19.5	3	142.8	9
United Nations Development Programme (UNDP)	63.5	20	142.2	18	429.0	26
United Nations Environment Programme (UNEP)	25.0	8	133.8	17	230.6	14
United Nations Industrial Development Organization (UNIDO)	16.6	5	0.0	0	73.4	4
West African Development Bank (BOAD)	0.0	0	0.0	0	8.0	0
World Bank	76.6	24	248.6	32	166.1	10
World Wildlife Fund-US (WWF-US)	9.8	3	32.1	4	60.5	4
Total	314.1	100	769.6	100	1,657.0	100

TABLE 5.4 GEF financing by child project GEF Agency

SOURCE: GEF Portal.

N O T E : The financial figures for each program are calculated as the sum of its child projects. These include coordination child projects, which are assigned to lead Agencies. Total GEF financing includes GEF grant, Agency fee, and project preparation grant and fee. The cutoff date is March 26, 2025.

Expected cofinancing

The average expected (projected ex ante) cofinancing ratio for the 11 GEF-8 integrated programs reached 7.6 at the project identification form (PIF) approval stage, compared to 9.2 for the three impact programs under GEF-7. Among programs with continued thematic focus, GEF-8's forest-focused integrated programs—such as those in the Amazon and Congo regions—show higher cofinancing ratios than their GEF-7 counterparts (figure 5.1). It is still too early to fully assess cofinancing ratios for some GEF-8 integrated programs, particularly Food Systems and Sustainable Cities, as many of their child projects are still in the process of being endorsed by the GEF Chief Executive Officer (CEO).

Implementation status of child projects

The GEF-6 IAP child projects exhibit varying levels of implementation progress (figure 5.2). As shown, 50 percent of the child projects under the Sustainable Cities IAP were in the implementation phase. In contrast, the Good Growth Partnership IAP was the most advanced, with all five of its child projects being completed and/or financially closed.

TABLE 5.5Number of countries participating inintegrated programming

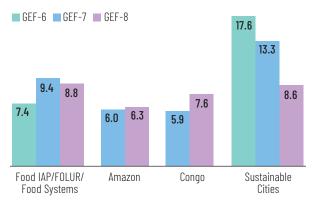
Program	No. of countries	SIDS	LDCs			
GEF-6 IAF	'S	-				
Resilient Food Systems	12	0	8			
Good Growth Partnership ^a	1	0	0			
Sustainable Cities	11	0	1			
Unique country count	22	0	8			
GEF-7 impact pr	ograms					
FOLUR	27	1	7			
SFM	24	2	7			
Sustainable Cities	9	0	2			
Unique country count	51	3	15			
GEF-8 integrated programs						
Food Systems	32	3	9			
Sustainable Cities	20	2	3			
Amazon, Congo, & Critical Forest Biomes	28	5	10			
Wildlife Conservation for Development	15	0	7			
Net-Zero Nature-Positive Accelerator	12	2	1			
Greening Transportation Infrastructure Development	5	1	1			
Ecosystem Restoration	20	2	13			
Clean and Healthy Ocean	14	4	1			
Circular Solutions to Plastic Pollution	15	2	4			
Blue and Green Islands	15	15	2			
Eliminating Hazardous Chemicals from Supply Chains	8	1	1			
Unique country count	98	26	31			

SOURCE: GEF Portal data as of March 26, 2025.

a. The program had four participating countries, but only one (Brazil) had a dedicated child project.

The vast majority of GEF-7 impact program child projects are currently under implementation, although a few are experiencing delays (figure 5.3). For instance, two SFM Drylands child projects in Kenya and Angola, as well as four FOLUR projects in India, Malaysia, Guatemala, and

FIGURE 5.1 Cofinancing ratios for integrated programming with continued themes



SOURCE: GEF Portal data as of March 26, 2025.

Madagascar, remain pending implementation despite having received CEO endorsement over a year and a half ago.

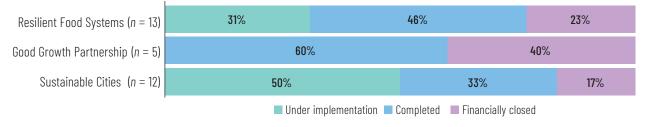
Most of the GEF-8 integrated programs were well positioned for implementation with the majority of their child projects having received CEO endorsement (figure 5.4). New GEF-8 integrated programs—such as Eliminating Hazardous Chemicals from Supply Chains, Circular Solutions to Plastic Pollution (now Plastic Reboot), and Ecosystem Restoration—are demonstrating faster progress toward implementation. This acceleration is partly due to their earlier approval by the GEF Council, giving them a head start compared to programs like Food Systems and Sustainable Cities, which received approval at a later stage.

5.3 Program governance

Lead Agency selection and role

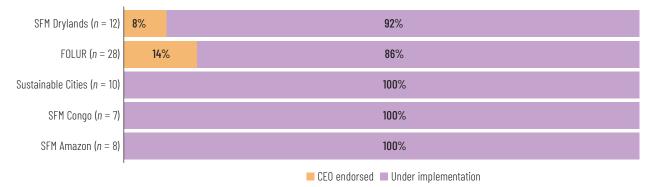
Lead Agency selection in FOLUR and the GWP at the overall program level was generally guided by institutional capacity, thematic expertise, prior performance, and alignment with the program's objectives.

FIGURE 5.2 GEF-6 IAP child project activity cycle status



SOURCE: GEF Portal data as of March 26, 2025.





SOURCE: GEF Portal data as of March 26, 2025.



FIGURE 5.4 GEF-8 integrated program child project activity cycle status

S O U R C E : GEF Portal data as of March 26, 2025.

For FOLUR, the World Bank served as the lead Agency, leveraging its expertise in agricultural value chains, land use planning, and interministerial coordination. Its role was pivotal in establishing a global platform, developing standardized guidance, and aligning child projects through shared indicators and knowledge exchange.

Similarly, in the GWP, the World Bank's continued leadership ensured platform continuity and effective coordination. The terminal evaluation of the predecessor GEF-6 global project emphasized that without such consistency, ongoing efforts could risk fragmentation.

In contrast, the SFM initiative-despite strong thematic focus across three distinct biomes-suffered from a lack of centralized coordination. With separate program frameworks, theories of change, and lead Agencies, the overall SFM effort lacked strategic coherence, limiting integration, visibility, and cross-program learning.

Two Agencies have led different cycles of Sustainable Cities integrated programming. The transitions from the World Bank in GEF-6 to UNEP in GEF-7, and then back to the World Bank in GEF-8, were abrupt. The first shift aimed to increase civil society organization participation in GEF activities, while the second shift aimed to enhance private sector participation and scale-up; the respective Agency choice was rooted in their comparative advantage. However, these shifts led to duplication of effort, as two global platforms were operating at the same time.

In the R2R program for Pacific SIDS, regional coordination by the Secretariat of the Pacific Regional Environment Programme and the Pacific Community enhanced legitimacy and alignment with regional priorities. However, limited resources and institutional capacity constrained the integration of land and marine planning across national governments. In summary, lead Agency selection was most effective when paired with a clear coordination mandate and sufficient resources. Simply appointing a lead Agency was not enough—its success depended on its ability to foster alignment, uphold common standards, and maintain consistent engagement across a diverse and often decentralized portfolio.

Agency selection at the child project level

At the child project level, Agency selection was primarily shaped by country preferences, existing partnerships, and in-country Agency presence. This pragmatic approach fostered trust and continuity, but it also posed challenges for ensuring programmatic consistency and cross-project integration.

In the GWP, Agencies such as UNDP, the World Bank, the World Wildlife Fund, FAO, Conservation International, UNEP, and the Asian Development Bank were commonly selected. While this diversity allowed countries to tailor projects to national needs and leverage specific Agency strengths, it resulted in significant variation in implementation modalities, monitoring systems, and safeguards. Some projects emphasized law enforcement and protected area expansion; others focused on community-based conservation or infrastructure. This variation supported national ownership but complicated programwide learning and harmonized results reporting.

FOLUR sought to address these inconsistencies through a global platform offering technical guidance, shared indicators, and standardized approaches. Projects were encouraged to align on core themes such as value chains, gender inclusion, and landscape finance. Despite these efforts, uptake varied, and tensions occasionally arose between global guidance and country-specific priorities.

In the SFM initiative, the absence of a central coordinating platform meant that biome-centric programs operate largely as stand-alone efforts. Lead Agency selection for each biome-based program followed standard GEF procedures, but without structured coordination mechanisms, collaboration across the three programs is limited. While FAO, UNDP, and the World Bank provided strong technical input, the lack of integration led to redundancies and missed opportunities for synergy—particularly among projects working on similar components and restoration strategies.

Sustainable Cities child projects have been implemented by 11 GEF Agencies. Although projects responded to locally defined priorities, Agency approaches to urban planning, mobility, and emissions reduction varied widely. Some projects progressed quickly, thanks to simpler designs and the use of established diagnostics and tools; while others struggled as a result of limited institutional capacity, weak inter-Agency coordination, or varied progress across the cities covered.

Pacific R2R child project Agencies were drawn from those with prior regional engagement—mainly UNDP, FAO, and UNEP. However, Agency capacity was often stretched, and limited in-country presence hampered effective implementation. Even within individual island states, coordination among Agencies remained a challenge.

Overall, these experiences suggest that while decentralized Agency selection enhances responsiveness and local ownership, it must be balanced with stronger upstream coordination, clearer programmatic guidance, and mechanisms for shared accountability. Without these elements, the diversity of implementing Agencies—though potentially beneficial—can lead to fragmentation and inconsistent results across the portfolio.

Country engagement

Countries played a central role in shaping and implementing the GEF's integrated programming, particularly in identifying child project priorities and selecting implementation partners. However, their ability to lead and sustain integrated approaches varied significantly based on institutional capacity, political commitment, and intersectoral coordination.

Under FOLUR, many countries used the opportunity to consolidate fragmented initiatives under broader landscape approaches. For example, Colombia, Indonesia, and Ghana developed jurisdictional models linking commodity value chains with land use governance, supported by close collaboration among agriculture, planning, and environment ministries.

In the GWP, national governments actively shaped interventions, forming wildlife crime units and updating protected area strategies. Some, as in Bhutan, integrated conservation into national development planning, while others used regional platforms to harmonize laws and enforcement.

The SFM projects saw mixed levels of country engagement. In countries with strong forest institutions, such as Viet Nam and Ethiopia, projects were well integrated into national programs. Elsewhere, poor coordination among key ministries led to fragmented implementation and weak political support.

The Sustainable Cities Impact Program faced difficulties in translating national involvement into effective local action. While national agencies participated, municipal authorities often lacked the mandates or resources needed for integrated urban planning.

In the Pacific R2R program, governments were engaged in priority setting, but institutional fragmentation—both between levels of government and across sectors—limited the effectiveness of integrated planning and coordination.

In summary, strong country engagement was critical to successful integrated programming, but it could not be taken for granted. Effective delivery required institutional alignment, sustained cross-sectoral leadership, and mechanisms to ensure continuity across political transitions. Countries with existing interministerial coordination platforms and decentralized governance systems were better positioned to implement integrated approaches effectively.

Quality of child project design

The quality of child project design under integrated programming varied widely, and directly influenced implementation feasibility, outcomes, and long-term sustainability. High-quality designs featured clearly defined theories of change, realistic causal pathways, alignment with national institutions, and validation through stakeholder consultations.

Many FOLUR projects—such as those in Costa Rica and Indonesia—stood out for their strong design, incorporating multistakeholder platforms, cross-sectoral coordination, and financing strategies to support landscape-scale approaches.

The GWP also included well-designed projects that integrated enforcement, community engagement, and policy reform. In the Strengthening the Conservation of Globally Threatened Species in Mozambique Through Improving Biodiversity Enforcement and Expanding Community Conservancies around Protected Areas (GEF ID 9158, UNDP) project, a national strategy on wildlife and forest crime paired intelligence-led enforcement with judicial reforms, resulting in increased convictions. Ethiopia-in Enhanced Management and Enforcement of Ethiopia's Protected Areas Estate (GEF ID 9157, UNDP)-and Thailand-in Combating Illegal Wildlife Trade (GEF ID 9527, UNDP)advanced institutional reforms and created dedicated environmental crime units. However, some projects, like Botswana's Managing the Human-Wildlife Interface to Sustain the Flow of Agro-Ecosystem Services and Prevent Illegal Wildlife Trafficking in the Kgalagadi and Ghanzi Drylands (GEF ID 9154, UNDP), remained

narrowly focused on enforcement, with limited attention to communities or alternative livelihoods.

Design quality was more uneven in the SFM projects. Some projects emphasized technical forestry interventions while neglecting key elements such as land tenure, gender, or climate resilience. Projects in India-Sustainable Land Management in Shifting Cultivation Areas of Nagaland for Ecological and Livelihood Security (GEF ID 3469, UNDP)-and Ethiopia-Community-Based Integrated Natural Resources Management in Lake Tana Watershed (GEF ID 3367, IFAD) underaddressed social aspects. Others-as in the Congo Basin-set unrealistic restoration targets, causing significant delays. In Mainstreaming Biodiversity Conservation, SFM and Carbon Sink Enhancement Into Mongolia's Productive Forest Landscapes (GEF ID 4744, FAO), project objectives were misaligned with available resources; and in Integrated and Transboundary Conservation of Biodiversity in the Basins of the Republic of Cameroon (GEF ID 9155, UNDP), midcourse revisions were required to incorporate social safeguards and indigenous peoples' participation.

Child projects under the Sustainable Cities Impact Program tested a range of interventions to address urban development challenges. Most aimed to support integrated and inclusive urban planning, pilot sustainable urban development approaches through targeted investments, and promote capacity building and knowledge sharing. Although the projects developed integrated plans that identified and prioritized actions, these plans were often not supported with financing. The targeted investments for pilot demonstrations were frequently unconnected to the integrated planning process, reducing their ability to drive systemic urban transformation.

The R2R projects in Pacific SIDS also faced challenges in translating integrated models into practice. In Tonga, demographic decline and limited political traction weakened land-coastal linkages. Fiji struggled to align its payment for environmental services model with administrative systems. The regional initiative, spanning 14 countries, faced difficulty converting regional coordination into meaningful national-level institutional change. Cross-cutting issues like gender and climate change adaptation were often insufficiently addressed because of capacity constraints.

5.4 Efficiency of implementation

Implementation timelines for integrated programming are broadly comparable to those for nonprogrammatic (stand-alone) approaches. An analysis of key timeline indicators such as the duration from CEO endorsement to project start, time to first disbursement, and overall implementation period—shows that integrated programming child projects generally reached critical milestones within similar or, in some cases, shorter time frames than stand-alone projects. More recent data indicate a reduction in the time elapsed between PIF approval by the GEF Council and CEO endorsement between GEF-7 and GEF-8 (table 5.6).³

Evolving causes of implementation delays

An ongoing review indicates that the causes of implementation delays in GEF integrated programming have evolved across project cohorts. Preliminary findings

TABLE 5.6Median elapsed time from PIF approvalto CEO endorsement

Program	Elapsed time (months)				
GEF-6 IAPs					
Resilient Food Systems IAP (n = 13)	21				
Good Growth Partnership IAP ($n = 5$)	20				
Sustainable Cities IAP ($n = 12$)	19				
GEF-6 IAP median ($n = 30$)	20				
GEF-7 impact programs					
FOLUR (<i>n</i> = 26)	23				
SFM (n = 24)	23				
Sustainable Cities ($n = 7$)	22				
GEF-7 impact program median (n = 57)	23				
GEF-8 integrated programs					
Amazon, Congo, & Critical Forest Biomes (n = 8)	17.5				
Net-Zero Accelerator (n = 13)	18				
Ecosystem Restoration ($n = 21$)	17				
Circular Solutions to Plastic Pollution ($n = 16$)	18				
Eliminating Hazardous Chemicals (n = 8)	17				
Blue and Green Islands (<i>n</i> = 16)	18				
GEF-8 integrated program median (<i>n</i> = 82)	18				

SOURCE: GEF Portal data as of March 26, 2025.

NOTE: Data are not included for five GEF-8 integrated programs (Sustainable Cities, Clean and Healthy Ocean, Greening Transportation Infrastructure Development, and Wild Life Conservation for Development) because the majority of projects from these programs are still under preparation and it is too early to calculate a median.

show that delays in the GEF-6 IAP cohort were primarily driven by the COVID-19 pandemic. In the GEF-7 impact program cohort, delays are more often linked to two emerging issues: the complexity of coordinating across multiple stakeholders, projects, and countries; and difficulties in managing financial transfers between Agencies (figure 5.5). These challenges reflect the increasing operational complexity of the programs.

³There are some qualifications on the comparability between the cohorts of child projects under GEF-6, GEF-7, and GEF-8. For example, the GEF introduced efficiency measures in 2018 requiring full-size projects to progress from PIF approval to CEO endorsement within 18 months. Child projects under GEF-6 IAPs that received CEO endorsement in 2016 and 2017 were prepared before the introduction of the 18-month requirement. Also, as an ongoing evaluation of the Sustainable Cities Integrated Program suggests, child project implementation delays also depend on project implementation duration. After adjusting for this, differences in implementation delays are lessened between GEF-6 and GEF-7.

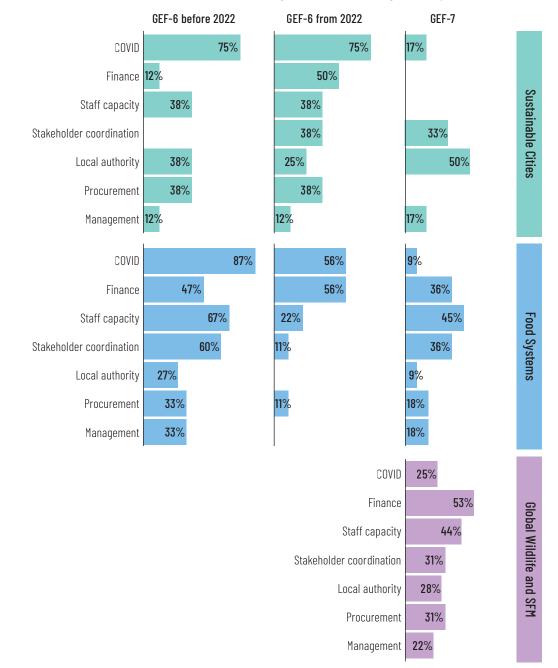


FIGURE 5.5 Top implementation issues for child projects that led to project delays

S O U R C E S : Project implementation reports (PIRs) of selected integrated programs, as of April 2025.

NOTE: Percentages show the share of projects for which implementation issues linked to delays were mentioned in the PIRs relative to all projects that described activity delays in the PIRs.

Implementation efficiency of child projects

Implementation efficiency across integrated programming was mixed, with many child projects facing delays, procurement bottlenecks, and uneven disbursement.

In the Pacific R2R program, delays averaged 6.7 years stemming from recruitment issues, administrative burdens, and the logistical challenges of remote island contexts. Countries like Fiji and Kiribati faced baseline data and indicator alignment issues, while poor inter-agency coordination in the Marshall Islands further slowed progress. However, some countries adapted effectively—for example, Tonga aligned R2R activities with local planning processes, and Fiji leveraged regional coordination to overcome early delays.

In the SFM portfolio, prolonged delays—particularly in the Congo Basin—stemmed from complex project designs, institutional fragility, and limited local capacity. Many projects required restructuring due to slow procurement and disbursement, compounded by the absence of centralized oversight.

The GWP encountered gaps between policy progress and field-level execution. Countries such as Ethiopia and Afghanistan advanced legal reforms but struggled with implementation because of weak coordination and financing. Mozambique faced similar challenges, with fragmented administration undermining momentum.

Under FOLUR, early delays were linked to multisectoral coordination challenges and the impacts of COVID-19. However, the global platform helped resolve bottlenecks, and progress resumed in countries with strong interagency mechanisms and capable local partners.

The Sustainable Cities initiative showed wide variability in efficiency. Countries with simpler project designs and favorable contextual conditions advanced more quickly; others struggled with complex project designs, challenges in obtaining clearances from government authorities, and difficulties in stakeholder coordination. Diverse infrastructure contexts made it difficult to standardize implementation timelines.

Overall, efficiency was strongest where project design anticipated coordination hurdles and incorporated adaptive management tools. Strong regional platforms and preexisting institutional networks helped accelerate implementation. Weaknesses arose where institutional readiness was overestimated, or project frameworks were too rigid to accommodate complex, integrated interventions.

5.5 Performance and effectiveness

Outcomes and sustainability

The limited number of completed GEF-6 IAP child projects with terminal evaluations have demonstrated good performance on outcome achievements, though with lower ratings for sustainability. Eighteen out of the 30 IAP child projects (60 percent) have been completed—either fully implemented or financially closed. The GEF IEO Annual Performance Report 2025 data set includes ratings for 10 of these completed child projects. The analysis shows that 90 percent of these evaluated projects received a satisfactory rating on outcomes. However, 71 percent were rated as having a likely level of sustainability—slightly below the overall GEF-6 portfolio average of 76 percent, as reported in the 2025 IEO Annual Performance Report.

ENVIRONMENTAL OUTCOMES

GEF-supported integrated programming has delivered notable environmental benefits, particularly in forest conservation, biodiversity protection, and ecosystem restoration. Under the SFM initiative, over 78 million hectares of forest were placed under improved management, and 5.6 million hectares received formal protection. These achievements reflect a broader legacy of GEF support to forest initiatives, dating back to before integrated programming, and have contributed to reduced deforestation, biodiversity conservation, and increased carbon sequestration. Common strategies included community forestry, agroforestry, and landscape restoration, which sought to align environmental goals with sustainable livelihoods.

The GWP yielded strong institutional results in combating wildlife crime. It supported the creation of environmental enforcement units and the deployment of technologies such as SMART, camera traps, and forensic labs. In Thailand, a Wildlife Crime Intelligence Center was established; in Mali, a Wildlife Crime Investigation Unit was created in partnership with the justice sector. Mozambique launched a national strategy on wildlife and forest crime, supported by an antipoaching coordination center, which led to increased conviction rates. Countries such as South Africa and Ethiopia applied advanced tools-such as LoRa (long-range, low-power, and low-data-rate communications) technology and drones-to improve species monitoring and antipoaching operations. Bhutan integrated biodiversity monitoring into national development planning, with community rangers supporting conservation activities. Additionally, the GWP fostered cross-border coordination, promoting harmonized legal frameworks and enforcement across wildlife trafficking corridors.

In the R2R program for Pacific SIDS, integrated land and marine resource management yielded localized environmental improvements. Countries such as Vanuatu and the Solomon Islands implemented catchment-level interventions to restore upland forests, reduce sedimentation, and establish marine protected areas. These efforts demonstrated the ecological interdependence of land and sea systems and addressed upstream drivers of reef degradation and declining fisheries.

However, the scale and depth of these achievements were uneven. In some SFM projects, metrics like hectares under improved management masked underlying governance issues. In Uganda, forest cover increased, but weak enforcement hindered sustainable use. In the Democratic Republic of Congo, community benefit sharing through social contracts was undermined by poor transparency and weak monitoring. Brazil's Amazon Sustainable Landscapes project expanded protected areas over more than 60 million hectares but struggled to scale sustainable production systems outside conservation zones.

Similarly, while the GWP made progress on enforcement and monitoring, it often lacked integration with broader land use or habitat restoration strategies. In Cambodia, efforts to link biodiversity conservation with ecotourism were hampered by poor coordination between enforcement and community development. In Mozambique, agricultural expansion and extractive industries continued to encroach on protected areas, weakening conservation outcomes despite national enforcement strategies.

In the Pacific SIDS, R2R projects succeeded in improving localized ecosystem health, including water quality and mangrove restoration. However, limited institutional capacity and fragmented governance both across sectors and between national and local levels—restricted the scale and integration of these efforts. Many projects functioned more as pilots, with limited uptake into national planning or cross-sector policy frameworks.

In summary, integrated programming has produced meaningful environmental results, especially where institutional coordination, community engagement, and technological innovation were well aligned. Yet, uneven design quality, governance challenges, and limited scalability continue to constrain the transformative potential of these programs in complex and capacity-constrained settings.

SUSTAINABILITY OF OUTCOMES

Sustaining results beyond project closure remains a significant challenge across the GEF's integrated programming, although some practices have shown promise. The most consistent factor supporting sustainability was strong institutional anchoring. Projects implemented through permanent government institutions, rather than temporary project units, were more likely to endure. For example, Brazil integrated SFM into national forestry policy, and Gabon embedded payments for environmental services within watershed planning. In the GWP, enforcement units that were fully institutionalized—such as Thailand's Wildlife Crime Intelligence Center and Mozambique's Anti-Poaching Coordination Center—demonstrated greater long-term viability.

Financial sustainability improved where projects actively pursued green finance or eco-business models. In Mozambique and Brazil, SFM projects piloted payments for environmental services and explored tools like forest certification and green bonds. GWP initiatives in Zambia and Tanzania linked conservation with ecotourism to fund community ranger roles and attract private cofinancing. Papua New Guinea's R2R project explored biodiversity offsets and climate finance to support conservation goals. However, in cases like Botswana, private sector partnerships remained largely aspirational and underimplemented.

Projects that lacked integration with national strategies or depended heavily on short-term donor funding struggled to sustain their impacts. In several SFM projects, services such as nurseries and patrols collapsed after funding ended, as seen in Myanmar and Benin. Côte d'Ivoire's advisory services also declined postproject because of weak institutional planning. Under the GWP, sustainability was weakest where wildlife protection efforts were donor-dependent and disconnected from national development frameworks. Projects in Madagascar, the Democratic Republic of Congo, and India suffered setbacks, because of a lack of long-term domestic financing and limited institutional alignment.

In the Pacific, R2R projects faced additional barriers as a result of high staff turnover and limited institutional capacity. The loss of institutional memory affected the continuity of project tools and systems. In Fiji and Tuvalu, monitoring systems lacked both financial and institutional backing, leading to the repeated reinvention of similar tools in subsequent efforts.

In summary, while integrated programming delivered concrete environmental results, its long-term impact often hinged on governance strength, institutional continuity, and strategic alignment with national systems. Lasting transformation requires not only protection and enforcement, but also integration with land use reform, sustainable livelihoods, and long-term financial and institutional support.

Co-benefits in livelihoods, governance, gender, and inclusion

Integrated programming aimed to deliver co-benefits beyond environmental outcomes—specifically in livelihoods, governance, gender equality, and the inclusion of indigenous peoples. These co-benefits were most effectively realized when communities were actively engaged in decision-making and resource management.

SFM projects in countries including Kenya, the Philippines, and Nepal supported tenure reform and the growth of community-based enterprises. Forest user groups received training and assistance to access markets, enabling alternative livelihoods through agroforestry and small-scale forest products. In the Amazon and Central Africa, formal recognition of indigenous land rights enhanced both environmental protection and community empowerment. The GWP generated co-benefits by involving local communities in conservation-linked livelihoods. In Zambia and Tanzania, communities participated as rangers and in ecotourism initiatives. However, benefit-sharing mechanisms were often weak or underdeveloped. In some cases, such as Cameroon, projects faced suspension as a result of inadequate safeguards and insufficient engagement with indigenous peoples. In the Democratic Republic of Congo, women's participation was limited, constrained by social and informational barriers. These challenges suggest that while participatory approaches were incorporated into design, they were not always effectively implemented because of weak institutional support.

In the Pacific R2R program, co-benefits included improvements in food and water security. Community-led marine conservation and mangrove restoration in Samoa and Vanuatu boosted both ecological resilience and local livelihoods. Women's groups played a role in coastal rehabilitation, and climate-resilient farming was promoted. However, weak infrastructure, limited market access, and lack of postproject support often hindered the long-term sustainability of these outcomes.

Efforts toward gender and indigenous inclusion varied across programs. Some countries, like Panama and Indonesia, integrated gender considerations more systematically by creating advisory groups and allocating dedicated budgets. In others, inclusion was treated more as a formality than a meaningful objective. Implementation delays and contestation over indigenous peoples' plans occurred in Cameroon and the Republic of Congo. In Botswana, efforts to foster collaboration with indigenous communities faced practical challenges despite recognition of the need.

In summary, co-benefits were most successful when communities had a central role in project design and implementation. Inconsistent application of inclusion principles, coupled with limited institutional capacity and follow-up support, often restricted the scale and durability of these achievements.

Enabling conditions and barriers to performance

The performance of integrated programming was shaped by a mix of enabling conditions and recurring barriers, with clear patterns emerging across different contexts.

Strong national commitment and supportive policy environments consistently drove better outcomes. Success was more likely when interventions were embedded in national planning frameworks and supported by coordinated inter-Agency platforms. Projects that integrated forest or wildlife initiatives within broader development strategies—backed by institutional mandates and interministerial collaboration—achieved more durable results.

Participatory governance also played a critical role. Community-based structures, such as village committees and indigenous governance systems, enabled alignment between traditional practices and technical approaches. Capacity development further enhanced performance, with local actors trained in wildlife monitoring, coastal resource management, and adaptive planning across several programs.

Institutional fragmentation and limited capacity frequently constrained implementation. Overlapping mandates among agencies working on forestry, agriculture, and land use created coordination challenges. Projects in some countries struggled to integrate conservation and development because of sectoral silos and weak political support. Even where coordination centers existed, as in Mozambique, disconnects between enforcement and community development limited overall cohesion.

Overly complex project designs posed barriers. Many aimed to address multiple sectors simultaneously-forestry,

biodiversity, agriculture, and livelihoods—within limited time frames and budgets, making implementation difficult. In the Pacific, demographic shifts and administrative misalignment further disrupted progress. Regional efforts like the R2R initiative often failed to translate integration goals into national-level institutional reform.

Weak monitoring and evaluation (M&E) systems compounded these issues. Projects frequently relied on output-level indicators that did not adequately measure environmental or social outcomes. Misaligned indicators made it difficult to track progress or adapt effectively. In several Pacific projects, indicators failed to reflect conservation impact, reducing opportunities for learning and adaptive management.

In summary, integrated programming performed best where national leadership, institutional alignment, community engagement, and capacity support were in place. Where these foundations were absent—and compounded by overly ambitious designs and weak M&E—project effectiveness and long-term impact were significantly limited. Strengthening these core elements will be essential for improving future program performance and scalability.

5.6 Private sector engagement

Private sector engagement across the GEF's integrated programming has been mixed, influenced by divergent strategy goals, inconsistent institutional capacity, and uneven enabling environments. Two major IAP initiatives—the Good Growth Partnership and Sustainable Cities—illustrate contrasting approaches to working with private actors.

The Good Growth Partnership positioned the private sector as a central actor in shifting commodity supply chains toward deforestation-free practices. Multistakeholder platforms were established to involve private actors in shaping policy, developing tools, and supporting regulatory improvements. Although these forums successfully facilitated dialogue and policy input, they rarely spurred independent private sector action. Direct engagement efforts—such as farmer training and transaction support—focused on improving production practices but fell short of catalyzing systemic changes in supply chain traceability, regulation enforcement, or market demand. Key gaps included limited involvement of influential downstream actors like processors, brands, and retailers, which weakened efforts to shift production incentives.

The Sustainable Cities IAP, in contrast, engaged the private sector through specific public-private partnerships. Some cities successfully launched projects in waste management, renewable energy, and transportation. For example, cities in India and Mexico partnered with private firms on biodigesters and electric vehicle deployment. However, many cities faced difficulties structuring public-private partnerships, attracting partners, or aligning incentives. Johannesburg and Vijayawada, for example, encountered challenges in outreach, procurement, and execution. These outcomes underscored a widespread need for improved municipal capacity and clearer frameworks for private sector collaboration.

In other integrated programs such as the SFM and the GWP, private sector engagement was more limited in scale and strategic focus. In the SFM portfolio, support often centered on small and medium-size enterprises, including community-based ventures in sustainable timber and nontimber products. While such efforts generated local benefits, they struggled to achieve scale because of market access constraints, weak investment links, and unresolved land tenure issues. Larger private actors, including agribusiness and forestry companies, were engaged only sporadically, constrained by unclear regulatory frameworks and insufficient incentives. Some innovation, such as performance-based finance models, showed potential but remained isolated. The GWP's early efforts engaged the private sector primarily in ecotourism and conservation-linked livelihoods, with limited strategic coordination. In later periods, new initiatives sought to foster partnerships and diversify financing, including technological collaborations such as wildlife forensics and traceability platforms. Although these are promising developments, results remain early and fragmented.

Private sector engagement is gaining traction, with GEF-8 initiatives supporting partnerships in sustainable food systems, NbS, and the blue economy. Nonetheless, overall engagement remains below potential. Structural barriers—including limited regulatory clarity, insufficient financial incentives, and institutional capacity gaps—have constrained progress. Although GEF-8 has introduced new models and tools to strengthen engagement, achieving lasting impact will require more strategic alignment, stronger enabling conditions, and deliberate partnerships with key market actors across sectors and value chains.

5.7 Knowledge management

In GEF-supported integrated programming, knowledge management was intended not just as a tool for documentation and dissemination, but as a driver of coordination, adaptive learning, and institutional strengthening. While nearly all programs included dedicated knowledge management components—such as global platforms, thematic toolkits, and regional learning hubs—implementation quality and strategic integration varied widely. Evaluations identified recurring challenges: uneven uptake, limited use of knowledge management in decision-making, and weak connections to adaptive project management.

The GWP stands out for its relatively well-structured knowledge management approach. A global coordination project developed toolkits on topics such as illegal wildlife trade, zoonotic disease risks, and wildlife-based enterprises. Enforcement agencies benefited from training modules and technical support. Notably, during the COVID-19 pandemic, the GWP maintained momentum by transitioning to virtual knowledge exchanges. These efforts translated into practical results: Botswana, Mozambique, and the Republic of Congo applied <u>EarthRanger technology</u> to improve protected area surveillance; Thailand used forensic tools like DNA analysis and IBM i2 intelligence software to strengthen wildlife crime investigations, illustrating how knowledge management investments supported national enforcement capacity.

In the R2R program, knowledge management was embedded in program architecture through the establishment of national learning hubs and a regional platform focused on integrated watershed and coastal management. Ten child projects developed knowledge management systems drawing on both scientific and traditional ecological knowledge. In Vanuatu, ecological indicators were incorporated into national sectoral planning. In Fiji and Samoa, participatory diagnostics fostered awareness and helped shape land-sea conservation strategies. Long-term continuity was challenged by institutional fragmentation, weak data systems, and limited technical capacity.

Food systems programs such as the Resilient Food Systems IAP, the Good Growth Partnership, and FOLUR integrated knowledge management as a cross-cutting function. Resilient Food Systems facilitated country-level innovation platforms linking farmers, researchers, and extension agents to exchange sustainable agriculture practices—particularly in Ethiopia and Nigeria. The Good Growth Partnership convened multistakeholder dialogues across sectors to improve land use governance and commodity supply chains. In Paraguay and Liberia, for instance, such platforms fostered dialogue among government, producers, and civil society around sustainable soy and palm oil production. FOLUR expanded these efforts through global convenings and country-level learning grants, though activities were disrupted during the COVID-19 pandemic.

Knowledge management was most impactful when directly tied to a program's theory of change and operational decision-making. The Amazon Sustainable Landscapes Program demonstrated this by not only producing knowledge management outputs—such as land use planning guidelines and sustainable production strategies—but actively using them to inform national policy dialogue. Yet this level of integration was not widespread. In many cases, knowledge management remained poorly integrated with project management and adaptive learning. Knowledge products were often created to meet reporting requirements, with little evidence of use in course correction or strategic planning.

Monitoring frameworks revealed further knowledge management weaknesses. In the R2R effort, inconsistent indicators across child projects made it difficult to aggregate data at the program level or assess collective impact. Similarly, in the GWP, although the global coordination team developed standardized tracking tools, access to harmonized national data was limited, hampering cross-country learning.

Resource constraints were a common limiting factor. Knowledge management was frequently combined with M&E or communications roles, often without dedicated personnel or budgets. This led to fragmented dissemination efforts and limited uptake. For example, in the Federated States of Micronesia, R2R knowledge management outputs focused mainly on reporting how many people were trained, offering little insight into environmental or behavioral change. In Niue, R2R indicators focused on the number of management plans rather than the quality or outcomes of their implementation.

Feedback mechanisms were underutilized. While midterm reviews and learning missions were meant to support adaptive management, few instances were documented where knowledge management directly informed design changes or implementation strategy.

In summary, while integrated programming made commendable investments in building knowledge systems, these were not consistently leveraged as tools for strategic learning and adaptive decision-making. Effective knowledge management was most evident when aligned with program goals, backed by dedicated resources, and supported by harmonized data systems. Moving forward, unlocking the full value of knowledge management will require greater integration into core project functions, improved feedback loops, and sustained institutional commitment.

5.8 Nature-based solutions

NbS cuts across GEF focal areas by offering integrated approaches that simultaneously address biodiversity conservation, climate change adaptation and mitigation, land degradation, water security, and societal benefits through the sustainable management of ecosystems.

Evolution since GEF-5

The GEF's approach to NbS primarily aligns with generally accepted international definitions, but lacks its own operational definition. The International Union for Conservation of Nature and the United Nations Environment Assembly describe NbS as actions to protect, sustainably manage, and restore ecosystems to address societal challenges while benefiting both human well-being and biodiversity. The GEF's integration of NbS has progressed from implicit alignment in earlier funding cycles to strategic integration, becoming a priority in GEF-8 across various focal areas, particularly within blended finance initiatives.

Main areas of intervention

GEF-funded NbS interventions address climate, biodiversity, and human well-being through integrated, cross-cutting strategies. These interventions span a wide range of ecosystems, themes, and approaches, in alignment with the GEF's mandate to deliver global environmental benefits. Core areas of support include ecosystem restoration, sustainable land and forest management, integrated water and coastal management, ecosystem-based adaptation and mitigation, and nature-positive urban infrastructure.

A key focus is on integrating these elements to enhance ecological integrity and climate resilience. NbS is embedded in urban systems through green infrastructure and in agriculture through agroecological and climate-smart practices. The GEF also supports the conservation and restoration of natural systems—such as mangroves and wetlands—for their role in reducing climate risks, sequestering carbon, and conserving biodiversity.

Portfolio

From GEF-5 to GEF-8, the GEF has supported 933 NbS-aligned projects, totaling \$6.2 billion, or approximately 39 percent of its total resources during this period (table 5.7). Most of these are full-size projects (87 percent), underscoring the scale of the GEF's investment in NbS. The portfolio includes full- and medium-size projects, Global Biodiversity Framework Fund projects, and 12 nongrant instrument projects. While the majority of NbS-aligned projects are still under way, more than a third have been completed. The number and funding of these projects have varied across GEF cycles. In terms of project count, GEF-5 saw the highest number of NbS-aligned projects (322 projects, \$1.78 billion). Although fewer NbS-aligned projects were programmed in GEF-7 (266), total financing increased to \$1.84 billion, indicating a trend toward larger projects, at least in nominal terms. Figures for GEF-8 are still evolving, as many projects remain in the design phase and their NbS components may be clarified at a later stage.

The GEF Trust Fund is the main financing source, while the Least Developed Countries Fund and Special Climate Change Fund contribute 17 percent of total funding, reflecting their role in adaptation-focused NbS. Programmatic approaches are increasingly central to the NbS portfolio, with over 16 percent of projects implemented as child projects under integrated programs. This share has grown significantly—from 19 percent in GEF-5 to 51 percent in GEF-8. United Nations entities manage 72 percent of the total GEF funding for these projects.

The NbS-aligned portfolio has strong representation in Africa and LDCs, with most projects being multifocal and emphasizing biodiversity. Africa hosts the largest number of NbS projects and receives the largest share of GEF

TABLE 5.7 Overview of GI	EF NbS portfolio
--------------------------	------------------

Metric	GEF-5	GEF-6	GEF-7	GEF-8	Total
Number of approved projects ^a	322	219	266	126	933
GEF financing (million \$)⁵	1,782	1,477	1,841	1,121	6,221
Cofinancing ratio at approval ^c	6.8	7.0	7.8	7.4	7.3

SOURCE: GEF Portal data as of March 26, 2025.

a. Includes approved, ongoing, and completed projects; excludes dropped, canceled, and suspended projects without a first disbursement.

b. Includes Agency fees and project preparation grant funding and fees.

c. GEF financing excludes Agency fees and project preparation grant funding and fees.

resources in NbS–38 percent of funding across 347 projects. China has the largest number of individual projects, and Mexico receives the most total funding. LDCs and SIDS together account for 44 percent of total NbS resources. The majority of NbS projects are multifocal, with over a quarter of total GEF funding supporting initiatives that address biodiversity, climate change, and land degradation.

Performance and effectiveness

GEF NbS-aligned projects show similar levels of outcome ratings in the satisfactory range compared to other GEF projects, with weaker sustainability ratings. Regarding project outcomes, 87 percent of NbS-aligned projects receive ratings in the satisfactory range, comparable to the rest of the GEF portfolio. Despite minor variations, the performance quality of NbS-aligned projects, regarding M&E design, implementation, overall implementation quality, and project execution, is broadly comparable to the rest of the GEF portfolio (figure 5.6). Only 58 percent of NbS-aligned projects are rated as having outcomes that are likely to be sustainable, compared to 74 percent for other completed GEF projects. Challenges in ensuring long-term financial flows and institutional complexity given the multisectoral nature of NbS-aligned projects hindered the sustainability of results of some NbS-aligned projects.

The long-term sustainability of GEF-supported NbS interventions relies on strong governance, financing, institutional capacity, and enabling conditions. Projects are more likely to endure when embedded in national policies, aligned with country priorities, and supported by local ownership (box 5.2). Many face challenges such as limited postproject financing, weak coordination across sectors, and lack of institutional continuity. The absence of mechanisms to mainstream NbS into national budgets further undermines viability. Interventions that effectively engaged indigenous peoples and local communities (IPLC) and built local capacity show greater potential for lasting impact.

Contributions and challenges

NbS interventions make important contributions to global environmental benefits, particularly in biodiversity conservation, climate change mitigation and adaptation, and land degradation neutrality. By using integrated approaches to land, forest, and coastal management, these projects often deliver multiple co-benefits—such as enhanced carbon sequestration, ecosystem restoration, and

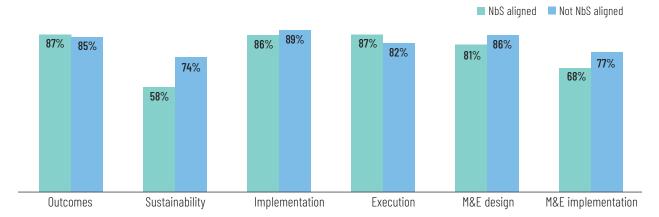


FIGURE 5.6 NbS-aligned projects rated in the satisfactory/likely range

S O U R C E : GEF IEO Annual Performance Report 2025 data set, which includes completed projects for which terminal evaluations were submitted by June 30, 2024, and performance ratings were independently validated through December 2024.

NOTE: Differences are not statistically significant at the 5% level, except for sustainability.

BOX 5.2 Scaling up GEF-supported nature-based solutions for climate and ecosystem resilience

GEF-supported NbS projects in India's coastal regions, including initiatives in Maharashtra and Odisha-Mainstreaming Coastal and Marine Biodiversity Conservation into Production Sectors in the Malvan Coast (GEF ID 3941) and in the Godavari River Estuary (GEF ID 3936)-piloted ecosystem-based adaptation through mangrove restoration and climate-resilient livelihoods. These models laid the foundation for the Green Climate Fund project Enhancing Climate Resilience of India's Coastal Communities, which scaled up interventions across three states, reaching 1.7 million people and enabling replication across India's 13 coastal states. Satellite analysis shows ecological improvements that include increased vegetation health and reduced flooding, indicating successful mangrove restoration and the potential of NbS as scalable climate solutions.

improved water regulation. Examples from Indonesia, the Congo Basin, and Viet Nam show how ecosystem-based strategies achieve impact across diverse ecological and geographic contexts.

However, the lack of systematic assessment of cost-effectiveness—especially for key ecosystem services—along with limited scale and monitoring, weakens the ability to demonstrate returns on investment. This limits policy uptake, replication, and private sector engagement, reducing the perceived scalability and value of NbS as a cost-effective alternative to conventional approaches.

Socioeconomic co-benefits

NbS interventions have generated important socioeconomic co-benefits, including improved agricultural productivity, water access, and income generation. For example, the Conserving Biodiversity through Sustainable Management in Production Landscapes in Costa Rica (GEF ID 9416, UNDP) project supported pandemic-affected families through urban reforestation, helping ease economic hardship. In Ghana's Promoting Value Chain Approach to Adaptation in Agriculture (GEF ID 4368, IFAD) project, poultry-based fertilizer enhanced crop yields and drought resilience. A value-for-money analysis of SFM projects in Uganda showed an increase of \$310 in household assets where GEF support was present.

Despite these positive outcomes, socioeconomic benefits are not systematically captured. Many evaluations reference impacts on income, health, and well-being, but often in anecdotal or qualitative terms. Challenges remain in developing robust results frameworks, ensuring quantitative measurement, and clearly attributing socioeconomic outcomes to project interventions.

Despite some progress, the meaningful inclusion of marginalized groups in NbS-aligned projects remains a challenge. While many initiatives involve IPLC and women-particularly in participatory planning and community-based adaptation-evidence shows that inclusive design does not always lead to equitable implementation. Strengthening safeguards, improving disaggregated data, and ensuring deeper engagement are essential to achieving fair and equitable benefit sharing.

Private sector engagement and innovation

Innovation–across technological, financial, and institutional areas–is essential to unlocking the transformative potential of the GEF's investments in NbS. Although the GEF has introduced enabling frameworks and piloted innovative finance tools like blended finance and outcome-based bonds, uptake remains limited. The scaling of NbS continues to be hindered by underdeveloped business models and insufficient private sector engagement. Notable examples, such as Fiji's Jobs-for-Nature initiative, Vanuatu's water infiltration galleries, and Palau's funding diversification through the R2R project, highlight emerging success stories. However, proving the scalability and long-term viability of these financial innovations remains a challenge.

Knowledge management

Although NbS has been increasingly integrated into GEF strategies, knowledge management systems remain underdeveloped. The lack of standardized tagging, indicators, and reporting protocols limits the GEF's ability to capture lessons, compare performance, and support adaptive learning across its NbS portfolio. This hinders evidence-based decision-making and broader adoption of successful practices. Incorporating traditional and local ecological knowledge is also critical to ensuring that NbS approaches are culturally grounded, equitable, and resilient. Strengthening knowledge systems is essential for the GEF to fulfill its catalytic role in scaling NbS through policy and investment influence.

Policy and institutional framework

ver the past 30 years, the GEF has developed a comprehensive suite of policies and guidance on gender equality, stakeholder engagement, and environmental and social safeguards designed to align with international good practice standards. It also has principles and guidance for engagement with indigenous peoples. It has promoted the use of community-based approaches (CBAs) to improve outcomes and support sustainability at the local level. The GEF has also aimed to support innovation by encouraging risk-taking and the application of advanced technologies. In parallel, it has supported financing from donors with an established cofinancing policy intended to leverage additional resources and partnerships. To guide efficiency in implementation, it has put in place an institutional framework intended to strengthen country engagement, support policy coherence, and improve the relevance and responsiveness of its results-based management and knowledge management systems.

This section presents the highlights of evaluative evidence across these areas, noting both achievements and areas for improvement.

6.1 GEF policies and safeguards

Over the years, the GEF has developed a robust policy framework to foster social inclusion through promoting gender equality, stakeholder engagement, and environmental and social safeguards. These include the <u>Policy on Gender Equality</u>, the <u>Policy on Stakeholder Engagement</u>, and the <u>Policy</u> <u>on Environmental and Social Safeguards</u>, as well as <u>Principles and Guidelines for Engagement with</u> <u>Indigenous Peoples</u>. These policies and principles have remained largely unchanged since the IEO's Evaluation of Institutional Policies and Engagement, which found them to be generally aligned with international standards, but noted gaps in complementarity and implementation (GEF IEO 2022b).

Recent IEO evaluations show that gender policy compliance in project design has improved significantly. Projects increasingly include gender analyses and action plans, particularly in the GEF-6, GEF-7, and GEF-8 portfolios. For instance, in the drylands portfolio, 80 percent of projects conducted gender assessments and incorporated sex-disaggregated indicators. Similarly, early warning systems projects and those in the chemicals and waste focal area showed increased integration of gender considerations. Data from the Least Developed Countries Fund/Special Climate Change Fund (LDCF/SCCF) portfolio reflect a rise in the proportion of projects implementing gender action plans-from 11 percent in 2023 to 39 percent in 2025-and in the use of sex-disaggregated monitoring-from 75 percent to 91 percent over the same period. Although project designs increasingly meet gender policy requirements, evaluations continue to highlight the need for deeper engagement, stronger attention to women's agency and leadership, and better use of sex-disaggregated data in adaptive management.

The inclusion of marginalized groups beyond gender remains uneven. Stakeholder consultations are widely documented during project design, with the GEF reporting that in 2024, 82 percent of projects consulted civil society organizations (CSOs) and 47 percent engaged indigenous peoples and local communities (IPLC). However, there is no systematic reporting on how stakeholders are involved throughout the activity cycle beyond these initial consultations. The IEO's ongoing evaluation on the inclusion of marginalized groups finds that while stakeholder analysis and engagement plans are included in newly approved projects, the extent and depth of actual participation remain unclear because of limited contextual information.

Evaluations also reveal inconsistencies in inclusion across the portfolio. The Pacific small island developing states (SIDS) evaluation found improved gender inclusion, particularly in the Implementing Sustainable Low and Non-Chemical Development in SIDS (ISLANDS) program, but noted limited engagement of youth, the private sector, and other community stakeholders. Similarly, the Global Wildlife Program evaluation observed modest improvements in IPLC inclusion from GEF-6 to GEF-8, although engagement remains limited overall. Barriers to inclusive implementation include resource and capacity constraints, as well as cautious approaches by some governments toward more comprehensive inclusion efforts.

The role of the GEF-CSO Network remains underdeveloped. Although it has the potential to enhance stakeholder engagement in GEF-funded projects, the lack of clear roles and responsibilities continues to constrain the network's effectiveness. The IEO engagement evaluation recommended a reset of the relationship between the GEF and the CSO Network (GEF IEO 2022b), yet progress has been limited. Although efforts such as the Small Grants Programme (SGP) 2.0 plan to increase civil society engagement, and despite CSO participation in meetings having increased, a strong, structured mechanism remains absent. In contrast, institutions such as the Climate Investment Funds have established more formal processes for civil society inclusion.

Overall, while GEF policies provide a strong foundation for promoting social inclusion and stakeholder engagement, implementation remains uneven. Greater clarity in roles, stronger monitoring systems, and sustained support for marginalized groups are needed to fully realize the GEF's commitment to inclusive development.

Environmental and social safeguards in GEF projects

Since the 2019 adoption of the Policy on Environmental and Social Safeguards, compliance has improved across GEF projects. All projects in the 2024 work programs met initial risk-screening requirements. However, the most frequently identified risks are related to biodiversity, labor conditions, and climate change, rather than inclusion. Risks linked to disadvantaged or vulnerable groups, indigenous peoples, gender, and persons with disabilities were identified in fewer than half of the projects, with disability-related risks entirely unreported.

Evaluation evidence suggests that the needs of vulnerable groups are not consistently addressed. For instance, the drylands strategic country cluster evaluation found that projects often overlook the social distribution of benefits. A review of 100 GEF-7 and GEF-8 projects revealed that 98 percent of comments received from the GEF Secretariat in draft Chief Executive Officer (CE0) endorsement documents were on policy application, and 70 percent received consisted of specific feedback on the inclusion of marginalized groups. Most comments focused on gender; references to indigenous peoples, youth, and persons with disabilities were far less common. Agencies responded to 93 percent of inclusion-related feedback with revisions.

INCLUSION TRENDS AND POLICY IMPACT¹

GEF-funded projects have shown increasing inclusion of marginalized groups over time. The share of projects engaging at least one of the following-women, IPLC, or youth-rose from 92 percent in completed projects to 100 percent in ongoing ones. Women and girls are the most consistently represented, with inclusion rising from 82 percent in GEF-5 and GEF-6 projects to 100 percent in GEF-7 and GEF-8. However, gender efforts typically focus on women and girls, with limited attention to men and boys. Youth inclusion also improved-from 56 percent in completed projects to 68 percent in ongoing ones-although definitions of youth remain inconsistent. IPLC engagement has increased as well, despite challenges in countries where indigenous status is not formally recognized. For instance, the Inclusive Conservation Initiative, launched in 2021, is supporting IPLC in leading conservation efforts on their lands and territories in the Congo, the Amazon, Fiji and Papua New Guinea, and Panama, among other locations. The initiative aims to strengthen rights, governance, and traditional knowledge systems while promoting biodiversity and climate resilience.

Projects with well-integrated inclusion efforts in both design and implementation phases tend to achieve better outcomes. Evaluations indicate a clear link between strong gender components and project performance. For example, in 2025, 77 percent of LDCF/SCCF projects with robust gender integration achieved satisfactory results, while projects with only superficial efforts performed poorly.

CHALLENGES TO EFFECTIVE INCLUSION

Despite policy progress, several challenges persist. Inclusion requirements are sometimes treated as procedural,

such as fulfilling participation quotas without fostering real empowerment. Stakeholders stress the need for deeper involvement of marginalized groups in decision-making and implementation. Inclusion is typically emphasized during project design but less consistently addressed during execution. Failure to deliver promised activities risks eroding trust within communities.

The GEF activity cycle and budget limitations also constrain inclusive engagement. Early and continuous involvement of marginalized groups is essential but difficult to achieve within current timelines, and efforts to shorten preparation phases could further hinder meaningful inclusion. Additionally, limited budgets may discourage deeper engagement as a result of the higher costs of inclusive approaches.

Monitoring and accountability remain incomplete. Many projects lack appropriate indicators to measure actual inclusion outcomes. While sex-disaggregated data are common, stakeholders report a lack of clear examples of indicators for broader inclusion. Without proper tracking, the benefits of inclusive approaches may go unrecognized.

In fragile and conflict-affected contexts, inclusion is both more difficult and more critical. These settings present added risks for marginalized groups, making inclusive practices essential to avoid unintended negative impacts and ensure equitable access to project benefits.

Community-based approaches

Although not mandated, CBAs have long been an integral part of GEF programming. Moreover, they align with several multilateral environmental agreements—such as the United Nations Convention to Combat Desertification, the Convention on Biological Diversity, and the United Nations Framework Convention on Climate Change as well as national policies and GEF strategies on biodiversity, land use, and climate change. CBAs place

¹Findings are based on preliminary evidence.

communities at the center of project planning and implementation, empowering them to make decisions rather than simply receiving aid. This shift in power dynamics improves governance, fosters local ownership, and enhances long-term sustainability.

Over time, the GEF's CBA projects have become more aligned with internationally recognized good practices. These practices include six key dimensions: local-level decision-making, devolution of resources, use of local institutions, legitimacy, accountability, and recognition of human rights and equality. Only a minority of projects meet a comprehensive standard, however. Just 5 percent of GEF-4 and GEF-5 projects and 12 percent of GEF-6 and GEF-7 projects scored above average across all six dimensions. Common gaps include insufficient devolution of financial and technical resources and limited incorporation of local institutions and norms. A strong example of good practice was the Restoration Challenge Grant Platform for Smallholders and Communities (GEF ID 10637, International Union for Conservation of Nature [IUCN]) project in Cameroon and Kenya, which supported rural restoration efforts through small grants/payments and mobile technology. Programs like the SGP and the Inclusive Conservation Initiative were also noted for effective bottom-up financial flows and community self-management.

Despite their potential, many CBA projects lack strong monitoring systems. Few track indicators central to the CBA process, such as the organizational capacity of grassroots groups, the resources managed directly by communities, or the inclusion of vulnerable populations in leadership and decision-making. Less than a quarter of reviewed projects monitored any of the six good practice dimensions, limiting adaptive learning and accountability.

Inclusivity in CBA projects has improved, particularly in terms of involving women, IPLC, and youth. Among projects designed during GEF-6 and GEF-7, 62 percent identified women as stakeholders, compared to 43 percent in GEF-4 and GEF-5. IPLC were mentioned

in 46 percent of newer projects, up from 14 percent; and youth in 33 percent, up from 11 percent. However, deeper engagement—especially for women in leadership and decision-making roles—remains limited. In Madagascar, for instance, project implementers reported practical efforts to engage women, such as scheduling meetings to accommodate their availability and using informal interactions to encourage participation. In Peru, civil society and IPLC stakeholders stressed the importance of integrating women's perspectives early in project design. Quotas were seen as a useful entry point, but insufficient for addressing systemic inequalities.

CBA projects have demonstrated strong environmental and socioeconomic results. Eighty-five percent of completed GEF-4 and GEF-5 CBA projects received satisfactory outcome ratings, slightly exceeding the percentage for the broader GEF project portfolio. GEF-5 projects performed especially well, with 92 percent receiving positive ratings. Environmental benefits included land restoration, reduced poaching, cleaner water, and biodiversity protection. Nearly half reported measurable improvements in environmental status, and two-thirds showed broader adoption of project practices. In Cambodia, the Sustainable Forest Management and Bio-Energy Markets (GEF ID 3635, United Nations Development Programme [UNDP]) project doubled monthly incomes for cookstove producers while cutting carbon emissions, illustrating the dual impact of CBAs.

These outcomes tend to be sustained when CBAs are well designed and communities remain engaged. In the Citarum Watershed Management and Biodiversity Conservation Project in Indonesia (GEF ID 3279, Asian Development Bank [ADB]), project activities became embedded in community routines and continued voluntarily after project closure. Sustained success was linked to local behavior change, capacity building, and alternative livelihoods supported through market opportunities or partnerships. Nonetheless, significant challenges persist. Short project cycles—typically three to five years—limit the time needed to build relationships, transfer skills, and involve communities in planning. Resource constraints during project preparation often reduce opportunities for outreach and early stakeholder engagement. Additionally, critical elements of CBA success—such as governance quality, inclusion of vulnerable groups, and resource control—are seldom measured, making it difficult to learn from or replicate successful practices.

In conclusion, CBAs offer a valuable and proven approach to achieving both environmental and social outcomes in GEF projects. Their effectiveness depends on meaningful community participation, strong local institutions, sustained engagement, and appropriate monitoring. While the GEF has made progress in aligning CBA design with good practices, more attention is needed to ensure consistent implementation, deeper inclusion, and stronger systems for tracking impact. Addressing these gaps will be critical to maximizing the transformative potential of CBAs across the GEF portfolio.

Supporting innovation and risk management in the GEF portfolio

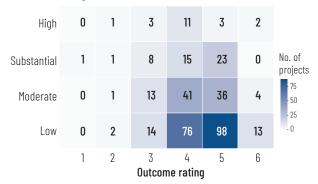
Managing risk has become increasingly important for development organizations over the past decade, particularly in the face of global environmental degradation and other complex challenges. In response, many GEF Agencies have developed enterprise risk management frameworks. These are intended to help optimize resources and achieve impact, even when this involves taking on higher levels of risk. Transparency and strategic risk-taking have become central to these efforts.

Recognizing the need to adopt more deliberate risk-taking in pursuit of innovation and global environmental benefits, the GEF Council approved a risk appetite document at its 66th meeting. This document is intended to guide Agencies in taking calculated risks while maintaining prudent management (GEF 2024a). It also signals a shift in the GEF's approach to managing risk and fostering innovation. For this shift to take root, the GEF must define its desired portfolio-level risk, clarify risk tolerance, and ensure shared understanding of risk ownership. Internal risk management processes within the GEF will also need to evolve to support these changes.

The GEF portfolio is currently characterized by a low to moderate risk profile. Most projects are rated as low risk and have delivered satisfactory outcomes (figure 6.1). Data from 366 closed projects show that the largest share is clustered around low risk with satisfactory results. Projects rated as high risk with at least marginally satisfactory outcomes represent a smaller portion. No clear shift toward a higher risk profile has been observed across GEF replenishment periods based on closed projects to date.

Although high-risk projects make up a smaller share of the portfolio, the GEF seeks to enable greater calculated risk-taking. The cultural shift required to support this has yet to occur. GEF Agencies display different attitudes toward risk and use varying criteria for risk measurement and management. In many cases,





S O U R C E : Ongoing and completed projects with available risk and outcome ratings from GEF Portal, United Nations Development Programme, World Bank, and the Annual Performance Report 2023 data set.

NOTE: Six-point scale for outcome ratings: 1 = highly unsatisfactory; 2 = unsatisfactory; 3 = moderately unsatisfactory; 4 = moderately satisfactory; 5 = satisfactory; 6 = highly satisfactory. n = 366. their self-described risk culture does not match the data. This inconsistency points to the need for a more harmonized understanding of risk across the GEF partnership to effectively implement the new risk appetite framework. The risk document emphasizes that further consultation and clarification are needed to support this effort (GEF 2024a).

Across Agencies, different risk profiles can result in similar project outcomes. Some Agencies are better equipped to manage risk due to internal capacities or institutional structures, while others face more constraints (figure 6.2). Agencies tend to adhere to their own standards, which are influenced by their unique incentive structures. To shift the GEF's overall risk profile, collaboration with Agencies is essential to build both capacity and willingness for higher-risk engagement.

High-risk projects typically exhibit greater variance in outcomes. On average, the correlation between risk and outcomes in closed projects is negative. High-risk projects display a wider range of outcomes compared to low-risk ones, and GEF data indicate a roughly 10 percent lower average outcome rating for high-risk projects. Nevertheless, there are cases where high-risk projects have yielded significant benefits.



Mean risk rating at entry



S O U R C E : Ongoing and completed projects with available risk and outcome ratings from GEF Portal, United Nations Development Programme, World Bank, and the Annual Performance Report 2023 data set. *n* = 366.

NOTE: The high-risk dimension was excluded to enhance readability.

For example, in the climate change focal area, three high-risk renewable energy projects focused on solar energy and policies to reduce fossil fuel subsidies achieved the highest possible outcome ratings. These UNDP-led projects-Renewable Energy for Rural Livelihood in Nepal (GEF ID 4345), Promoting Access to Clean Energy Services in St. Vincent and the Grenadines (GEF ID 5297), and Renewable Energy for the City of Marrackech's Bus Rapid Transit System (GEF ID 9567)-addressed regulatory barriers and promoted energy efficiency, demonstrating the potential rewards of targeted high-risk investments. Similarly, a high-risk protected area project in Uruguay-Strengthening the Effectiveness of the National Protected Area System by Including a Landscape Approach to Management (GEF ID 4841, UNDP)shows the benefits of long-term GEF engagement. Remote sensing of the Esteros de Farrapos National Park reveals minimal forest loss within park boundaries over time, confirming the park's effectiveness as a buffer against deforestation.

Institutional and state capacity strongly influence a project's risk profile. Weak technical or financial capacity, limited government ownership, and low in-country capacity are major concerns. Conversely, countries with stronger institutions and rule of law tend to manage and implement projects more successfully, resulting in better outcomes.

Adaptive risk management also plays a role in influencing results. Among 315 projects that reported more than one risk rating over their implementation period, 29 percent showed a decrease in risk rating, suggesting successful mitigation or adjustment during implementation. In contrast, 13 percent of projects saw risk ratings increase, possibly due to unforeseen challenges or underestimation at design. Projects that experienced a reduction in risk ratings generally achieved better outcomes, supporting the value of adaptive management. In summary, while most GEF projects continue to operate within a low to moderate risk profile, there is increasing recognition of the need for calculated risk-taking to achieve ambitious environmental goals. Strong examples, such as solar energy and protected area projects, highlight the potential benefits of this approach. Moving toward a higher-risk, higher-reward model will require clearer internal guidance, enhanced coordination with Agencies, and a shared understanding of risk within the GEF partnership.

GEF support to advanced technologies²

The past decade has seen rapid technological advancements that can enable environmental sustainability and transformational change. The GEF has a long-standing commitment to innovation, including novel technologies. More recently, the GEF-8 Strategic Positioning Framework emphasized innovation as a lever for transformational change (GEF Secretariat 2022b), supported by the establishment of an Innovation Window and reinforced by the 2024 risk appetite statement that classifies innovation-related risk as high (GEF 2024a).

The ongoing Evaluation of Innovation and Application of Technologies in the GEF assesses the GEF partnership's efforts and readiness to leverage technological innovations for the environment, aiming to identify lessons for GEF-9. Within the GEF-6, GEF-7, and GEF-8 portfolios, about 120 technologies were identified and organized into three categories: narrow innovative technologies such as artificial intelligence (Al) and green hydrogen; broader innovative technologies such as digital platforms and remote sensing; and other technologies, representing broad and long-standing technologies.

Applying this taxonomy to a portfolio scan of 2,016 projects, the evaluation found that a broad variety of

²Findings are based on preliminary evidence.

technologies were supported, with 63 percent of projects having some technology elements. However, when considering broader and narrow innovative technologies, the percentages decrease to 31 percent and 10 percent, respectively. The most supported broader innovative technologies were digital platforms, remote sensing, and nature-based solutions, while the most common narrow innovations were data modeling, mobile applications, and sensors.

Innovative technologies increased from GEF-6 to GEF-7 by 40 percent for narrow technologies and 55 percent for broader ones. Some technologies such as AI, green hydrogen, and smart meters grew from no projects in GEF-6 to three projects each in GEF-7.

Stakeholder interviews indicate that the overall recent focus on innovation in GEF strategies and approaches has supported the growth of innovative technologies in GEF projects. The Challenge Program for Adaptation Innovation, supported since GEF-7, and the GEF Innovation Window launched in 2024 highlight the partnership's increased focus on innovation. The introduction of integrated programming is also seen as an opportunity for a more proactive rollout of innovative technologies. For example, under Sustainable Cities programming, 30 percent of projects supported broader innovative technologies, such as digital platforms, remote sensing, data modeling, nature-based solutions, and smart grids.

Several potentially disruptive technologies identified by the GEF Scientific and Technical Advisory Panel and in the literature have limited or no presence in GEF projects to date. For instance, blockchain is only present in four projects, while nanotechnology and cellular agriculture were not identified in any project. These technologies offer significant environmental benefits. Blockchain can enhance supply chain transparency and carbon credit verification; nanotechnology shows promise for water treatment and pollution remediation; and cellular agriculture could dramatically reduce the environmental footprint of food production. The absence or limited presence of these novel technologies is not consistent with the market developments and expertise available in several GEF Agencies and other multilateral organizations. For example, UNDP has established a Blockchain Academy for United Nations (UN) personnel in over 170 countries (UNDP 2024); and the Food and Agriculture Organization of the United Nations (FAO) has developed expertise in cell-based protein, among other emerging technologies.3 The global market for nanotechnology is projected to grow from \$68.0 billion in 2023 to \$183.7 billion by 2028, with applications relevant to GEF programs and focal areas already being commercialized in African countries.⁴ Interviews indicate challenges in supporting these technologies because of the demand-driven nature of the GEF business model, lack of strategic approach, and funding and capacity constraints.

EFFECTIVENESS AND EFFICIENCY

Several GEF IEO evaluations have noted that technological innovations and transformational change are correlated. The Evaluation of GEF Support for Transformational Change (GEF IEO 2018a) provides evidence that the use of innovative technologies has been an enabling factor in driving transformational outcomes, particularly when integrated into broader systemic change processes. For example, in Uruguay, the GEF supported wind energy development at an early stage through technical assistance and policy support. This project helped reduce perceived investment risk and paved the way for Uruguay's large-scale transition to renewables. By 2016, wind accounted for over 30 percent of the country's electricity generation, demonstrating how GEF interventions with a strong technological core can lead to sectorwide

³ Source: FAO, <u>Cell-based food and precision fermentation</u> web page.

⁴See, for example, BCC Research (2023); Campa et al. (2024); Khatoon and Velidandi (2025); Muhammad (2022); and UNECA (2020).

transformation. In projects across the Sustainable Cities portfolio, technologies such as digital platforms and geospatial mapping tools are being used to promote integrated urban planning, allowing city stakeholders to manage trade-offs between infrastructure, climate resilience, and biodiversity. These examples from the GEF IEO's evaluations demonstrate that technological innovation—when aligned with systemic levers such as policy, finance, and behavior—has played a significant role in achieving the conditions necessary for transformational change.

ROLE OF THE PRIVATE SECTOR⁵

Private sector involvement is notably higher in projects with technological components (67 percent) compared to those without (30 percent). As confirmed by stakeholder interviews, the use of technology in projects is largely facilitated by the private sector, which leads in its deployment and rollout. Several stakeholders noted that private sector partnerships have predominantly been established at the project rather than the strategic level. Interviews revealed opportunities to complement local project-level engagements more systematically, through global program-level mechanisms that could serve as incubators and encourage broader technology adoption.

RISKS

The risk ratings analysis shows that projects with technological components do not have significantly higher overall risk ratings or innovation-related risk ratings. The average risks remain low, and very few projects carry substantial or high risks in any technology category. Stakeholder interviews indicate that additional measures—better incentives, stronger private sector partnerships—are needed to support the uptake of higher-risk innovative technologies.

ENABLERS AND BARRIERS

Stakeholder interviews identified several key enablers that support advanced technologies within the GEF. These include national policies that foster a favorable environment for the adoption of new technologies, as well as the capacity and willingness of certain GEF Agencies to promote and integrate innovation into their operations. Recent initiatives by the GEF Secretariat-such as its risk appetite document, the LDCF/SCCF Challenge Program for Adaptation, Innovation Window, and the emphasis on integrated programminghave the potential to encourage innovation across the portfolio. In addition, the Scientific and Technical Advisory Panel continues to provide guidance on promising technological approaches, reinforcing the GEF's efforts to advance innovation in support of global environmental goals.

Barriers to effectively supporting technological innovations in the GEF include the absence of a comprehensive strategic approach to quide their identification, deployment, and scaling. Country-level capacity constraints also limit the ability to adopt and sustain technological innovation, compounded by variation in capacities across GEF Agencies. The GEF's demand-driven model means the Secretariat primarily responds to proposals initiated by countries and Agencies, which can constrain proactive efforts to promote innovation. Strategic partnerships with the private sector-critical for incubating, transfer, and scaling promising technologies-remain limited, and current collaboration tends to occur at the project level rather than through coordinated, systemwide approaches. Additionally, there has been limited proactive horizon scanning of emerging technologies with high environmental potential. Budget limitations for piloting new technologies, along with varying levels of readiness and risk appetite among countries, Agencies, and partners, further restrict the GEF's ability to support bold, technology-driven solutions at scale.

⁵Some of these findings are based on preliminary evidence, as the evaluation is ongoing.

6.2 Financing, cofinancing, and efficiency

Donor financing

The GEF Trust Fund has been primarily supported by sovereign donors. Recent patterns point to a gradually contracting and increasingly concentrated donor base, with limited diversification in recent replenishments. Since GEF-5, six countries—Germany, Japan, the United States, France, Sweden, and the United Kingdom have ranked among the top five contributors to the GEF Trust Fund at least once. Germany and Japan have consistently remained in the top three contributors across all replenishments from GEF-5 to GEF-8, while the United States has done so in all but GEF-7. Sweden has steadily increased its share, moving from the seventh-largest contributor in GEF-5 to a more prominent position in subsequent cycles.

Overall, the GEF Trust Fund relies heavily on a stable core of sovereign donors. Of the 34 countries that have contributed at least once since GEF-5, 28 have participated in all four replenishments. At the same time, the total number of donors declined from 33 in GEF-5 to 29 in GEF-8, with five countries not returning for the latest cycle. Côte d'Ivoire is the only country to have joined as a new donor in recent years, contributing in GEF-7 and GEF-8. The number of recipient donors-countries that contribute while also receiving GEF fundinghas declined from eight in GEF-5 to six in GEF-8, and their share of total contributions has dropped from 3.7 percent to 2.7 percent. Brazil, China, India, Mexico, Nigeria, Pakistan, and South Africa have contributed at least once as recipient donors since GEF-5, although some have since ceased contributions. Meanwhile, Greece and Portugal last contributed in GEF-5 and have not returned since. No countries from the Middle East and North Africa have contributed to the GEF Trust Fund, although several-such as Qatar and the United Arab Emirates-have pledged

resources to other climate funds such as the Green Climate Fund (GCF) and the Adaptation Fund. Similarly, some GEF participant countries, including Estonia, Hungary, Mongolia, and Slovakia, have contributed to other climate mechanisms but not to the GEF since GEF-5.

Cofinancing

In addition to contributions from sovereign donors, the GEF seeks cofinancing as a means to increase its environmental impact, expand project activities, and strengthen partnerships. The Evaluation of Cofinancing in the GEF examined the effectiveness of the GEF's cofinancing strategy, comparing it with that of other organizations and assessing how the GEF mobilizes cofinancing, as well as how its executing partners manage it. It also explored the factors influencing funding commitments and their realization.

The GEF sets ambitious cofinancing targets, with an overall portfolio target of \$7 for each dollar of GEF funding (7:1). For investment cofinancing in upper-middle-income or high-income countries that are not SIDS, the target is 5:1. In comparison, the International Fund for Agricultural Development (IFAD) has a target of 1.2:1, while Gavi's cofinancing requirements range from 0.25:1 to a maximum of 9:1. Notably, the Global Fund, the GCF, ADB, and the World Bank do not specify cofinancing targets.

The GEF's approach to cofinancing is flexible, allowing for a broader range of contributions than institutions such as ADB and the World Bank. Unlike several other organizations, the GEF accepts in-kind contributions and considers country context when setting cofinancing expectations. Additionally, it provides exceptions in emergencies or unforeseen circumstances, ensuring adaptability in its financing model.

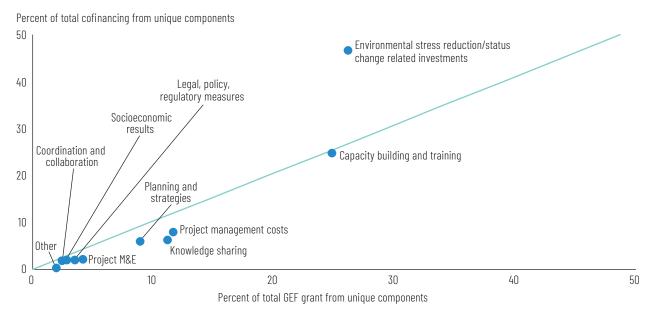
The GEF's flexible approach to cofinancing enables high fund mobilization but raises concerns about the credibility of reported cofinancing. Its broad definition allows for high reported cofinancing ratios, although not all contributions are equally essential. To improve cofinancing quality, considerations such as the time value of money, likelihood of realization, alignment with GEF-funded activities, and whether the cofinancing is critical to achieving project objectives are important.

GEF Agencies use different strategies to raise cofinancing. Multilateral development banks mostly use internal resources, adjusting their cofinancing strategies based on the required level of concessionality and whether the project involves a loan investment or an advisory product. UN organizations and international nongovernmental organizations, which often have limited internal resources, take a proactive approach to securing cofinancing, relying more on in-kind and parallel cofinancing sources.

The level of cofinancing commitments for a project is influenced by its design components. Project components that directly reduce environmental stress or improve environmental conditions typically attract higher levels of cofinancing (figure 6.3). These include infrastructure development, technology demonstration, and the procurement of efficient equipment and vehicles. In contrast, activities such as capacity building, legal and policy development, and project monitoring generally receive lower levels of cofinancing.

From GEF-6 through GEF-7, GEF projects secured cofinancing commitments averaging \$7.50 for every dollar across all GEF-managed funds. Between GEF-6 and GEF-7, projects attracted an average of \$7.70 in cofinancing for every dollar of GEF funding. However, only half of the projects fully met their cofinancing targets, with lower realization in LDCs and SIDS. Projects funded through the GEF Trust Fund generally raise higher levels of cofinancing compared to those funded through the Capacity-Building Initiative for Transparency, the LDCF, and the SCCF. Projects in the international waters and climate change mitigation focal areas, as well as national and regional projects, tend to attract higher levels of cofinancing commitments. Conversely, projects focused on biodiversity conservation,

FIGURE 6.3 Project components by share in GEF financing/cofinancing for completed projects



S O U R C E : GEF Portal; all 118 completed projects from GEF-6 (114 projects) and GEF-7 (4 projects), for which terminal evaluations were available on the GEF Portal as of December 31, 2023.

those with a global scope, and those implemented in least developed countries (LDCs) and SIDS generate lower levels of cofinancing.

Thirty-four percent of cofinancing commitments (number, not total amount) in project proposals are not realized, and GEF Agencies fill this gap by securing new sources of cofinancing. The shortfall is most pronounced among loans-55 percent of which go unrealized-followed by 32 percent of grants and 34 percent of in-kind contributions. Loan realization is especially vulnerable to shifts in national priorities and delays in project execution, frequently resulting in reductions or cancellations. Projects implemented by multilateral development banks face particular challenges due to their reliance on loan financing, while nongovernmental organizations fulfill less than half of their cofinancing commitments. Among the cofinancing contributions realized by project completion, 40 percent come from new sources. UN entities and international nongovernmental organizations actively seek alternative cofinancing during implementation, often in response to midterm review findings, though

options remain limited for projects in SIDS because of the smaller pool of potential contributors.

On average, GEF projects achieve their expected level of cofinancing, though realization rates vary by country context and Agency type. A review of project documents for 118 completed GEF-6 and GEF-7 projects found that cofinancing realization at completion averaged 102 percent of the committed amount. Realization tends to be lower in LDCs and SIDS, while projects in upper-middle- and high-income countries (excluding SIDS) achieve higher realization for projects implemented by multilateral development banks is lower compared to those implemented by UN and other entities, with underreporting cited as a contributing factor.

Full realization of cofinancing commitments shows a positive correlation with both outcome and sustainability ratings. When projects fully realize expected cofinancing, the outcome rating increases by 0.10 points on a binary scale and 0.30 points on a six-point scale. Similarly,

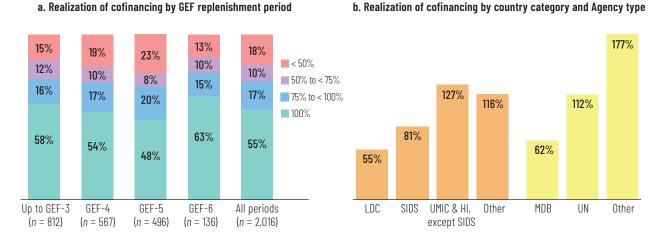


FIGURE 6.4 Realization of cofinancing by GEF replenishment period, country category, and Agency type

SOURCE: GEF Portal.

N O T E : LDC = least developed country; SIDS = small island developing state; UMIC = upper-middle-income country; HI = high-income country; MDB = multilateral development bank; UN = United Nations. Data by replenishment period are for all projects for which cofinancing realization data were received at project completion. Data for country category and Agency type are for GEF-6 and GEF-7 completed projects only; *n* = 118. the likelihood of sustainability is rated 0.23 points higher on a binary scale and 0.33 points higher on a four-point scale for projects with full cofinancing realization. Qualitative analysis indicates support for a positive causal relationship between cofinancing realization and outcome achievements.

Proportionality in project management costs between cofinancing and GEF financing is a recurring issue in GEF Secretariat feedback to Agencies, often resulting in extensive exchanges. The GEF's 2010 Rules and Guidelines for Agency Fees and Project Management Costs stipulate proportionality in these costs (GEF 2010). However, with in-kind cofinancing present in 84 percent of GEF projects and parallel cofinancing frequently used, Agencies struggle to meet proportionality requirements. This challenge arises because much of the cofinancing-both in-kind and parallel-is not managed by the project's management unit, making it difficult to allocate a proportionate share of project management costs across the full cofinancing amount. Consequently, reviewers identify discrepancies and gaps related to proportionality in 60 percent of proposals.

Tracking and reporting of cofinancing commitments have improved but challenges remain in verifying the realization of these commitments. Tracking and reporting of cofinancing commitments have improved as a result of updated policies and the adoption of the GEF Portal, which offers real-time aggregated data. However, verifying the actual realization of cofinancing remains challenging. Persistent issues include incomplete documentation, difficulty tracking in-kind contributions, and limited information in midterm reviews and terminal evaluations. While the GEF Secretariat emphasizes compliance during project preparation, it relies largely on Agency-reported data, with minimal follow-up to confirm accuracy or completeness.

Efficiency in resource use

ADMINISTRATIVE EFFICIENCY

The GEF ranks as the most efficient among the vertical climate funds in terms of administrative costs/expenditure ratios. Administrative costs accounted for between 1 and 18 percent of total expenditures across various funds. The LDCF had the lowest administrative cost share at 1 percent, while the GCF recorded the highest at 18 percent. With an administrative cost-to-expenditure ratio of 3.7 percent, the GEF maintained a relatively low overhead compared to several other funds, highlighting its operational efficiency. The GEF's disbursement-to-approval ratio is 76 percent compared to 31 percent for the GCF and lower ratios for other vertical climate funds (G20 SFWG 2024). Agency fees for the GEF are about 9 percent, in line with other climate funds.

OPERATIONAL EFFICIENCY

Assessing the efficiency of the GEF activity cycle is crucial for understanding how effectively and promptly the GEF partnership translates replenishment resources into tangible environmental results. Delays in the activity cycle can hinder the timely achievement of results and reduce the overall effectiveness of interventions. Recognizing this, the GEF Council, the GEF Secretariat, and other partners have placed increased emphasis on improving cycle efficiency.

Over the past four years, notable operational efficiency gains have been observed in some stages of the activity cycle, with challenges in meeting other set targets. The GEF has sustained and, in some areas, improved its activity cycle efficiency in GEF-8 compared to previous replenishment periods. Project identification form (PIF) submissions for stand-alone full-size projects continued to receive timely approvals, maintaining the efficiency gains first observed in GEF-7—some of which were initially enabled by pandemic-related shifts to virtual workflows. The time from PIF approval to CEO endorsement also improved, with the 2021-22 cohort reaching endorsement in a median of 19 months, compared to 23 and 22 months for the 2019-21 and 2015-18 cohorts, respectively. However, nearly two-thirds of recent PIFs still exceeded the 18-month benchmark. In contrast, the transition from CEO endorsement to first disbursement has slowed, with only 34 percent of projects endorsed in 2021-22 disbursing funds within a year-down from two-thirds in earlier cohorts, partly because of pandemic-related delays. In terms of implementation, medium-size projects that began between 2014 and 2019 were completed significantly faster than those initiated in 2010-13; full-size projects maintained consistent timelines across both periods.

Projects approved under programmatic approaches generally take an equivalent amount of time in preparation and to achieve first disbursement compared to stand-alone projects. Projects approved under programmatic approaches tend to take longer to reach implementation completion. Medium-size projects typically have shorter preparation and implementation durations than full-size projects (table 6.1).

Multiple financing windows add complexity for countries and Agencies. The GEF has five competitive windows using GEF Trust Fund resources: the Blended Finance Program, the Inclusive GEF Assembly Challenge Program, the Innovation Window, the SGP CSO Challenge Program, and the System for Transparent Allocation of Resources (STAR) Competitive Window for Policy Coherence. In addition, the Global Biodiversity Framework Fund represents a new funding source with its own selection process; the Gustavo Fonseca Youth Conservation Leadership Program also involves a selection process in some of its program components. The LDCF and the SCCF also have a competitive window-the Challenge Program for Adaptation Innovation. CSOs and community-based organizations also now have multiple entry points to access GEF

resources, including the SGP through FAO and Conservation International (in addition to UNDP); the SGP CSO Challenge Program cited above; the SGP Microfinance Initiative, which provides support through microfinance institutions; and the Inclusive Conservation Initiative, launched in GEF-7. These various windows have their own processing timelines and procedures, adding to complexity for countries as well as Agencies.

6.3 Institutional framework

Policy coherence⁶

Policy coherence, as defined by the Organisation for Economic Co-operation and Development and set out in GEF documents, refers to "the systematic promotion of mutually reinforcing policy actions across government departments and agencies creating synergies towards achieving the agreed objectives" (OECD 2001, 90). The GEF-8 Programming Directions explicitly identify "governance and policies" as one of four levers of system transformation. In October 2023, the GEF Council approved a new strategic roadmap for the GEF to enhance policy coherence through projects, programs, and corporate activities. A whole-of-government framework is emphasized to integrate policy coherence into GEF-8 programming at the design stage. The roadmap's implementation in 2024 includes, among other activities, the rollout of the competitive window for the top five recipient countries in June and a multistakeholder workshop on Target 18 of the Global Biodiversity Framework in October. This evaluation assesses the GEF's past efforts in supporting policy coherence through projects and the initial efforts to enhance it using broader approaches under the new explicit focus in GEF-8.

⁶Findings are based on preliminary evidence.

	Medium-size projects			Full-size projects		
Cohort	Program	Stand-alone	Total	Program	Stand-alone	Total
PIF submission to PIF approval, by GEF replenishment period						
GEF-8 PIF submission	_	_	_	_	2	2
GEF-7 PIF submission	_	_	_	_	2	2
GEF-6 PIF submission	_	_	_	_	9	9
GEF-5 PIF submission	_	_	_	_	5	5
PIF approval to CEO endorsement/approval, by period of PIF approval						
PIF approval 2021–22	_	12	12	17	19	19
PIF approval 2019–20	_	16	16	23	24	23
PIF approval 2015–18	_	14	14	22	22	22
PIF approval 2011–14	_	16	16	22	22	22
CEO endorsement/approval to project start						
CEO endorsement/approval 2021–22	4	6	6	8	8.5	8
CEO endorsement/approval 2019–20	_	4	4	3	5	5
CEO endorsement/approval 2015–18	_	4	4	5	5	5
CEO endorsement/approval 2011–14	5	4	4	4	4	4
	CEO endorse	ement/approval	to first disburse	ement		
CEO endorsement/approval 2021–22	12.5	10	10	14	19	17
CEO endorsement/approval 2019–20	_	6	7	10	9	9
CEO endorsement/approval 2015–18	-	8	8	7	10	10
CEO endorsement/approval 2011–14	7.5	6	6	9.5	9	9
Time taken from project start to completion						
Start year 2014–17	_	59	59	82	80	80
Start year 2010-13	71	66.5	68	81	77.5	78

TABLE 6.1 Efficiency of activity cycle: median time taken between steps in months

S O U R C E : GEF Portal through February 2025.

NOTE: -= not applicable/not analyzed because of small number of observations.

The GEF has historically supported policy coherence at the country level through focal area programming, particularly in areas such as biodiversity mainstreaming, sustainable forest management, and integrated water resource management. Land degradation projects, especially under the land degradation neutrality framework, have also promoted cross-sectoral alignment in line with the United Nations Convention to Combat Desertification mandate. Agriculture has been the most frequently

engaged nonenvironment sector, followed by the forestry and water use sectors. A review of projects shows that the GEF contributes to horizontal policy coherence in three main ways:

 Mainstreaming environmental objectives into sectoral policies—for example, integrating biodiversity guidelines into tourism permitting, as in the Conserving Biodiversity in Coastal Areas Threatened by Rapid Tourism and Physical Infrastructure Development (GEF ID 5088, UNDP) project

- Creating synergies between environmental and other sectoral goals—for example, aligning ministries on electric vehicle policy, as in the Enhancing Electric Vehicle Mobility and Integration in Fiji's Land Transport Sector (GEF ID 11078, UNDP) project
- Reducing policy conflicts and mandate overlaps for example, harmonizing agriculture, aquaculture, and fisheries policies, as in the Transforming Productivity in Palau's Food Systems Through Nature Positive Innovations (GEF ID 11258, IUCN) project.

Of these, mainstreaming has been the most common approach, while efforts to reduce policy conflicts have generally relied on coordination mechanisms and integrated planning, with greater emphasis on tackling harmful subsidies emerging only in GEF-8. Although many interventions aim for joint environmental and nonenvironmental benefits—such as reducing toxic chemicals to improve public health—explicit policy harmonization for mutual gains has been less frequent.

GEF support to national action plans required by the conventions has the potential to strengthen policy coherence across environmental focal areas and with nonenvironment sectors. Instruments such as national adaptation programs of action, national action plans to combat desertification, and national biodiversity strategies and action plans are typically developed through participatory, research-driven processes involving multiple sectors. These processes offer opportunities to review existing policies and facilitate multistakeholder dialogue, thereby promoting alignment and coherence. In parallel, the GEF also funds projects that aim to harmonize decision-making, implementation, monitoring, and reporting across Rio convention commitments. Examples of such projects include Strengthening Technical Capacities to Mainstream and Monitor Rio Convention Implementation through Policy Coordination (GEF ID 6973, UNDP),

Strengthening of Multisector and Decentralised Environmental Management and Coordination to Achieve the Objectives of the Rio Conventions in the Union of Comoros (GEF ID 9314, UNDP), and Integrating Rio Global Environmental Commitments into National Priorities and Needs through the Improvement of Information Management and Knowledge for Planning and Decision Making (GEF ID 9319, UNDP).

The design of integrated programs has evolved significantly, from identifying policy conflicts in GEF-6 to establishing institutional and financial mechanisms for policy coherence in GEF-8. For instance, the GEF-6 Sustainable Cities integrated approach pilot emphasized integrated planning but lacked enforcement mechanisms. In contrast, the GEF-8 iteration introduces multilevel governance structures that align municipal, regional, and national policies and link them to financing instruments such as green bonds and performance-based grants, which are contingent on institutional reforms.

GEF-8 integrated programs also reflect expanded engagement in the policy process and an enhanced focus on results. While earlier programs, such as those under GEF-6, often limited participation to local actors or sector-specific working groups, GEF-8 integrated programs engage a broader array of stakeholdersincluding indigenous peoples, the private sector, national agencies, and global platforms like the G7 and Rio conventions-through more structured mechanisms to co-design and implement coherent strategies. These changes in GEF-8 reflect the increasing application of whole-of-government and whole-of-society approaches. In addition, several GEF-8 integrated programs have introduced indicators that measure policy reform and institutional alignment. For example, the Congo Basin Integrated Program tracks changes to policies and legal frameworks that promote effective forest governance at both national and transboundary levels, rather than solely measuring increase in areas covered by integrated land use planning.

GEF support has contributed to varying degrees of policy and institutional reform across different sectors and countries. Figure 6.5 illustrates policy coherence outcomes at least three years postproject, including two cases of successful outcomes (a and b) and two cases of more limited progress (c and d).

GEF-funded projects are valued for supporting technical expertise and multistakeholder training that foster intersectoral capacity building, particularly in areas that governments are less likely to fund. Often acting as neutral facilitators among sectoral agencies of equal standing, GEF projects help build understanding of environmental concerns in nonenvironment sectors. However, many projects underestimate the time and complexity needed for legal and institutional reforms, often overlooking political dynamics such as competing priorities, unclear mandates, and unequal capacities across sectors. Case studies show mixed results: some, as in the Philippines (figure 6.5b), effectively built on existing coordination bodies or strong national priorities (figure 6.5a). Others, such as in Malawi and Uruguay (figure 6.5c and d, respectively), had more limited results due to lack of political will or capacities in nonenvironment sectors.

Emerging challenges include a lack of shared understanding among GEF partners about the concept and value of policy coherence. Despite surveys saying that the GEF is well positioned to promote policy coherence, this conceptual gap hinders progress. The GEF's influence with finance and planning ministries remains limited, although its Agencies have comparative advantages for supporting different stages of the policy cycle. For example, some Agencies are better positioned to engage decision-makers, while others are strategically placed to co-develop cross-sectoral policies with implementers and generate data on the economic benefits of more coherent policies.

a. Integrated water resource management	b. Illegal wildlife trade reduction
GEF support for integrated water resource management through two projects—Reducing Transboundary Degradation in the Kura- Aras Basin (GEF ID 1375, UNDP) and Advancing IWRM Across the Kura River Basin through Implementation of the Transboundary Agreed Actions and National Plans (GEF 6962, UNDP)—helped establish the State Water Resources Agency in Azerbaijan and a Water Law in Georgia, marking the first coordinated approach to water management in these countries. Both countries prioritized these reforms to align with European Union standards and mitigate droughts. The projects strengthened relationships and local expertise through multistakeholder capacity building.	Combating Environmental Organized Crime in the Philippines (GEF ID 9658, ADB) trained various environment, fisheries, law enforcement, and port agencies on wildlife law enforcement. It also helped pass a joint administrative order between the environment, agriculture, and local government ministries to clarify roles in wildlife trade. The project provided technical knowledge and broad consultations that normally received lower government funding priority.
c. Sustainable land management	d. Mercury life-cycle management
In Malawi, the Private Public Sector Partnership on Capacity Building for SLM [Sustainable Land Management] in the Shire River Basin (GEF ID 3376, UNDP) reviewed and developed new policies in forestry, charcoal, agriculture, and energy. Maize production subsidies and weak implementation of the country charcoal strategy have made SLM expensive for farmers to adopt, leading to more land and forest degradation.	In Uruguay, the Environmental Sound Life-Cycle Management of Mercury Containing Products and Their Wastes (GEF ID 4998, UNDP) project provided legal expertise to help pass a decree banning mercury-containing medical products. It supported both the ministries of environment and public health, providing mercury analysis equipment to the latter, which did not have the infrastructure or human resources to manage it.

FIGURE 6.5 Cases highlighting policy coherence outcomes at least three years after project completion

National contexts shape how policy coherence efforts unfold. While most countries have integrated development strategies and plans in place, implementation often remains siloed. Middle-income countries may have strong coordination mechanisms in some sectors but not in others. Sectoral agencies require additional expertise, funding, and time to engage meaningfully, yet many countries lack resources to develop such capacities. In addition, integrating finance, governance, legal reform, and global alignment can be highly demanding for implementers. Interventions need to be adjusted to existing capacities, respecting each country's institutional realities and priorities.

Institutional systems to strengthen engagement, results, knowledge, and learning

The Country Engagement Strategy (CES), introduced by the GEF in October 2022, marks a strategic advancement from the earlier Country Support Program (CSP). Its primary aim is to enable recipient countries to make well-informed, impactful decisions on the use of GEF resources, while ensuring sustainability and alignment with global environmental goals. By bringing together various country engagement initiatives under a unified framework, the CES seeks to enhance country ownership, improve alignment with GEF and national priorities, raise the GEF's visibility, strengthen policy coherence, and promote coordination with other environmental funding sources.

The CES is structured around four key components: upstream technical and national dialogues; ongoing CSP activities; the Knowledge Management and Learning (KM&L) Strategy; and a range of supplementary initiatives, including youth leadership programs, Council Member field visits, and support for international convention participation. A comprehensive evaluation of CES implementation through December 2024 is under way. The evaluation's findings suggest that the CES's principal value lies in its attempt to centralize and coordinate country engagement under a single strategic umbrella. While pre-GEF-8 activities were scattered across multiple programs, the CES now integrates CSP efforts with new proactive engagement tools and the KM&L Strategy. However, actual implementation of these new elements has been slower than anticipated, and their full potential has yet to be realized.

Progress on recommendations from the 2021 CSP evaluation has been partial. Although the CES represents a more structured approach to engagement, it lacks a defined theory of change or a full results framework, and monitoring and reporting systems are still under development. Until very recently, management of the program was decentralized and had staffing issues. Timing issues for national dialogues and postevent engagement also persist, limiting sustained stakeholder involvement (table 6.2).

Progress in implementing the new activities of the CES has been slower than expected at midpoint through GEF-8, and their full potential is still to be realized. Several new CES initiatives were awaiting implementation by October 2024. These include financial support to operational focal points, building execution capacity for national executing agencies and CSOs, and broader implementation of the KM&L Strategy. The staff have been hired to advance the KM&L Strategy, and progress has been initiatied in action areas outlined in the strategy. Other initiatives, like field visits and pre-Council meetings, remain underutilized because of low demand or scheduling issues.

Despite these challenges, 75 CES activities had been implemented by October 2024. These included 29 upstream technical and national dialogues, 21 workshops, 20 constituency meetings, 3 introduction seminars, 1 pre-Council meeting, and 1 Council member field visit. Additionally, 127 participants were supported through the Gustavo Fonseca Youth Conservation Leadership Program, and 39 individuals received support

Activity	Status	Comments
Upstream technical dialogues		No evidence found of implementation, although upstream support may have been delivered through other means
Operational focal point empowerment/financial support to operational focal points		Ancillary agreements in the process of being signed for Africa and Latin America and the Caribbean
Building execution capacity of stakeholders		Not started and model for implementation still unclear
KM&L Strategy		Staff has been hired and currently planning implementation
Gustavo Fonseca Youth Conservation Leadership Program		127 students supported through 8 ancillary agreements; more agreements being signed
Field Visit Program for Council members		One pilot visit conducted (June 2023), but no others have been organized
Support for country delegations and relevant stakeholders to attend convention conferences of the parties (COPs)		Starting in November 2023, 39 participants have been supported

TABLE 6.2 Progress in implementing new country engagement activities

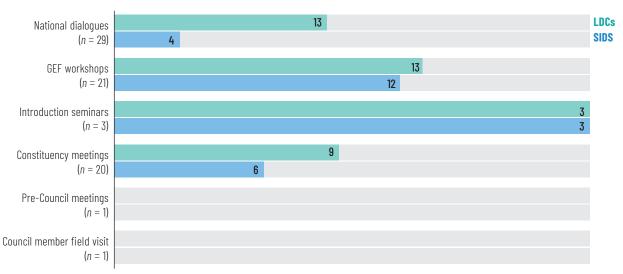
SOURCES: Project documents, interviews, and case studies.

N O T E : = no progress; = some progress; = substantial progress.

to attend conferences of the parties (COPs) under the relevant environmental conventions. Notably, the number of national dialogues (12 in the first year of GEF-8) was lower than in GEF-7, as the Secretariat prioritized the rollout of eight integrated program workshops between October 2022 and February 2023. The conduct of national dialogues is also demand driven by countries.

LDCs have benefited more pronouncedly than SIDS in CES activities (figure 6.6). Half of all CES activities involved LDC representatives, and 44 percent of national dialogues





SOURCE: Project documents, interviews.

were held in LDCs. In contrast, SIDS accounted for only 33 percent of CES activities and held just 14 percent of national dialogues. Geographically, Africa participated in the largest number of activities, while Central and Eastern Europe had the fewest.

The total CES budget for GEF-8 rose by 44 percent from the GEF-7 CSP level, totaling \$40.2 million. This included \$27 million for core CES activities and \$13.2 million for additional programs. However, the budget for legacy CSP activities declined by 14 percent. As of October 2024, only 40 percent of the CES budget had been committed or disbursed, with some activities fully funded and others not yet begun. Upstream dialogues and constituency meetings showed the highest budget utilization.

Survey data indicate mixed perceptions of timeliness. Fifty-six percent of respondents rated CES activities as timely to support GEF-8 programming. While integrated program rollout workshops were timely, national dialogues were less effectively leveraged as a result of timing and planning priorities. Consequently, 12 national dialogues were conducted during the first year of GEF-8 (7 in the first semester), against 22 for GEF-7.

When implemented, CES activities have contributed positively, if modestly, to national portfolio development, alignment with GEF-8 priorities, and stakeholder empowerment. Workshops and dialogues have helped disseminate information, solicit input, and improve understanding of how national projects align with GEF goals. Some national dialogues occurred too late to inform programming effectively, but many facilitated consultations and project prioritization.

The CES has also fostered stakeholder empowerment by increasing knowledge sharing, encouraging broader participation, and reinforcing alignment with national development strategies. However, consistent and broader stakeholder engagement, particularly beyond government actors, remains a challenge. CES contributions to enhancing GEF visibility, policy coherence, and coordination with other environmental funds have been more limited. While some events introduced the new GEF Communication and Visibility Policy, overall recognition remains low. Policy coherence was occasionally emphasized, especially during constituency meetings, but more structured support and targeted studies are needed to address this issue effectively. Coordination with other funds has been limited mainly to two pilot events in Rwanda and Uganda, and stakeholders noted that more established coordination mechanisms exist outside the CES.

Inclusivity has been a strong point of CES activities. Events have attracted diverse participants, particularly through national dialogues and GEF workshops. However, the depth of stakeholder engagement has varied, with some participants continuing their involvement postevent and others not.

To improve its overall impact, the CES would benefit from accelerating implementation, establishing robust monitoring and accountability systems, and better integrating its activities. Enhancing the capacity of local stakeholders, especially in LDCs and SIDS, would better assist these countries. These adjustments will allow the CES to more effectively support country-led, strategic environmental programming within the GEF framework.

Results-based management

The GEF's results-based management system is designed to capture the results of its activities, enhance management effectiveness, and strengthen accountability. It seeks to achieve these by setting realistic targets, monitoring progress, incorporating lessons learned into decision-making, and reporting on performance. An evaluation assessed the performance of results-based management system components during GEF-8, including the GEF Portal, the results measurement framework—particularly indicators for measuring activity cycle efficiency—self-evaluations, and the reporting of project results and process indicators. It also reviewed monitoring and evaluation (M&E) in fragile, conflict-affected, and violent (FCV) contexts.

GEF Portal enhancements improve efficiency, but usability challenges remain. During GEF-8, the GEF Portal underwent significant upgrades to align with new programming directions, automate business processes such as project reviews and endorsements, and accommodate the requirements of the Global Biodiversity Framework Fund. These enhancements, developed in collaboration with the World Bank Information and Technology Solutions (ITS) team, have improved operational efficiency and data quality through better validation features. New functionalities, including Agency and country factsheets and geolocation tools, have also been introduced. However, persistent resource constraints have delayed other user-requested improvements, and vague error messages continue to hamper troubleshooting efforts, indicating room for further refinement.

The GEF Secretariat has taken several steps to strengthen self-evaluation for learning and adaptive management. In its 2022 Guidelines on the Implementation of the GEF-8 Results Measurement Framework, the Secretariat established requirements for midterm reviews and set a four-year threshold post-CEO endorsement to monitor timely submissions. A good practices report outline has been circulated to Agencies, and findings from midterm reviews are synthesized in the monitoring report for corporate-level analysis. To facilitate learning, the Secretariat developed templates to document lessons learned-compiling over 1,700 by March 2023-and conducts regular bilateral exchanges with Agencies. The monitoring report also prioritizes qualitative insights, highlighting adaptive management, good practices, and risk assessments to guide operational improvements.

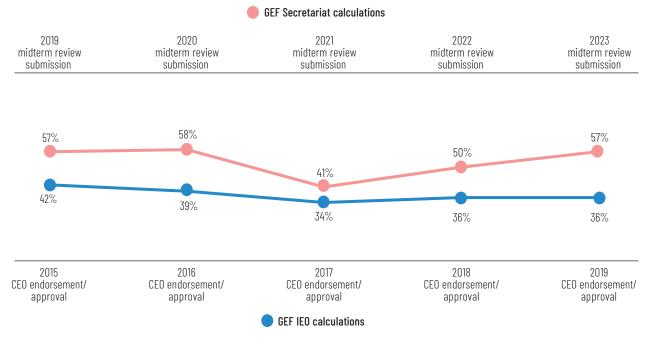
During GEF-8, the results measurement framework was improved for clearer and more consistent core indicator

measurement, though challenges remain. The terminology for some core indicators was refined to ensure greater clarity and accuracy, and the GEF-8 guidance for results measurement became more detailed. Additionally, the GEF adopted a zero-baseline approach for all core indicators, except those using ratings, to focus on measuring net effects. Despite these improvements, the GEF results measurement framework has gaps. The framework does not effectively capture transformative and long-term impacts. Clear guidance on tracking non-place-specific ecosystem services is lacking, and co-benefits from ecosystem-based projects are often underreported.

There is improved consistency in measuring and reporting indicators specified in project results frameworks, although reporting rates vary across Agencies and project types. While most GEF projects include M&E plans with objective and outcome indicators, reporting is higher among the World Bank, UNDP, and Conservation International and generally stronger for full-size projects. About 90 percent of indicators are now reported using the specified units, and core indicators have a 92 percent reporting rate. However, with an expectation close to 100 percent, gaps remain, underscoring the need for further improvements in monitoring and reporting consistency.

The GEF has established appropriate indicators to track operational efficiency, but its measurement approach may obscure trends. Currently, efficiency indicators—such as timely first disbursement or midterm review submission—are measured by the fiscal year of reporting rather than project endorsement or approval. This can distort performance trends and complicate year-over-year comparisons. Moreover, tracking midterm review submission by the fiscal year in which a midterm review is submitted can overstate compliance by excluding projects that never submit a review. The evaluation found that measuring compliance based on endorsement or approval year would better

FIGURE 6.7 Midterm review submissions within four years of CEO endorsement: Comparison of submission rates by submission year versus CEO endorsement year cohorts



SOURCES: GEF Portal and GEF Secretariat 2024.

capture delays and reveal clearer performance trends (figure 6.7).

The availability of midterm reviews has improved with enhanced tracking by the GEF Secretariat; however, variations persist in their preparation and timing across Agencies. The evaluation found that actions taken by the GEF Secretariat have significantly improved the submission of

TABLE	6.3	Availability of midterm reviews for			
projects completed in 2020					

		% for which midterm reviews were available		
Project type	No. of projects	As of December 2020	As of June 2024	
Full size	95	43	74	
Medium size	55	16	27	
Total	150	33	57	

S O U R C E S : GEF Portal and GEF IEO 2023, 2025 forthcoming.

midterm reviews for full-size projects, although timely completion remains a challenge. By 2024, retroactive submissions by Agencies substantially increased the availability of midterm reviews (table 6.3). The evaluation also found that for the more recent cohorts of GEF projects for which midterm reviews may be expected—those CEO endorsed from FY2016 to FY2019—midterm reviews were submitted within four years of endorsement for 38 to 51 percent of projects. Compared to other GEF Agencies, midterm review submissions by the World Bank and FAO tend to be timely.

The timeliness and availability of terminal evaluations vary across projects and Agencies. Terminal evaluations for GEF projects approved from GEF-5 onward and completed by December 31, 2023, are available for 89 percent of completed projects where they are expected, but only 70 percent were submitted within one year of project completion. Full-size projects show better submission rates and timeliness (92 percent submitted, 74 percent on time) compared to medium-size projects (84 percent submitted, 64 percent on time). Global and regional projects, as well as those in Africa and LDCs, exhibit lower rates of timely submission than national projects. Substantial variation exists across Agencies: Conservation International, the Inter-American Development Bank, IUCN, UNDP, and FAO have high submission rates; while ADB, the African Development, the United Nations Environment Programme (UNEP), and IFAD lag. Timeliness is notably higher for UNDP, FAO, and Conservation International; and lower for ADB, IFAD, and UNEP. Joint projects involving multiple Agencies also face greater delays. Delayed submissions correlate with weaker M&E implementation but show no link with other performance metrics such as outcomes or sustainability, indicating that operational challenges rather than reluctance to report may underlie the delays.

Candor in self-evaluation remains an issue within the GEF partnership. While 73 percent of terminal evaluations are rated satisfactory or higher based on well-substantiated performance data, the reliability of earlier self-assessments-such as project implementation reports (PIRs) and midterm reviews-raises concerns. A comparison of development objectives ratings in final PIRs with independently validated outcome ratings in terminal evaluations reveals a notable discrepancy: 96 percent of projects received satisfactory ratings in PIRs, but only 87 percent maintained this rating after independent validation. In 10 percent of cases, PIR ratings were inflated by two grades relative to terminal evaluations. These discrepancies suggest ongoing limitations in reporting objectivity, echoing findings from a previous evaluation of GEF self-evaluation systems, which identified a lack of institutional incentives for candor (GEF IEO 2023). However, some Agencies are beginning to foster a more transparent evaluation culture.

Results frameworks for FCV contexts need to be adjusted to be more relevant. Projects in FCV contexts often operate under conditions that differ from more stable environments, yet these distinctions are not fully reflected in the current GEF results framework. Although FCV countries represent 26 percent of GEF recipients and account for 20 percent of GEF-8 STAR allocations, the framework offers limited guidance on how to address FCV-specific challenges. While the Policy on Environmental and Social Safeguards includes basic requirements related to conflict management, it does not provide detailed direction for conflict-sensitive monitoring. As a result, many projects in FCV areas do not include objectives or indicators tailored to sociopolitical dimensions such as community collaboration or perceptions of security. To support more context-appropriate project design and reporting, the framework could be enhanced by integrating indicators related to social cohesion, adaptive practices, and inclusive consultation processes. Such adjustments would help improve the relevance and utility of M&E in FCV settings.

Knowledge management and learning⁷

The GEF has long aspired to be not only a funder of environmental projects, but also a learning partnership committed to generating and applying knowledge across its operations. This ambition has grown alongside the recognition that environmental challenges are increasingly complex and dynamic, requiring organizations like the GEF to systematically learn from both successes and failures. A recent evaluation of underperforming projects and an ongoing assessment of the GEF's 2023 KM&L Strategy implementation provide complementary insights into the GEF's evolving knowledge management system, highlighting achievements, persistent gaps, and the road ahead.

⁷Findings are based on preliminary evidence.

LEARNING FROM FAILURE: LESSONS FROM UNDERPERFORMING PROJECTS

A recent evaluation on learning from challenges in GEF projects analyzed the experience of less successful GEF projects—around 20 percent of the total portfolio—to extract lessons on risk management, adaptive strategies, and the role of learning in overcoming implementation barriers. The evaluation reviewed 202 underperforming projects, primarily focusing on 141 completed ones.

A key finding from this analysis was the importance of robust risk assessment and mitigation at the design stage. Underperforming projects generally face higher risk levels compared to the overall GEF portfolio. While 80 percent of closed underperforming projects recognized external risks within their control at design—such as limited government capacity and policy gaps—these assessments and mitigation measures were often not comprehensive. As a result, nearly half still faced legal and policy barriers by closure, and over a third encountered challenges from low government capacity. Risks perceived as beyond direct project control, including political instability and insufficient government ownership, were frequently overlooked during design, resulting in implementation challenges.

Adaptive management played a key role in improving project performance. Among closed underperforming projects, 27 percent improved outcomes by learning from challenges and adapting during implementation. These improved projects implemented more comprehensive restructuring by analyzing and addressing root causes across all challenges. On average, improved projects mitigated more risks and applied more adaptive measures than unimproved ones. While unimproved projects also employed adaptive management, it was usually too late or narrowly focused rather than addressing the full range of challenges.

A compelling example of successful turnaround comes from the Improving the Conservation of

Biodiversity in Atlantic Forest of Eastern Paraguay (GEF ID 2690, World Bank) project. Initially underperforming because of competing land use priorities and weak government support and capacity, the project underwent a major restructuring following its midterm review. The pivot toward engaging indigenous communities, which owned large land areas and had a vested interest in conservation, coupled with transferring execution leadership to the environmentally active Itaipú hydroelectric company, turned the project into a success. This transformation was rooted in context-sensitive adjustments and strategic stakeholder engagement, showcasing the power of adaptive learning.

The data also show that even within underperforming projects, some challenges are technical and more easily addressed through established solutions, while others are complex adaptive challenges, requiring trust building, negotiation, and deep contextual awareness.

Learning from failure needs to be institutionalized. It should not be an incidental exercise but a deliberate component of project management. Monitoring should go beyond compliance to support innovative problem-solving. The GEF partnership needs to invest in real-time learning systems, contextual intelligence, and a culture of continuous adaptation.

THE KM&L STRATEGY: AN EVOLVING ARCHITECTURE

In response to gaps identified by the GEF IEO in its Seventh Comprehensive Evaluation (OPS7), the GEF Council approved a new KM&L Strategy in 2023. The strategy provides a more structured approach to addressing knowledge management within the GEF partnership. Corresponding to a reorganization of the GEF Secretariat, a new Integration and Knowledge Division was created, and two dedicated staff were recruited in 2024 to support strategy implementation. The strategy is built on three pillars—people, process, and systems—and organized around four strategic directions containing 10 action areas. These directions focus on aligning KM&L with GEF-8 delivery, strengthening KM&L in programming, investing in global public goods generation, and aligning KM&L with communications and outreach.

As of March 2025, progress had been made in approximately half of the action areas. In line with the four recognized steps of the knowledge management cycle, the follow-ing progress has been observed:

- Knowledge capture. The Secretariat has begun redesigning the GEF Intranet for internal knowledge sharing and adapting project templates to better capture lessons learned, with over 1,700 lessons uploaded to the GEF Portal as of March 2023. Knowledge management has become increasingly integrated into project design, with 97 percent of CEO-endorsed projects between July 2023 and June 2024 including dedicated knowledge management components.
- Knowledge development and curation. Progress includes establishing knowledge platforms within integrated and impact programs, such as the Net-Zero Nature-Positive Accelerator, Sustainable Cities, and Food Systems (and their predecessors), in addition to the long-standing initiative IW:LEARN in the international waters focal area. These platforms are supporting knowledge exchange, documenting lessons learned, and fostering networking. The Secretariat has focused on inventorying platforms, developing platform interoperability principles, and organizing expert workshops to strengthen knowledge synthesis and sharing on substantive aspects of integrated programs.
- Knowledge sharing and dissemination. Efforts include new internal learning series, microlearning videos, courses, and products to complement the

existing GEF Brown Bag Lunch learning series and South-South exchanges.

 Knowledge application. The Secretariat is developing communities of practice, and IEO evaluations have highlighted examples where knowledge application has yielded benefits, particularly in Pacific SIDS and in CBAs.

Going forward, several areas require attention in GEF-9. The strategy would benefit from prioritization of its strategic directions. While the integration of existing and planned learning activities links knowledge management with learning, it risks allowing learning to dominate KM&L activities, potentially reducing focus on other crucial knowledge management steps.

Although knowledge management approaches now exist in most GEF projects, monitoring and reporting on lessons and insights remains inconsistent. The existing lessons database needs curation for user-friendliness and consistency, and a common knowledge management technical platform is still needed to complement the GEF Portal and Intranet.

Knowledge development requires a more systematic approach to identify key topics for knowledge capture and synthesis. A significant gap in knowledge sharing is the inconsistent exchange between projects in the same focal area/program and at the country level. Knowledge application should be reinforced by documenting positive examples, improving systems to integrate previous lessons into project proposals, and supporting projects to close the gap between learning and application.

STRENGTHENING THE LOOP: FROM LEARNING TO IMPACT

Findings from underperforming projects and the early rollout of the GEF's KM&L Strategy point to a clear need for more institutionalized and consistent learning practices. Adaptive management—when timely, proactive, and rooted in contextual understanding—can significantly improve project outcomes. The data confirm that identifying risks early and responding comprehensively is key to course correction, whereas delayed or narrowly focused responses often limit a project's ability to recover. The KM&L Strategy offers a framework to support this shift but requires more deliberate implementation. Strengthening knowledge platforms, documenting lessons in a consistent and accessible way, and establishing clear feedback mechanisms to inform project design and execution are critical next steps. A more coordinated approach to synthesizing knowledge across the portfolio would help ensure that insights are translated into broader strategic improvements.

As GEF-9 approaches, sharpening the strategy through concrete timelines, clearer priorities, and a stronger focus on application will be essential. Institutionalizing learning from failure—not just encouraging it—will enable the GEF to better fulfill its goal of becoming an adaptive, learning-oriented institution equipped to tackle complex global environmental challenges.

OPS8 approach paper

EIGHTH COMPREHENSIVE EVALUATION OF THE GEF (OPS8) APPROACH PAPER

May 20, 2024

Recommended Council Decision

The Council, having reviewed Document GEF/ME/C.58/02, "Eighth Comprehensive Evaluation of the GEF (OPS8): Approach Paper," approves this approach paper. The Council requests the Independent Evaluation Office to conduct the Eighth Comprehensive Evaluation (OPS8) and to provide the evaluation report to the replenishment process and to the Council according to the schedule presented.

I. INTRODUCTION

1. Beginning with the First Overall Performance Study (OPS1) in 1998, the replenishment negotiations for the Global Environment Facility (GEF) have been informed by an independent comprehensive evaluation of its progress and performance.¹ Accordingly, in advance of the ninth replenishment, the Eighth Comprehensive Evaluation of the GEF (OPS8) will be undertaken by the GEF's Independent Evaluation Office (IEO). Like its predecessors, OPS8 will provide a crucial evidence base for guiding negotiations for GEF-9. Its intended audience includes replenishment meeting participants, the GEF Council, the GEF Assembly, members of the GEF partnership, external stakeholders, and various civil society groups and academic institutions. Findings will be disseminated through multiple channels including workshops, webinars, and the IEO website. It is expected that the report will be presented at the GEF replenishment meeting in October 2025. Subsequently, it will serve as a working document for the GEF Council in December 2025 and will be formally presented at the next GEF Assembly in 2026.

2. This approach paper outlines a roadmap for the preparation of OPS8, aiming to define the range and scope of inputs into the study and to facilitate constructive dialogue within the GEF and among its partner agencies around the evaluation. OPS8 will particularly focus on two interconnected themes: (1) the GEF strategy, institutional issues, and programming; and (2) GEF performance, impact, and sustainability, drawing on evaluations conducted by the IEO, and evidence collected by the evaluation units within the GEF Agencies. OPS8 is designed to evaluate the outcomes and insights derived from OPS7, monitor the progress achieved on OPS7 recommendations, and assess the advancement in implementing the GEF-8 Strategy and Programming Directions. OPS8 will encapsulate its primary findings and main conclusions, present an assessment of the overall competitive advantage of the GEF within the contemporary environmental and economic context, and develop strategic recommendations for consideration by the replenishment group.

3. Preparation of this approach paper has involved a consultative process with numerous stakeholder groups, including the GEF Secretariat, GEF Council members, the GEF Agencies, civil society organizations (CSOs), and country focal points. The preparation of the approach paper was also guided by an external panel of experts comprising Monika Weber-Fahr, Patricia Rogers, Stefan Schwager, Vinod Thomas, and Hasan Tuluy, who will advise the IEO team through the preparation of the report.

4. The paper begins with a summary sketch of the environmental and economic trends that form the backdrop for GEF-9, situating the GEF in the economic realities pertaining in a post-COVID world. It is within this context, and to acknowledge these realities, that OPS8 is being undertaken. Section 2 digs deeper into this context from the GEF's perspective, looking at the coverage and considerations of GEF-8. Section 3 details how OPS8 will look at the work performed during the replenishment period, setting out the key focus areas and evaluation questions, along with sources of evaluative evidence; Section 4 discusses the methodological considerations and limitations.

¹ See annex 1 for a summary of the evolution of the GEF OPSs.

II. SECTION 1: CONTEXT FOR OPS8: ECONOMIC AND ENVIRONMENTAL TRENDS

5. The GEF's ninth replenishment will occur within an extraordinarily challenging context. In response to the COVID-19 pandemic, much of the world is in social and economic recovery mode, necessitating a delicate balance between stimulating economic growth and addressing systemic vulnerabilities exposed by the crisis. This has imposed substantial limitations on available finance for international efforts to progress toward the Sustainable Development Goals. Furthermore, inflationary pressures, tightening monetary policies, the imminent threat of recession in major economies, and the persistent occurrence of extreme weather events contribute to continued pressure on global economic growth overall. This burden is even more pronounced in the least developed countries and countries affected by fragility, conflict, and violence, amplifying their economic challenges.

6. Compounding the major challenges of COVID recovery, the world is facing numerous wars and geopolitical conflicts, the effects of which stretch far beyond their immediate location in terms of global supply chains and finance flows. Food and water insecurity is also on the rise.

7. In addition to these localized wars, there is an overriding, overarching conflict in process. As United Nations (UN) Secretary-General António Guterres observes, "Humanity is waging war on nature. This is senseless and suicidal." The consequences are evident in environmentally induced human suffering and economic losses, and the accelerating erosion of life on Earth. These effects range from weather-related disasters, which have caused a fivefold increase in deaths over the past 50 years, to the displacement of 21.5 million people annually due to climate-change-related disasters.

The Triple Planetary Crisis

8. The negative effects of human behavior on the environment have resulted in what has been categorized as the "triple planetary crisis," ² referring to three interconnected issues humanity currently faces: climate change, pollution, and biodiversity loss. Each issue has distinct causes and effects, all of which must be addressed to secure a sustainable future on Earth.

9. Climate change stands as the most urgent challenge humanity confronts today. It denotes long-term shifts in temperatures and weather patterns that fundamentally reshape ecosystems. Human activities—notably energy consumption, industry, transportation, construction, and agriculture—are the primary drivers of climate change. Its consequences include intensified droughts, water scarcity, wildfires, rising sea levels, floods, polar ice melting, severe storms, and declining biodiversity.

10. Pollution is a major environmental issue, and it comes in various forms (for example, air, water, soil, chemicals, plastics), with each form having profound impacts on health and the environment. Air pollution ranks as the leading cause of disease and premature death globally, claiming over 7 million lives annually. It has been estimated that 9 out of 10 people worldwide breathe air containing pollutants exceeding World Health Organization

² https://unfccc.int/news/what-is-the-triple-planetary-crisis

guidelines. Pollution stems from such sources as traffic, industries, wildfires, volcanoes, mold, and indoor household activities such as cooking with polluting fuels.

11. Biodiversity loss denotes the decline or disappearance of biological diversity, encompassing animals, plants, and ecosystems. It results from diverse factors including overfishing, habitat destruction (e.g., deforestation for development of settlements or agriculture), and desertification due to climate change. Biodiversity loss undermines food security, access to clean water, and the overall sustainability of the planet.

12. The triple environmental crises are intricately linked to the <u>planetary boundaries</u> framework, which underscores the need for a comprehensive and integrated approach to manage human impacts on Earth's systems, ensuring a sustainable future. Six of the nine planetary boundaries have now been transgressed—climate change, biosphere integrity, freshwater change, land system change, biogeochemical flows and novel entities— emphasizing the urgent need for environmental policies to simultaneously address climate change, biodiversity and pollution.

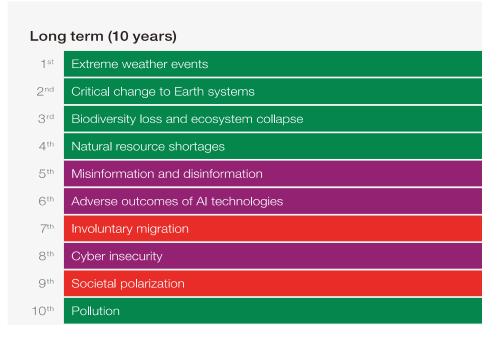
Environmental Risks, Financing and the GEF Role

13. As the World Economic Forum notes, "Countries are grappling with the impacts of record-breaking extreme weather, as climate-change adaptation efforts and resources fall short of the type, scale and intensity of climate-related events already taking place."³ Its most recent perception-based Global Risks survey suggests that, while the short-term (2-year) assessment of global risk is weighted toward immediate challenges such as geopolitical tensions, warfare, financial stress and technological risks, the long-term (10-year) risk perspective produces a much stronger focus on the environment (table 1).⁴ Half of the perceived key global risks for this time period are centered on the environment, including all dimensions of the triple planetary crisis. However, while environmental risks are more pronounced in the long term, viewing them primarily as long-term issues can impede immediate policy action on critical matters such as biodiversity loss and climate change.

³ World Economic Forum, <u>Global Risks Report 2024</u>, p. 4.

⁴ Source: World Economic Forum Global Risks Perception Survey 2023-2024. This year's survey included insights from 1,490 experts across academia, business, government, the international community, and civil society.

Table 1: Perceptions of key global risks over the next 10 years





Financing for Climate and the GEF Role

14. International fund flows have increased in response to accelerated environmental risks, most notably in relation to climate change (mitigation and adaptation). The GEF is one of several major international funding facilities helping countries address the challenges of climate change (box 1). However, despite the increasing number and capacity of funding facilities in the climate field, the total volume of public resources still falls far short of requirements. The <u>2024</u> *Financing for Sustainable Development Report: Financing for Development at a Crossroads* notes that financing challenges imperil the SDGs and environmental and climate action. In addition, average global growth has declined, while policy and regulatory frameworks still do not set appropriate incentives. Private investors are not incentivised to invest enough in environmental interventions and climate change, and several donor countries are facing fiscal constraints.

15. To prevent some of the worst impacts of climate change, estimates suggest that public climate finance of at least \$1.3 trillion will be needed every year by 2030.⁵ In 2020, such funding had reached \$333 billion, still significantly below the levels required to meet 2030 climate targets. Other environmental challenges, notably biodiversity loss, have received even less financing, and policies and programs in biodiversity are struggling to promote sustainable development.

⁵ See, for example, World Resources Institute, *State of Climate Action 2022*.

Box 1: UN-backed international climate funds

- *Global Environment Facility.* The GEF aims to "catalyze transformational change in key systems that are driving major environmental loss," particularly energy, cities and food.
- *Green Climate Fund* (GCF). Set up by the United Nations Framework Convention on Climate Change in 2010, the GCF is the world's largest dedicated climate fund, mandated to support mitigation and adaptation action equally in developing countries.
- *Adaptation Fund*. The fund has committed some \$830 million since 2010 to help vulnerable communities in developing countries adapt to climate change.
- UN-REDD. Three UN agencies (United Nations Development Programme, United Nations Environment Programme, and the Food and Agriculture Organization of the United Nations) teamed up in 2018 to protect forests, a "pre-eminent nature-based solution to the climate emergency."
- *Clean Technology Fund.* The \$5.4 billion fund is "empowering transformation in developing countries by providing resources to scale up low carbon technologies."
- Least Developed Countries Fund (LDCF). Managed by the GEF the LDCF aims to help the least developed countries integrate climate change considerations into development policies.
- Special Climate Change Fund (SCCF). Managed by the GEF, the SCCF provides funds for mitigation and adaptation activities, with a specific emphasis on vulnerable communities and ecosystems.

16. In addition to the UN backed climate funds, several multilateral development banks (MDBs), many of which are GEF Agencies, have also increased their financing for climate and environmental initiatives. In response to COP28, the MDBs collectively pledged over \$180 billion in climate finance and committed to enhanced collaboration and reporting mechanisms. Another recent significant development is the joint announcement by a group of MDBs of common principles to track nature-positive finance in line with COP28 commitments and the objectives of the <u>Global Biodiversity Framework</u>. "Nature-positive finance" involves funding directed toward protecting, restoring, or enhancing the sustainable use and management of nature.

17. While the increasing interest and commitments of the MDBs are encouraging, they continue to face challenges in fulfilling their COP28 commitments. This necessitates adjustments in their approaches and institutional reforms. Specifically, they need to leverage their history of financial innovation to support the reform of global environmental management. The most effective way to achieve this is through enhanced partnerships with major institutions that have extensive expertise in the field. The GEF is well positioned to play a key role in facilitating these partnerships.

18. In response to the evolving challenges in environmental finance, and institutional responses described above, the GEF will need to maintain its distinct position within the

environmental financing architecture by facilitating global benefits across numerous sectors. Its uniqueness stems from its role in providing financial support to a broad range of major multilateral environmental agreements, including the Convention on Biological Diversity, the United Nations Framework Convention on Climate Change, the Stockholm Convention on Persistent Organic Pollutants, the Minamata Convention on Mercury, and the United Nations Convention to Combat Desertification. Moreover, the GEF allocates funding to assist economies transitioning away from ozone-depleting substances under the Montreal Protocol, as well as to activities related to international waters and sustainable forest management, which contribute to the implementation of several global and regional multilateral environmental agreements.

19. To implement its strategy and achieve its overall objective of enhancing global environmental benefits, the GEF operates through a network of implementing partners. This network has expanded from an initial 3 Agencies (the United Nations Development Programme, the United Nations Environment Programme, and the World Bank Group) to its current level of 18 <u>Agencies</u>.

III. SECTION 2: GEF-8 THEMES AND PRACTICES: BUILDING ON OPS7

20. This section presents a snapshot of GEF-8, grounding its programming and priorities in the recommendations made by OPS7.

21. Based on its detailed analysis of extensive data sets and evaluation reports, OPS7 drew broadly positive conclusions concerning the GEF's relevance and performance to date and during GEF-7 (box 2).

Box 2: Conclusions of OPS7

- (1) The GEF continues to be a **relevant financing mechanism** of numerous conventions and multilateral environmental agreements, while advancing integrated programming on priority environmental issues and systemic transformation.
- (2) The GEF has a **strong record of performance**. Over its 30-year history, the GEF has demonstrated improvements on all performance measures. Cumulatively, 80 percent of all completed GEF projects, accounting for 79 percent of GEF grants, are rated in the satisfactory range for outcomes.
- (3) The GEF is a **robust and adaptable partnership**, comprising environmental, development, and financial expertise, convening multistakeholder programs and projects at multiple levels.
- (4) The GEF is a source of predictable environmental finance, enabling the mobilization of cofinancing and project scale-up. However, the GEF still has unrealized potential for mobilizing additional resources in strategic and complementary ways. Possibilities include partnering with financing institutions—such as the Green Climate Fund, multilateral development banks, bilateral donors, foundations with complementary visions, and the private sector—to pursue synergies.

- (5) The GEF supports upstream policy work and the development of enabling environments at the country level, and its projects have contributed to building stronger country institutions; however, the GEF's ability and effectiveness in promoting policy coherence and institutional synergy will require substantial efforts by the GEF, together with complementary efforts in enforcement within countries.
- (6) The GEF has a **tried and tested set of implementation mechanisms**, and each is effective in realizing its stated purposes—albeit with scope for increasing efficiencies in terms of time and financial resources.
- (7) The GEF is recognized as more innovative than other environmental funding institutions, balancing the pursuit of innovation with risk and performance considerations in its selection of projects, and preparing the groundwork for other donors to scale up its successful pilots... The GEF is moderate in its risk-taking, but valuable and useful in allocating its grant funding for pilot and innovative activities, including for new technologies such as solar and wind energy. The approach to innovation, piloting and scaling up is not very clear and systematic.
- (8) GEF policies and systems are generally consistent with global good practice and provide opportunities for the GEF to strengthen inclusion. With regards to systems, both results-based management (RBM) and knowledge management improved significantly in GEF-7.

22. At the same time, OPS7 made several recommendations to strengthen the GEF's contribution while implementing GEF-8—particularly considering the many and growing challenges prevailing in meeting the Sustainable Development Goals. While the recommendations of OPS7 were based on a detailed assessment of GEF performance during the seventh replenishment, they were framed within the evolving context of continuing environmental degradation and international resource shortfalls. The recommendations thus emphasized the need to maximize the use of available GEF resources to promote innovation, integrated programming, and coherence and synergies among stakeholders—all while continuing to meet its obligations to a broad range of international and regional conventions and agreements. The conclusions presented in box 2 and the recommendations in table 3 together highlight the micro-macro disconnect where project level successes do not necessarily aggregate up to macro level achievements. The GEF's contribution towards addressing this disconnect will be examined in OPS8. The OPS7 recommendations are listed in table 2 by theme.

Торіс	Summary
Innovation and risk	The GEF should continue to pursue innovative projects to advance
	transformational change. GEF project review mechanisms should
	incentivize innovative projects across the partnership. The
	preparation process should explicitly allow for consideration of the
	risk associated with these projects and be streamlined.
Integrated programming	The GEF should continue pursuing integration in programming but
	should clearly demonstrate the additionality of this approach in
	terms of environmental benefits, socioeconomic co-benefits, policy
	influence, and inclusion.
Synergies and cooperation	The GEF should establish clear ground rules for GEF Agency
among Agencies	interactions with respect to project development and
	implementation, and in terms of engaging with operational focal
	points and executing agencies. Ground rules should provide
	guidance to the Agencies about what is—and is not—acceptable at
	the country level.
Country engagement	The GEF should develop and implement a more strategic and
	coherent approach to engagement at the country level to better
	address varying country needs and capacities.
Priority country groups	The GEF should increase its support to least developed countries
	(LDCs) and small island developing states (SIDS) to have greater
	impact in these priority countries.
Private sector engagement	The GEF should strengthen private sector engagement through
	targeted support.
Small Grants Programme (SGP)	The GEF should reappraise its vision for the SGP in order to expand
	its purpose and potential for impact.
Administrative processes	The GEF should review its requirements, processes, and
	procedures to allow countries, Agencies, and the private sector to
	secure GEF resources and move to implementation and execution
	more quickly in the post-pandemic period.
Policies and systems	Monitoring implementation of GEF policies needs to be continued
	and done better. The recent GEF policies on safeguards, gender,
	and stakeholder engagement will need to be monitored with
	adequate data and evidence to be able to assess their
	effectiveness. The GEF's RBM and knowledge management systems
	should adapt to the shift to integration.

Table 2: Summation of OPS7 recommendations

23. The GEF responded to the OPS7 recommendations with an ambitious set of policy and programming initiatives, encapsulated in the GEF-8 Programming Directions and implemented during GEF-8, to improve various aspects of the GEF's operations. Several of these initiatives stemmed from the OPS7 recommendations and collectively aimed to enhance the GEF's effectiveness, efficiency, and impact in addressing global environmental challenges while promoting sustainable development.

24. The most notable themes and policy measures implemented during GEF-8 can be summarized as follows; these include a mix of new initiatives and emphases and continuations of ongoing efforts.

Increasing Emphasis on Integrated and Impact Programs

25. The most comprehensive aspect of these initiatives is a substantially increased emphasis on integrated programming. This attention can be seen as an evolution from earlier GEF experiences, starting with multifocal area activities⁶ The integrated programs have been designed to address complex and interlinked environmental challenges more effectively as traditional, single-sector approaches often fail to capture the interdependencies and synergies between different environmental domains. These programs allow for the implementation of holistic solutions that can address multiple environmental objectives simultaneously, making them more likely to yield sustainable and impactful results.

26. The GEF-8 programming architecture has built on progress made in GEF-7, emphasizing a combination of integrated programming and focal area actions to maximize the potential for impactful outcomes, ultimately supporting global convention needs and expectations. In GEF-8, the aim has been to encourage countries to channel more of their GEF funded initiatives through 11 integrated programs addressing the major environmental needs of the planet within the GEF's mandate. The programs have been supplemented with targeted GEF-8 investments focusing on specific entry points within focal areas to ensure that all GEF commitments to international and regional conventions and agreements are addressed.

Box 3: Integrated programs under GEF-8

- Food Systems Integrated Program
- Ecosystem Restoration Integrated Program
- Sustainable Cities Integrated Program
- Amazon, Congo, and Critical Forest Biomes Integrated Program
- Circular Solutions to Plastic Pollution Integrated Program
- Blue and Green Islands Integrated Program
- Clean and Healthy Ocean Integrated Program
- Net-Zero Nature-Positive Accelerator Integrated Program
- Wildlife Conservation for Development Integrated Program
- Greening Transportation Infrastructure Development Integrated Program
- Elimination of Hazardous Chemicals from Supply Chains Integrated Program

27. The integrated programs aim to collectively tackle major drivers of environmental degradation and deliver multiple benefits across various thematic dimensions mandated for the GEF. Their thematic scope and geographical coverage align with global aspirations for nature-positive, climate-neutral, and pollution-free development pathways, fostering harmony with nature. Additionally, they aim to address diverse country needs for investing in a blue and green post-COVID-19 recovery, utilizing global or regional platforms to attract stakeholders and resources in response to political commitments. Integrated programs also intend to facilitate the involvement of other stakeholders—including the private sector—

⁶ See annex 2.

promote knowledge sharing and learning and ensure more effective utilization of GEF resources.

28. While integrated programs are intended to yield substantial global benefits across different focal areas of the GEF, some aspects of guidance from conventions are best addressed through complementary investments in each distinct focal area, focusing on objectives not fully covered within the proposed integrated programs. These aspects have been programmed into individual focal area investment frameworks for biodiversity, climate change, international waters, land degradation, and chemicals and waste.

Deepening the Focus on Policy Coherence

29. GEF-8 programming recognizes that policy coherence is crucial for the GEF to maximize benefits, address transboundary impacts, avoid negative spillovers, and release funding from perverse investments. To this end, GEF-8 initiatives have sought to deepen the focus on policy coherence in GEF operations, particularly in the upcoming GEF-9 replenishment and programming phase.

30. A proposed <u>Coherence Roadmap</u> outlines actions to enhance policy coherence in GEF operations, including assessing existing project portfolios, rolling out dedicated programming, and mainstreaming policy coherence into GEF-8 design and implementation. It emphasizes engaging with recipient countries and GEF Agencies, building tools for assessment, and focusing on knowledge activities. The document also highlights the importance of addressing the nature financing gap and the role of policy coherence in maximizing the benefits of GEF investment. Overall, the roadmap underscores the significance of policy coherence in achieving global environmental goals and maximizing the impact and sustainability of GEF resources.

Emphasizing Co-Benefits

31. As a component of the OPS8 programming exercise, the GEF has drafted a <u>document</u> outlining its approach to co-benefits. These co-benefits refer to positive outcomes resulting from GEF investments that extend beyond its formal set of global environmental benefits and are crucial for ensuring the sustainability of GEF benefits. These co-benefits include, *inter alia*, improvements in incomes, livelihoods, health, employment, gender equality, market development and improved access to services. Key measures identified include the creation of a checklist for project developers, expansion of the Results Measurement Framework to incorporate dedicated co-benefit indicators, capacity-building initiatives within the GEF partnership, and the establishment of institutional arrangements for monitoring and reporting on co-benefits.

Defining Risk Appetite

32. In response to OPS7 recommendations and incorporated into GEF-8 programming, the GEF produced a <u>document</u> outlining its approach to managing risk in pursuit of global environmental benefits. This approach emphasizes the criticality of risk assessment and management in achieving transformative environmental impacts. The GEF aims to take bold and innovative approaches to address environmental challenges, setting a risk appetite across three dimensions: context, innovation, and execution. It highlights the need for rigorous analysis and adaptation to diverse contexts, encourages purposeful innovation, and

underscores the necessity of effective execution while maintaining zero tolerance for fraud or exploitation.

33. The GEF is implementing the Risk Appetite Framework under GEF-8 by integrating risk considerations into decision-making processes, updating project templates, providing training, and ensuring annual reporting on risk. Additionally, knowledge management and learning practices are being promoted to better manage risks and leverage innovative approaches.

Reforming the Country Engagement Strategy

34. The Country Engagement Strategy under implementation during GEF-8 builds on earlier initiatives aimed at empowering countries to maximize the impact of GEF resources. The strategy seeks to combine activities from the Country Support Program with upstream engagement approaches. It aims to strengthen country ownership of GEF portfolios, promote policy coherence, and enhance stakeholder engagement to achieve greater environmental impact.

35. Activities supporting country engagement include upstream technical dialogues, national dialogues, GEF workshops, constituency meetings, and pre-Council meetings. Additionally, the Country Engagement Strategy may incorporate specific activities to enhance the scope of engagement with countries during GEF-8. These include the Gustavo Fonseca Youth Conservation Leadership Program, aimed at building the capacity of young professionals in developing countries; a field visit program for GEF Council members to deepen their understanding of GEF projects and programs; and support for country delegations and relevant stakeholders to attend COPs to the conventions, ensuring that developing countries have the necessary support to participate effectively in negotiations.

Rolling out SGP 2.0

36. The Small Grants Programme (SGP) supports Civil Society Organizations (CSOs) and community-based organizations help achieve global environmental goals. Overall, GEF-8 aims to implement a comprehensive strategy and operational framework for SGP 2.0, emphasizing the importance of civil society engagement and local action in achieving global environmental objectives. Resource allocation in GEF-8 for the SGP includes funding from core resources, country allocations under the System for Transparent Allocation of Resources (STAR), and cofinancing from other sources.

37. SGP 2.0 strategic priorities include community-based management of ecosystems, sustainable agriculture and fisheries, low-carbon energy access, effective chemicals and waste management, and sustainable urban solutions. It also emphasizes social inclusion and supports decision-making of women, youth, and indigenous peoples and local communities. The key features include expansion, innovation, diversification, and optimization. SGP 2.0 envisions using multiple GEF Agencies for implementation, rather than spearheading by the United Nations Development Programme alone; introducing competitive CSO initiatives; maximizing financing for CSOs and community-based organizations; and enhancing monitoring and reporting.

Implementing the Private Sector Engagement Strategy

38. The <u>GEF Private Sector Engagement Strategy</u> (PSES) aims to provide the rationale for a more coordinated approach to private sector engagement. The PSES has three core elements: (a) working strategically with multi-stakeholder platforms to achieve scale and impact (b) supporting multiple private sector entry points (c) engaging the private sector beyond a transactional level. The PSES aims to enhance value chain connectivity to generate efficiencies and collaborative models that connect market demand signals of sustainable consumption with sustainable models of supply. The strategy also aims to expand the use of blended finance (non-grant instruments).

Implementing Policy and Institutional Measures

39. To enhance efficiency and collaboration, a series of policy and institutional measures are being implemented in the GEF. Ongoing reforms and changes in organizational structure aim to streamline the project cycle, minimize bureaucratic hurdles and expedite project delivery. Efforts are also under way to foster collaboration with other climate funds enabling resource leverage, mitigating duplication of efforts, and maximizing overall impact.

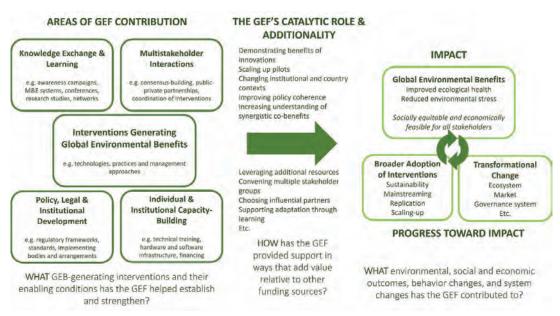
IV. SECTION 3: COVERAGE AND CONSIDERATIONS

40. This section outlines the theory of change applied by the IEO, the proposed scope, content, methods, and organizational arrangements for OPS8, with guidance provided by a five- member external review panel.

The IEO Theory of Change

41. OPS 8 and the component evaluations align with the IEO's theory of change framework shown in figure 3 and address the questions outlined in the evaluation matrix provided in table 3. The theory of change highlights two critical pathways to impact for the GEF.





42. First, direct and sustained impacts from specific projects: These are the immediate and long-term benefits derived directly from the implementation of targeted environmental projects. These impacts result from interventions designed to address specific environmental challenges, leading to measurable outcomes and improvements in ecological health and sustainability and transformational change.

43. Second, broader Impacts from GEF's catalytic effects: These are the wider, systemic changes facilitated by GEF projects. Catalytic effects include:

- (a). *Scaling Up*: Expanding successful project models through learning and knowledge sharing, multistakeholder interactions, to larger scales or new contexts to maximize their benefits.
- (b). *Changing Institutional and Country Contexts*: Influencing and improving the frameworks within which environmental projects operate, including governance, policies, and institutional capacities.
- (c). *Improved Policy Coherence*: Promoting alignment and integration of policies across different sectors to enhance overall environmental outcomes.
- (d). Understanding of Co-Benefits: Fostering a deeper appreciation of the interconnectedness of environmental, social, and economic outcomes, leading to synergistic benefits.
- (e). Supporting Adaptation: Enhancing the ability of communities and ecosystems to adapt to changing environmental conditions and climate change.
- (f). *Catalytic Financing*: Mobilizing additional financial resources by demonstrating the viability and effectiveness of environmental projects, thus attracting further investment from public and private sectors.

44. These pathways together would ensure that GEF's efforts not only produce tangible project-level outcomes but also drive broader systemic changes that support sustainable development on a larger scale, consistent with the objectives of GEF-8.

OPS8 Framing of GEF-8 Initiatives

45. The GEF IEO four-year work program⁷ discussed with, and approved by the GEF Council in June 2022, was developed to assess the progress of the GEF against the key strategic priorities included in the GEF-8 Programming Directions, ⁸ and in the implementation of policies designed to support the GEF's effective functioning. In response to Council requests, evaluations on cofinancing and portfolio-level risk were subsequently added to the work program. This inclusion reflects the critical importance of these topics in leveraging and scaling up efforts, as well as seeking integrative solutions in OPS8. In all, 31 evaluations conducted by the IEO will feed into the overall OPS8 report, conducted over the

⁷ GEF/E/C.62/01

⁸ Source: GEF Secretariat, 2022, <u>GEF-8 Programming Directions</u>.

FY 2023–25 period. The full range of this body of work is outlined in figure 2. The approach papers and concept notes for the listed evaluations are available on the <u>IEO website</u>.

46. As depicted in figure 2, the OPS8 evaluation report will cover the broad themes of the GEF-8 program outlined in the previous section.⁹ Additionally, our assessment will include the customary review of performance and impacts of focal area interventions and GEF country engagement, GEF policies, and the effectiveness of long-running programs such as the SGP.

47. The performance of the GEF partnership in terms of relevance, efficiency, and effectiveness will be assessed through the annual performance reports, terminal evaluations, and post-completion verifications at the project, program, and country levels. Evaluations of the integrated approach pilots (IAPs) and impact programs will provide evidence on the results of the GEF's focus on programming for greater integration. The implementation of GEF policies on gender, engagement with stakeholders, civil society, the private sector, and indigenous peoples will be addressed through the thematic evaluations as cross-cutting issues. The evaluation of GEF systems to support effective results management and knowledge sharing will be assessed based on specific evaluations related to these topics, and in the annual performance reports. Institutional governance issues will be addressed through the evaluations of the IAPs and the impact programs; the evaluation of the Country Engagement Strategy; and through an assessment of the dynamic relationships between the various members of the GEF partnership. A special focus study will be conducted on the Scientific and Technical Advisory Panel (STAP), as the last review of STAP was conducted ten years ago. Besides the evaluations of work funded by the GEF Trust Fund, evaluations of the achievements of the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF) will also contribute to this comprehensive evaluation of the GEF.

48. In general, the evaluations contributing to OPS8 will assess completed GEF-6 projects, as many GEF-7 activities will still be under way and GEF-8 activities will largely be at an early stage of implementation. To take this time lag into best account, projects that are at an early stage or under implementation will mainly be assessed in terms of their quality at entry in the various thematic evaluations. All evaluations conducted between 2022 and 2025 and approved in the work program will contribute to this eighth comprehensive evaluation. Several major evaluations are now under way or in their early stages. They include:

Evaluation of GEF Food Systems and Land Use Integrated Programs

49. The primary aim of this evaluation is to appraise the GEF's systemic approach to its programmatic interventions, particularly concerning food systems and land use. It will assess the degree to which GEF food system programs and their constituent projects address the root causes and downstream effects of environmental issues stemming from targeted food systems in both design and implementation phases. Additionally, the evaluation will examine whether project proponents have accounted for crucial interactions (e.g., global market

⁹ But see paragraph 44

dynamics, geopolitical tensions), and the role of policy coherence that influence the achievement and sustainability of outcomes.

Evaluation of the Sustainable Cities Program

50. The GEF Sustainable Cities Program has undergone assessments in OPS-6 through the Review of the Integrated Approach Pilot Programs (GEF IEO 2018) and OPS-7 through the GEF Integrated Approach to Address Drivers of Environmental Degradation (GEF IEO 2022). These evaluations primarily examined design and implementation aspects. The ongoing Evaluation of the Sustainable Cities Program, conducted within the framework of O-8, shifts focus to program outcomes, the effectiveness of its knowledge platform, sustainability of interventions supported, and the value added by the GEF.

Evaluation of GEF Programs in Pacific Small Island Developing States (SIDS)

51. The main objective of this evaluation is to provide GEF stakeholders with insights into how relevant, coherent, and effective these programs are in Pacific SIDS. The evaluation also aims to understand how GEF programs in these countries have evolved and whether they have integrated lessons from past projects. Evaluative evidence will be collected through a comprehensive review of the program and project documentation, key informant interviews, contribution analysis and country field visits.

Strategic Country Cluster Evaluation of the Amazon Biome

52. The strategic country cluster evaluation of the Amazon aims to gather evidence of the GEF's impact on strengthening biodiversity conservation, reducing deforestation and degradation, and enhancing community livelihoods in the region. Examining the three phases of the Amazon Sustainable Landscapes (ASL) Program, this evaluation seeks to extract insights and lessons to inform future programming, design, and implementation of GEF initiatives in the area. The evaluation will operate at three levels: strategic, program and project, and country levels, providing a comprehensive analysis of the GEF's efforts in the Amazon.

A Study on the Environmental and Socioeconomic Co-benefits of GEF Interventions

53. This study will provide one of the first systematic, global-scope assessments of the environment and the associated socioeconomic co-benefits of GEF activities—a topic on which limited evidence is available in the literature. It builds on an IEO pilot study in Uganda, which measured income benefits alongside environmental outcomes. The evaluation will draw on currently available geospatial data and socioeconomic survey data in addition to country case studies.

Evaluation of GEF Support to Nature-based Solutions

54. This evaluation marks the first systematic examination of GEF support for naturebased solutions (NbS). Employing a mixed-methods approach, the evaluation centers on Identifying influencing factors related to project results and effectiveness, as well as assessing the value and challenges in integrating NbS to deliver global environmental benefits. It will also extract key lessons for implementing NbS in future GEF interventions and strategies.

Assessing Inclusion of Marginalized Groups in GEF-Supported Projects in Fragile and Conflict-Affected Situations

55. The objective of this evaluation is to assess the extent to which GEF projects have been inclusive of historically marginalized groups, with a particular focus on women, Indigenous Peoples and Local Communities (IPLCs), youth, and persons with disabilities. It aims to compare the level of inclusion across Fragile and Conflict-Affected Situations (FCS) and non-FCS contexts. Furthermore, the evaluation seeks to examine the outcomes, both intended and unintended, of this inclusion on the success of GEF projects and any associated socioeconomic co-benefits.

Annual Performance Report 2025

56. The Annual Performance Report (APR) 2025 aims to offer a comprehensive overview of the results and sustainability of GEF activities, with a particular emphasis on projects within the OPS8 cohort. It will focus on projects for which terminal evaluations were submitted after the closure of OPS-7, providing insights into the progress to impact of the OPS-8 cohort. Additionally, the report will present an aggregated analysis of the results achieved by GEF-5 and GEF-6 projects, comparing them with the respective targets set for those periods. It will delve into topics such as the performance of the System for Transparent Allocation of Resources (STAR) and the distribution of GEF resources among its Agencies.

Evaluation of GEF Engagement with the Private Sector

57. This evaluation focuses on the GEF's implementation of its approved private sector engagement strategy. Feeding into this evaluation will be the thematic evaluations and integrated program evaluations that will look at the GEF's engagement with the private sector to assess the extent to which large companies, associations, and Micro, Small and Medium Enterprises (MSMES) are engaged by the GEF to effectively address supply chain constraints. Recent developments in the non-grant instrument will be also reviewed as part of this broad study.

Leveraging Technologies for the Environment: An Assessment of the GEF partnership efforts and readiness

58. The GEF's strategic direction and advisory documents underscore the pivotal role of technology in driving environmental sustainability. Building on prior evaluations by the GEF Independent Evaluation Office (IEO) concerning transformational change, innovation, and risk assessment, this evaluation aims to appraise the GEF's collaborative endeavours and preparedness to aid its members, particularly countries and agencies, in capitalizing on technological opportunities while mitigating associated risks for the environment.

Evaluation of Policy Coherence in the GEF

59. Given the GEF's renewed focus on policy coherence, this evaluation seeks to appraise the integration of policy coherence across portfolio/corporate, program, and project levels. Through methods including document analysis, stakeholder interviews, an online survey, and field-based case studies, the evaluation aims to gather evidence on the GEF's role in

enhancing policy coherence among sectoral agencies and government levels, both presently and historically.

Evaluation of Results Based Management in the GEF

60. The review of Results-Based Management for OPS8 will delve into the measurement and reporting of core indicators, along with other results indicators delineated in project results frameworks. Moreover, the evaluation will analyse the influence of country context on monitoring practices adopted by GEF Agencies, with a particular emphasis on practices observed in fragile, conflict, and violence (FCV) affected situations. By examining the impact of these contexts, the review aims to identify any unique challenges or adaptations in monitoring processes.

Small Grants Programme Evaluation: An Update

61. The main objective of this evaluation is to evaluate progress made since, the 2021 joint SGP-IEO evaluation and the extent to which the SGP is achieving the objectives set out in its strategic and operational directions SGP2.0 under GEF-8.

The Country Engagement Strategy Evaluation (CES): An Update

62. This evaluation will appraise the progress made in implementing the CES, probing into the factors that have either facilitated or impeded this progress. It will explore how the CES has influenced the evolving dynamics within the GEF partnership, particularly in facilitating country access to climate and environmental finance. The evaluation will analyse CES activities on a global scale and within the various regions the GEF operates, including Africa, Asia, Europe and Central Asia, Latin America and the Caribbean, Middle East and North Africa, Pacific, and South Asia.

An Evaluation of the Partnership Dynamics and Competitive Advantage of the GEF

- 63. This evaluation aims to delve into key aspects as they relate to:
 - (1) The GEF's Strategic Role: The evaluation will assess the strategic and competitive positioning of the GEF in the contemporary environmental finance landscape, particularly in delivering global environmental benefits.
 - (2) Partnership Dynamics: A central focus of the evaluation will be to examine the relationships among the various stakeholders within the GEF partnership. By evaluating the strengths and dynamics of these relationships, the study aims to identify areas of synergy and opportunities for enhanced collaboration.
 - (3) Role and Contribution of STAP: The evaluation will include a special focus on the Scientific and Technical Advisory Panel (STAP) to understand its contribution, influence, and impact within the GEF framework. This analysis will shed light on the role of scientific expertise in shaping GEF strategies and initiatives.

Evaluation of the GEF's Chemicals and Waste Focal Area

64. The objective of the Chemicals and Waste evaluation is to conduct a comprehensive review of GEF programming from 2010 onwards. A primary focus of this evaluation is to examine the recent transition from a chemical-by-chemical approach to a more holistic strategy for addressing pollution. In particular, the evaluation will analyse the shift towards an integrated approach that encompasses the entire supply chains of industries such as garment, food, and beverage. By doing so, it seeks to ascertain the extent to which this integrated approach aligns with and supports the commitments delineated in the Stockholm and Minamata Conventions.

LDCF/SCCF Annual Evaluation Report 2024 and Program Evaluations

65. LDCF and SCCF annual evaluation reports and program evaluations will also provide insights into the performance of projects that are jointly funded through the GEF and the LDCF/SCCF trust funds. The AER 2024 covers evaluations that have integrated adaptation to climate change including: Evaluation of the GEF's Approach and Interventions in Water Security (GEF/E/C.64/01/Rev.01); Evaluation of GEF Support to Climate Information and Early Warning Systems (GEF/E/C.66/04); GEF Support to Drylands Countries (GEF/E/C.66/01); Evaluation of Community-Based Approaches at the GEF (GEF/E/C.66/02); and, Learning from Challenges in GEF Projects (GEF/E/C.66/03/Rev.1). Program evaluations of LDCF/SCCF conducted every four years have also informed GEF adaptation strategies.



questions covering broad strategy and performance areas as shown in the evaluation matrix in table 3. The main sources of evidence will be Evidence from the comprehensive range of evaluations of the IEO Work Program (figure 2) will be used to analyze key evaluation the GEF-8 Programming Directions, external scientific and economic literature, individual component evaluations that dive into specific themes, the terminal evaluation database, Chief Executive Officer-endorsed documents, midterm reviews, and relevant evaluations conducted by GEF Agencies. 66.

Table 3: Evaluation Matrix of Questions: Relevance, Policies and Systems, Performance and Impact, Financing

Relevance of the To w GEF		
	To what degree does the GEF maintain global relevance and what strategies	Relevance and coherence will be assessed in terms of both alignment
	could be implemented to further its global significance?	with the global context (including the Sustainable Development Goals)
		and alignment with the Conventions.
ls th	Is the GEF's programming effectively aligned with country specific priorities	
and	and overarching global environmental concerns?	Alignment with country needs and priorities will be assessed in the
		broader context of global environmental challenges, public and private
How	How does the relevance of the GEF intersect with the guidance provided by	funding available to address environmental degradation and the GEF
the (the Conventions? Additionally, does GEF programming adequately align	resource envelope, drawing on external and internal evaluations and
with	with focal areas and objectives delineated by both Conventions and	the literature.
indiv	individual countries, particularly in light of the increasing emphasis on	
inte	integrated and impact programs?	
		Relevance findings will be synthesized from focal area studies, the
Have	Have the policies implemented by the GEF facilitated the necessary	Country Engagement Strategy, thematic and project-level evaluations,
flexi	flexibility to maintain relevance and respond efficiently to recent crises?	evaluations of the integrated and impact programs.
Ном	How well positioned is the GEF to support countries in addressing the triple	
envi	environmental crises, ensuring attention to socio-economic co-benefits,	
socié	social justice, and equity in its assistance efforts?	
Implementation of Wha	What is the current status of progress toward achieving the main objectives	Progress on the GEF-8 Strategy will be assessed through all formative
the GEF-8 Strategy outli	outlined in the GEF-8 Strategy?	components of the various thematic evaluations; the evaluation of the
		Results Based Management System, a quality-at-entry analysis of the
ls th	Is the current business model of the GEF conducive to supporting the	design elements of Chief Executive Officer-endorsed projects in GEF-8.
strat	strategy and effectively facilitating its implementation?	
		Responsibilities and relationships among members of the GEF
		partnership including STAP, the Agencies, the operational focal points
		and CSO Network, will be examined in the context of the integrated and

24

Implementation of GEF policies on safeguards; Have GEF policies approach? GEF policies on gender; Do GEF projects pr peoples, civil socie these endeavors? indigenous these endeavors? peoples, and civil societv		manat Drazzowi and the overlastice of the Country Engineet
<u> </u>		impact Programs and the evaluation of the country Engagement Strategy.
	Have GEF policies been effectively implemented to foster a whole of society	OPS8 will review the implementation of recommendations on prior IEO
		evaluations on implementation of GEF policies in the context of recently
		closed projects and a quality at entry assessment of recently approved
	Do GEF projects prioritize support for gender, inclusion of indigenous	projects.
	peoples, civil society, and youth? What findings and lessons emerge from	
indigenous peoples, and civil society		Other sources include evaluations of socio-economic co-benefits,
peoples, and civil society		evaluation of gender and inclusion in fragile and conflict affected
		situations, and the evaluation of Community Based Approaches.
s for	Is the Results Based Management System adequately meeting the needs of	Evaluation of the GEF's RBM system, indicators and quality of
results-based the GEF Partnership for effective	ip for effective project monitoring information?	information in the GEF Portal. Annual Performance Report will assess
management and		the extent to which information underpinning GEF evaluations is of high
Knowledge Are the self-evalua	Are the self-evaluation systems yielding high quality information for both	quality, candid and consistently applies terminal evaluation guidelines.
management for accountability a	for accountability and organizational learning purposes?	
		A special study of results frameworks in FCV contexts will shed light on
Is the GEF effectively fulfilling its	ely fulfilling its role as a significant data and information	monitoring and evaluating in difficult country contexts.
provider, and are t	provider, and are there any systemic issues that need addressing in this	
regard?		The Learning from Challenges study, and an assessment of knowledge
		platforms through the evaluations of the integrated and impact
How well is the GE	How well is the GEF positioned as a "learning organization"? Does it have	programs will inform the status of Knowledge Management.
the right level of e	the right level of evidence, analysis and knowledge to be able to prioritize the arrivers and arranged	

Key issue	Evaluation question	Scope and evaluation sources
	What are the environmental and socio-economic outcomes of GEF interventions, and how sustainable are these over the long term?	Performance trends will be observed from portfolio analysis, Annual Performance Reports, Annual Evaluation Reports, mid
Performance and		term reviews, focal area studies, Strategic country cluster
Impact, Policy Coherence, Socio	Vuhat are the impacts of GEF support within countries, and now sustainable are GFF interventions over the long term?	evaluations on drylands, small Islands, the Amazon, Lower Mekong Region, as well as evaluations of the integrated and
economic co-		impact programs. The study on co-benefits will provide evidence
benefits,	What strategies best help countries achieve policy coherence in the context	on socio economic outcomes, and the study on policy coherence
sustainability of	of competing environmental, social and economic priorities?	will delve into the GEF experience of driving policy coherence
	What role does behavior change play in influencing the long-term	cowards achieving Strater milpaces.
	sustainability of outcomes?	Special focal area themes include evaluation of water security,
	In the context of a whole-of-corciety annroach what stratenies hest help	sustaninable 101est management, sustannable chries, urgianus, cang werning evetame labseing out DCBs marruny raduction
	in the context of a whole of society approach, what strategies best field recisiont countries recognize the constraics between alchal environmental	warming systems, priasing out r cos, merculy reduction.
	recipient countries recognize the synergies between global environmental benefits and social and economic co-benefits particularly those related to	
	social justice and equity?	
Catalytic Role of the	Has the GEF effectively acted as a catalyst in promoting broader adoption	These cross- cutting themes will be addressed through studies on
GEF, Nature Based	and scaling up for transformational change either through its own	portfolio risk, use of advanced technologies in projects, the
Solutions, Risk	interventions, through partnerships or demonstration effects?	implementation of Nature Based Solutions, support for broader
Appente, and Innovation in the	How has GEF effectively implemented Nature Based Solutions to achieve	auoptioni, quanty at entry analysis for elements of transformational change. the evaluations of Integrated and
pursuit of	transformational change?	Impact Programs, the focal area assessments, the private sector
transformational		analysis on the commodities and cities programs, and the study
change	What is the evidence on the GEF record for supporting the use of new technologies?	on policy coherence.
	mission to enhance Global Environmental Benefits?	
	How is the GEF effectively using governance and policies, financial leverage, multi-stakeholder Dialogues and innovation to drive transformational change?	

Key issue	Evaluation question	Scope and evaluation sources
Finance for Transformational	How does the GEF effectively catalyze financing to scale its interventions?	This theme will draw on the cofinancing study, external sources, the private sector study, the evaluation of integrated and impact
Change	How does the GEF leverage non grant instruments to innovate and scale up conservation financing?	programs, evaluation of the NGI.
Overall Competitive Advantage of the GEF	What specific advantages does the GEF partnership offer in addressing contemporary environmental challenges?	This will draw on all OPS8 component evaluations and culminate in a special focus study to address efficiency, roles and
in Addressing Global Environmental	Are the policies. structure. administrative processes and financing of the GEF	relationships among the various parties of the GEF partnership, a special focus on the Scientific and Technical Advisory Panel (STAP)
Challenges	well suited to fulfill its mission effectively?	and an assessment of the competitive advantage of the GEF.
	Is the GEF's balance of priorities contributing to better outcomes?	

V. SECTION 4. OPS8 METHODOLOGICAL CONSIDERATIONS

Tools and Methods

1. The evaluative inputs into OPS8 utilize a variety of methods, depending on the objectives of the individual evaluations. A systems approach is adopted in most evaluations to evaluate along the theory of change presented in figure 3. The methods used adhere to international good practice standards and typically involve a mixed-methods approach. Methods include literature reviews, theory of change development, document reviews, interviews, surveys, geographic information system (GIS) and remote sensing, rapid impact evaluations, stakeholder consultations, country case studies, field verification, statistical and qualitative analysis, and triangulation of findings. The limitations of each evaluation are clearly reflected in the respective approach paper/concept note.

2. **Post completion verification and quality-at-entry analysis.** The IEO has developed methodologies for post completion verification and quality-at-entry analysis of projects. These will be applied consistently in thematic evaluations for GEF and LDCF/SCCF projects to facilitate comparisons and aggregated reporting. Geospatial analysis will be applied where and as appropriate to measure environmental outcomes.

3. **Impact pathways and drivers.** OPS8 will analyze the full portfolio of GEF projects and activities, identifying impact pathways and specifying impact drivers and assumptions for modeling progress toward impact as specified in the IEO theory of change. Evidence on progress toward impact will be gathered from completed projects between January 2021 and June 2024. The GEF-IEO theory of change (figure 1) provides a general framework for evaluating GEF interventions.

4. **Data limitations.** As part of the fallout from the COVID pandemic, some project timelines may have been disrupted, leading to delayed midterm reviews and terminal evaluations. OPS8 will report on any resultant data limitations and ensure that its findings take appropriate account of these.

5. **Credible claims of contribution.** Credible claims of contribution will be made based on the logical and feasible design of interventions, their implementation as designed, the occurrence of expected early results, and consideration of potential alternative explanations for results. Analysis will attempt to determine the added value of the GEF's contributions.

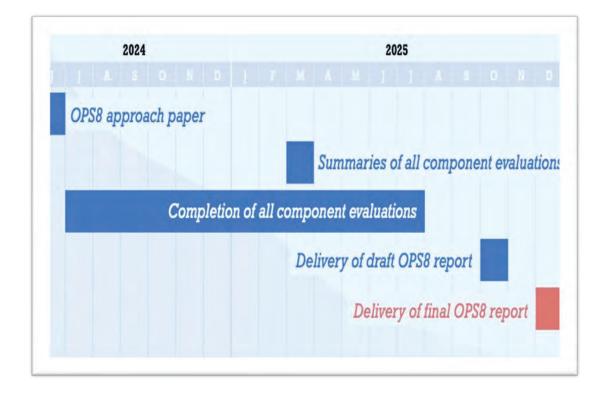
Organizational Aspects

6. **Stakeholder consultations.** OPS8 will be an in-depth evaluation using a participatory approach characterized by regular stakeholder consultation and involvement throughout the evaluation process, notably through reference groups and targeted dissemination and outreach to key stakeholders. Subregional meetings of GEF focal points and Expanded Constituency Workshops will offer an invaluable learning opportunity for the IEO to gain insights from country stakeholders on issues of relevance to them. These meetings will enable the IEO to gather feedback from countries on a variety of issues related to GEF projects and processes.

7. **Quality assurance.** Five external expert quality assurance advisers from developed and emerging economies have been appointed. The external review panel consists of the following experts: Monika Weber Fahr, Patricia Rogers, Stefan Schwager, Vinod Thomas and Hasan Tuluy. These individuals are recognized international development professionals in the fields of the environment, development, and evaluation and will provide quality assurance through all stages of preparing OPS8. They will provide guidance throughout the evaluation process—including conceptualization of the evaluation, interpretation of the findings, and framing of the recommendations. The IEO has already benefited from the panel's feedback in the development of this approach paper. Another key component of the quality assurance process is review of the individual evaluations and studies. Peer reviewers and reference groups have provided, and will continue to provide, quality feedback and inputs into the individual evaluations as they are prepared. At this stage, every component evaluation is either completed or under way, and quality review meetings with internal and external reviewers have been held for all evaluations.

8. Deliverables and timelines. OPS8 will be prepared and delivered in time for the GEF-9 replenishment discussions, with the first draft submitted for comment in September 2025. The component evaluations will be shared (or, in some cases, have already been shared) with the GEF Secretariat and the GEF Agencies for comment and discussion of recommendations. They will be presented at Council meetings during the GEF-8 period; they will then be published as evaluation reports and uploaded to the IEO website as they are endorsed by the Council. Early findings of the individual component evaluations will be shared with the GEF Secretariat and the Agencies in February 2025 and made available for the first replenishment meeting in the spring of 2025. The draft OPS8 report will be shared with the GEF Secretariat, Agencies, country stakeholders, and civil society in September 2025 for comment and will inform the GEF-9 replenishment meeting in October 2025. The final report will be delivered to the Council in December 2025. Besides the GEF Council and replenishment participants, the OPS8 report and component evaluations will be distributed widely to GEF partners, stakeholders, and civil society, and will be uploaded to the IEO website. The report will be completed within the GEF-8 budget envelope of the IEO.

Figure 3: Timeline of OPS8 deliverables



VI. ANNEX 1: SUMMARY OF THE EVOLUTION OF THE GEF'S OVERALL PERFORMANCE STUDIES

9. The evolution of the Global Environment Facility's overall performance studies provides valuable insights into the Facility's effectiveness and contribution toward impacts over time. They have provided critical feedback for the GEF to continually evolve and improve its strategies and operations to address global environmental challenges effectively.

- **OPS1.** Requested by the Council in 1996, this study concluded that the GEF had effectively established new institutional arrangements and programming approaches across its four focal areas. It had successfully leveraged cofinancing for projects and demonstrated positive impacts on policies and programs in recipient countries.
- **OPS2.** Conducted to assess the achievement of the GEF's primary objectives, OPS2 found that GEF-supported projects significantly addressed global environmental problems and had produced important project results by 2002.
- **OPS3.** Prepared between September 2004 and June 2005, OPS3 evaluated GEF activities' results and sustainability at the country level; and the GEF's catalytic role, policies, institutional structure, partnerships, and implementation processes. It highlighted substantial progress in the GEF system, but emphasized the need for constructive dialogue in defining baselines.
- **OPS4.** This study determined that the GEF remained relevant to the global conventions and national priorities, with effective projects producing sustainable outcomes. However, it identified the need to improve the GEF's efficiency in programming, project identification, formulation, and results-based management.
- OPS5. This study affirmed the GEF's role in achieving its objectives and supporting countries in meeting their environmental obligations. It recognized the need for the GEF to reflect on its organizational and business model and enhance efficiency in project approval processes.
- **OPS6.** This study comprehensively assessed the GEF's relevance, performance, impact, institutional, and governance issues. While acknowledging the GEF's strong track record in project performance and catalytic role, it emphasized the need for further improvements in programmatic approaches, integration across focal areas, and operational governance.
- **OPS7.** The OPS7 comprehensive evaluation assessed the GEF's progress in addressing the gaps identified in OPS6 and the extent to which it had further enhanced its effectiveness and impact.

VII. ANNEX 2: EVOLUTION OF INTEGRATED PROGRAMMING IN THE GEF¹⁰

10. The Global Environment Facility invests in projects tailored by countries to tackle specific focal area objectives, guided by the relevant conventions for which GEF serves as a financial mechanism. Over the years, the use of GEF grants has evolved from multifocal area to integrated approaches, driven by the need for better integration and the creation of multiple global environmental benefits based on country-specific needs.

Multifocal Area Programming

11. Multifocal area programming involves utilizing GEF financing from multiple focal areas to address various GEF objectives and outcomes within each area. The prevalence of multifocal area projects has grown over time, representing 13 percent of GEF funding in GEF-4 and increasing to 28 percent in GEF-5. This approach provides countries with opportunities to leverage GEF financing according to their priorities, aiming to generate global environmental benefits. Multifocal area programming has been instrumental in advancing initiatives such as the Sustainable Forest Management program, encouraging countries to exploit synergies across focal areas for preserving crucial forest landscapes. However, a challenge of multifocal area programming lies in the expectation that global environmental benefits will directly correlate with the investment in focal areas, which can be difficult to establish and may limit synergy harnessing while risking negative trade-offs.

Integrated Approach Programs

12. During GEF-6, the "integrated approach" was introduced with three pilot programs targeting major drivers of global environmental challenges. These IAPs—focused on urbanization (Sustainable Cities), commodity-driven deforestation (Commodities), and food security in Sub-Saharan Africa's drylands—were structured to allocate GEF financing coherently, aiming for sustained generation of multiple global environmental benefits while preventing adverse impacts on related objectives. Integrated programming enables projects to exploit synergies and mitigate negative trade-offs. Moreover, it facilitates multistakeholder engagement due to its alignment with sectoral priorities crucial for economic growth and development.

Impact Programs

13. Building on the experiences of GEF-6, GEF-7 introduced impact programs to drive transformative changes in key economic systems, aligning with multiple convention goals and focal area strategies. GEF financing closely corresponds to convention objectives while accommodating priorities that are best addressed through separate investments within each focal area. This approach aligns with the Leaders' Pledge for Nature, advocating for enhanced integration across multilateral agreements. Impact programs empower countries to pursue holistic approaches in line with their national development priorities, fostering integration among GEF investments and attracting private sector financing.

¹⁰ Source: GEF Secretariat, 2022, <u>GEF-8 Programming Directions</u>,

Integrated Programs

14. In response to the escalating global environmental challenges, GEF-8 and beyond will increasingly rely on integrated programming to scale up investments for global environmental benefits. Proposed integrated programs for GEF-8 aim to promote blue and green recovery from the COVID-19 pandemic, reflecting the urgency to address pressing threats to the planet.

References

- BCC Research. 2023. "Global Nanotechnology Market." BCC Research, Boston.
- Campa, M., et al. 2024. "Nanotechnology Solutions for the Climate Crisis." Nature Nanotechnology October.
- G20 SFWG (G20 Sustainable Finance Working Group). 2024. 2024 G20 Sustainable Finance Report.
- GEF (Global Environment Facility). 2010. "Rules and Guidelines for Agency Fees and Project Management Costs." GEF/C.39/9. GEF, Washington, DC.
- GEF (Global Environment Facility). 2022a. "GEF Programming Strategy on Adaptation to Climate Change for the LDCF and the SCCF for the GEF-8 Period of 1 July 2022 to 30 June 2026 and Operational Improvements." GEF/LDCF.SCCF.32/04/Rev.01. GEF, Washington, DC.
- GEF (Global Environment Facility). 2022b. "Work Program for the GEF Trust Fund." GEF/C.62/07. GEF, Washington, DC.
- GEF (Global Environment Facility). 2024a. "GEF Risk Appetite." GEF/C.66/13. GEF, Washington, DC.
- GEF (Global Environment Facility). 2024b. "Work Program for GEF Trust Fund." GEF/C.68/04/Rev.02. GEF, Washington, DC.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2018a. <u>Evaluation of GEF Support for</u> <u>Transformational Change</u>. Evaluation Report No. 122. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2018b. *Formative Review of the Integrated* <u>Approach Pilot Programs</u>. Evaluation Report No. 126. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2022a. <u>GEF Integrated Approach to Address</u> <u>the Drivers of Environmental Degradation</u>. Evaluation Report No. 154. Washington, DC: GEF IEO.

- GEF IEO (Global Environment Facility Independent Evaluation Office). 2022b. <u>GEF Institutional Policies and Engagement</u>. Evaluation Report No. 150.Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2022c. "<u>GEF Evaluation Policy</u>." GEF IEO, Washington, DC.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2022c. <u>Seventh Comprehensive Evaluation</u> <u>of the GEF: Working Toward a Greener Global Recovery</u>. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2023. <u>Results-Based Management: Agency</u> <u>Self-Evaluation and the GEF Portal</u>. Evaluation Report No. 158. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2024a. <u>Evaluation of GEF Support in Fragile</u> <u>and Conflict-Affected Situations</u>. Evaluation Report No. 151. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2024b. <u>LDCF/SCCF Annual Evaluation</u> <u>Report 2023</u>. Evaluation Report No. 161. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2025a. <u>Evaluation of Cofinancing in the</u> <u>GEF</u>. Evaluation Report No. 168, Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2025b. <u>GEF Support to Climate Information</u> <u>and Early Warning Systems</u>. Evaluation Report No. 169. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2025c. <u>LDCF/SCCF Annual Evaluation</u> <u>Report 2024</u>. Evaluation Report No. 167. Washington, DC: GEF IEO.

- GEF IEO (Global Environment Facility Independent Evaluation Office). 2025 forthcoming. <u>Evaluation of</u> <u>Components of the GEF's Results-Based Management</u> <u>System</u>. Evaluation Report No. 173. Washington, DC: GEF IEO.
- GEF Secretariat (Global Environment Facility Secretariat). 2022a. "<u>GEF-8 Programming Directions</u>." GEF/R.08/29/ Rev.01. GEF, Washington, DC.
- GEF Secretariat (Global Environment Facility Secretariat). 2022b. "<u>GEF-8 Strategic Positioning Framework</u>." GEF/R.08/28. GEF, Washington, DC.
- GEF Secretariat (Global Environment Facility Secretariat). 2024. "<u>The GEF Monitoring Report 2023</u>." GEF/C.66/03. GEF, Washington, DC.
- Khatoon, U.T., and A. Velidandi. 2025. "An Overview on the Role of Government Initiatives in Nanotechnology Innovation for Sustainable Economic Development and Research Progress." Sustainability 17 (1).
- Lee, R.Y., S. Seitzinger, and E. Mayorga. 2016. "Land-based nutrient loading to LMEs: a global watershed perspective on magnitudes and sources." *Environmental Development* 17: 220–29.
- Metternicht, G., E.R. Carr, and M. Stafford Smith. 2020. "Why Behavioral Change Matters to the GEF and What to Do About It." Scientific and Technical Advisory Panel to the Global Environment Facility, Washington, DC.

- Muhammad, I.D. 2022. "<u>A comparative study of research</u> and development related to nanotechnology in Egypt, <u>Nigeria and South Africa</u>." Technology in Society February.
- OECD (Organisation for Economic Co-operation and Development). 2001. <u>The DAC Guidelines: Poverty Reduction</u>. Paris: OECD.
- UNDP (United Nations Development Programme). 2024. "<u>UNDP takes its Blockchain Academy global</u>." Article, November 19.
- UNEP (United Nations Environment Programme). 2024. "Draft report on the sixth review of the financial mechanism." UNEP/POPS/COP.12/INF/36. UNEP, Geneva.
- UNECA (United Nations Economic Commission for Africa). 2020. "Towards an African Nanotechnology Future: Trends, Impacts and Opportunities." UNECA, Addis Ababa.
- World Economic Forum. 2025. <u>The Global Risks Report 2025</u>. Geneva: World Economic Forum.
- Yasuda, Yumiko, and Fabiola Tabora. 2024. "<u>Enhancing</u> <u>transboundary water cooperation through</u> <u>multistakeholder regional dialogues</u>." International Waters Experience Note 2.

The Independent Evaluation Office (IEO) of the Global Environment Facility (GEF) was established by the GEF Council in July 2003. The Office is independent from GEF policy making and its delivery and management of assistance.

The Office undertakes independent evaluations at the strategic level. These evaluations typically focus on cross-cutting themes, such as focal area-wide topics or integrated approaches to delivering global environmental benefits. The IEO presents a GEF-wide annual performance report and also undertakes institutional evaluations, such as assessing GEF governance, policies, and strategies. The Office's work culminates in a quadrennial comprehensive evaluation of the GEF.

The Office cooperates with professional evaluation networks on developing evaluation approaches, setting standards, and delivering training-particularly with regard to environmental evaluation and evaluation at the interface of environment and socioeconomic development. We also collaborate with the broader global environmental community to ensure that we stay on the cutting edge of emerging and innovative methodologies.

To date, the Office has produced over 160 evaluation reports; explore these on our website: www.gefieo.org/evaluations.

Independent Evaluation Office, Global Environment Facility 1818 H Street, NW • Washington, DC 20433, USA www.gefieo.org





Independent Evaluation Office GLOBAL ENVIRONMENT FACILITY