

ops8

INTEGRATION FOR GREATER IMPACT

EIGHTH COMPREHENSIVE EVALUATION OF THE GEF

September 8, 2025



**Independent
Evaluation Office**
GLOBAL ENVIRONMENT FACILITY



INTEGRATION FOR GREATER IMPACT

EIGHTH COMPREHENSIVE EVALUATION OF THE GEF

© 2025 Global Environment Facility Independent Evaluation Office

1818 H Street, NW, Washington, DC 20433

Internet: www.gefio.org/

email: gefevaluation@thegef.org

Reproduction permitted provided source is acknowledged.

Please cite the work as follows: Global Environment Facility Independent Evaluation Office (GEF IEO), *Integration for Greater Impact: Eighth Comprehensive Evaluation of the GEF*, 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.

The full report is available on the GEF IEO website: <https://www.gefio.org/evaluations/ops8>

ISBN: 978-1-64233-067-0

Editing: Nita Congress, Karen Holmes, and Liesl Wiederkehr

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

Acknowledgments.....	vii	5.5 Land degradation	78
Abbreviations.....	viii	5.6 Chemicals and waste.....	82
Executive summary	ix	5.7 Multifocal area, including nature-based solutions	87
PART I: CONTEXT FOR OPS8	1	5.8 Summary.....	92
Chapter 1: Introduction.....	2	PART III: ENABLERS OF TRANSFORMATION	95
1.1 Current global environment	3	Chapter 6: Integrated programming.....	96
1.2 The GEF's role	5	6.1 Evolution of the portfolio	96
1.3 GEF progress since OPS7.....	7	6.2 Relevance of integrated programming	100
1.4 OPS8 purpose, methods, and limitations.....	8	6.3 Governance of integrated programming	102
1.5 Organization of this report.....	12	6.4 Effectiveness	105
Chapter 2: The GEF portfolio.....	15	6.5 Efficiency	108
PART II: PERFORMANCE	23	6.6 Innovation.....	112
Chapter 3: GEF performance.....	24	6.7 Stakeholder inclusion	112
3.1 Portfolio performance	26	6.8 Sustainability and scalability.....	115
3.2 Performance at the regional/country level.....	32	6.9 Knowledge management	117
3.3 Enhancing achievement of long-term impact. .	39	6.10 Summary.....	119
3.4 Efficiency in resource use	45	Chapter 7: Operationalizing social inclusion	121
3.5 Summary.....	47	7.1 Inclusion in GEF policies and safeguards	122
Chapter 4: Socioeconomic co-benefits	48	7.2 Inclusion trends in GEF-supported projects ..	124
4.1 Socioeconomic co-benefits in project design .	49	7.3 Modalities for inclusion.....	127
4.2 Co-benefit outcomes	50	7.4 Factors affecting social inclusion	129
4.3 Sustainability of co-benefits	56	7.5 Community-based approaches	130
4.4 Summary	57	7.6 The Small Grants Programme.....	132
Chapter 5: Focal area performance	58	7.7 Summary.....	135
5.1 Biodiversity.....	58		
5.2 Climate change adaptation	64		
5.3 Climate change mitigation	69		
5.4 International waters.....	74		

Chapter 8: Engagement with the private sector136

- 8.1 Private sector engagement in the GEF portfolio137
- 8.2 Effectiveness141
- 8.3 GEF Strengths in engaging the private sector144
- 8.4 Constraints to GEF private sector engagement146
- 8.5 Summary.....148

Chapter 9: Risk and innovation 149

- 9.1 Risk in the GEF portfolio.....150
- 9.2 Technological innovation in the GEF portfolio154
- 9.3 Summary.....159

PART IV: GEF INSTITUTIONAL FRAMEWORK161

Chapter 10: Partners and financing.....162

- 10.1 The GEF partnership.....162
- 10.2 Financing174
- 10.3 Summary.....179

Chapter 11: GEF results and learning systems 180

- 11.1 Results-based management180
- 11.2 Knowledge management and learning185
- 11.3 Summary.....189

PART V: PLANNING FOR GEF-9191

Chapter 12: Conclusions and recommendations192

- 12.1 Conclusions193
- 12.2 Recommendations.....202

ANNEXES207

- A: Contributors.....208
- B: Independent Advisory Panel statement.....210
- C: Projects cited212

REFERENCES..... 220

BOXES

- 3.1 Definitions of key performance-related terms . .25
- 3.2 Examples of projects with satisfactory and unsatisfactory outcomes 26
- 4.1 Matching traditional knowledge and information technology for natural resource conservation in Mexico.....52
- 4.2 Socioeconomic co-benefits in country clusters55
- 5.1 Involving Indigenous communities 62
- 5.2 Effects of COVID-19 on economic activities around Global Wildlife Program protected areas 63
- 5.3 Examples of more and less effective projects in climate change adaptation 68
- 5.4 TDA-SAP contribution to policy coherence in Georgia and Azerbaijan77
- 5.5 Niger Community Action Programs 82
- 5.6 Integrating climate change risks into water and flood management in Azerbaijan..... 82
- 5.7 Eco-industrial park legislation in Viet Nam....87
- 5.8 India: Scaling up GEF NbS interventions through the Green Climate Fund 92
- 6.1 Six domains for evaluating the additionality of integrated programming97
- 7.1 SGP supports women-led nature-based enterprise in Lesotho133
- 7.2 SGP encourages leadership by Indigenous people in Vanuatu134
- 8.1 Private sector engagement across the GEF focal areas143
- 8.2 Effectiveness of global and regional programs in engaging private actors144

FIGURES

- 1.1 GEF IEO theory of change 11
- 2.1 GEF Trust Fund financing by focal area and corporate program16
- 2.2 Multifocal area projects as a share of the GEF portfolio and of GEF Trust Fund financing16
- 2.3 Cofinancing ratio by GEF Agency type..... 17
- 2.4 Growth of programmatic approaches in the GEF Trust Fund portfolio18

2.5	GEF Trust Fund financing and cofinancing ratios for LDCs and SIDS.	19	6.2	Frequency of environmental benefits reported for integrated program child projects and stand-alone projects.	106
2.6	GEF Trust Fund financing and cofinancing ratios by region.	19	6.3	Percentages of integrated program child projects and matched stand-alone projects reporting activity delays.	109
2.7	Top 10 countries in GEF financing (million \$) .	20	6.4	Frequency of various implementation issues reported for GEF-7 integrated program child projects and stand-alone projects.	110
2.8	Distribution of all GEF projects by activity cycle stage, by replenishment period.	20	6.5	GEF-8 integrated program child project activity cycle status.	111
3.1	Percentage of projects with outcomes rated in the satisfactory range, by GEF period.	26	6.6	Distribution of median risk ratings for child projects of integrated programs and stand-alone projects in GEF-8.	113
3.2	Percentage of projects with sustainability of outcomes rated in the likely range, by GEF period.	30	7.1	Inclusion of marginalized groups, change over time.	124
3.3	Percentage of projects with quality of implementation/execution rated in the satisfactory range, by GEF period.	30	7.2	Planned participation activities over time for each marginalized group.	128
3.4	Percentage of projects with M&E design/implementation rated in the satisfactory range, by GEF period.	31	7.3	Inclusion of different marginalized groups in projects in fragile and nonfragile contexts.	130
3.5	Projects rated in the satisfactory/likely range, by region.	33	8.1	Number and funding of approved GEF private sector engagement projects over time.	137
3.6	Percentage of GEF projects addressing transformational change in design.	42	8.2	Prevalence of private sector projects across GEF focal areas, country categories, regions, and Agencies.	138
4.1	Main categories of co-benefits and examples. .	51	8.3	Sampled private sector engagement projects by primary engagement modality.	139
4.2	Positive correlation between GEF activities and household assets.	54	8.4	GEF financing for NGI projects, GEF-5 to GEF-8.	140
5.1	Biodiversity: percentage of projects rated in the satisfactory/likely range.	61	8.5	Sampled GEF projects rated in the satisfactory/likely range for outcomes/sustainability by primary private sector engagement modality.	141
5.2	Climate change adaptation: percentage of projects rated in the satisfactory/likely range. .	67	8.6	Distribution of stakeholder perceptions on whether the GEF has a comparative advantage in engaging with the private sector.	146
5.3	Climate change mitigation: percentage of projects rated in the satisfactory/likely range. .	72	9.1	Heatmap of risk and outcome ratings.	151
5.4	International waters: percentage of projects rated in the satisfactory/likely range.	76	9.2	Risk profiles and outcomes.	152
5.5	Land degradation: percentage of projects rated in the satisfactory/likely range.	81	9.3	Distribution of risk ratings for private sector engagement and other projects, by innovation risk category.	154
5.6	Chemicals and waste: percentage of projects rated in the satisfactory/likely range.	85	9.4	Growth in top 10 broad and narrow technological innovations from GEF-6 to GEF-7.	155
5.7	Multifocal area: percentage of projects rated in the satisfactory/likely range.	89			
6.1	Distribution of stakeholder perceptions on whether GEF integrated programming approach is effective in tackling major environmental challenges.	104			

10.1 Intervention logic of the Country Engagement Strategy	164
10.2 Prevalence and trends in GEF projects where Agencies perform a dual role	169
10.3 Distribution of stakeholder perceptions on whether GEF Agencies cooperate in implementing GEF activities	171
10.4 Project components by share in GEF financing/cofinancing for completed projects	177
10.5 Realization of cofinancing by GEF replenishment period, country category, and Agency type	178
11.1 Variation in performance trends resulting from tracking GEF efficiency indicators by reporting year versus endorsement year	183

TABLES

2.1 Number of projects and amount of GEF financing by GEF replenishment period and funding source	15
2.2 Cofinancing ratio by funding source	16
2.3 Distribution of GEF-8 GEF Trust Fund financing by region and Agency (%)	18
3.1 Portfolio of closed projects	24
3.2 Reporting on project indicators at project completion by indicator category	27
3.3 Achievement of GEF-6 corporate environmental targets	29
3.4 Broader adoption reported at project completion (% of cohort)	40
3.5 Examples of pathways to replication and scaling under SGP OP7 (2020–24)	41
3.6 Efficiency of activity cycle: median time taken between steps in months	46
5.1 Overview of GEF Trust Fund biodiversity portfolio	59
5.2 Overview of LDCF/SCCF climate change adaptation portfolio	65
5.3 Overview of GEF Trust Fund climate change mitigation portfolio	70

5.4 Overview of GEF Trust Fund international waters portfolio	75
5.5 Overview of GEF Trust Fund land degradation portfolio	79
5.6 Overview of GEF Trust Fund chemicals and waste portfolio	83
5.7 Overview of GEF Trust Fund multifocal area portfolio	88
6.1 Intended contributions of GEF-8 integrated programs by focal area	98
6.2 Overview of GEF integrated programming	99
6.3 Average GEF integrated programming funding by program and child project (million \$)	99
6.4 Shares of cofinancing committed at approval by source, programmatic approach, and period (%)	100
6.5 Occurrence in GEF-8 project design documents of transformational change elements, by programmatic approach (%)	102
6.6 Achievement of GEF-6 corporate environmental indicators by programmatic approach	107
6.7 Median elapsed time from PIF approval to CEO endorsement	111
7.1 Gender and social inclusion in SGP OP7 (2020–24)	132
9.1 Dimensions and categories of the risk appetite framework	150
11.1 Availability of midterm reviews for projects completed in 2020	184

Acknowledgments

This 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 the GEF–Civil Society Network. 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. Nita Congress provided excellent editorial support to the team.

IEO team

Geeta Batra, Director
Anupam Anand, Senior Evaluation Officer
Mariana Calderon, Evaluation Analyst
Carlo Carugi, Senior Evaluation Officer
Fabrizio Felloni, Chief Evaluator and Deputy Director

Jeneen Garcia, Senior Evaluation Officer
Francisco Grahammer, Information Analyst
Silke Heuser, Evaluation Officer
Mitsuaki Hirai, Evaluation Officer
Manuella Koukoui, Senior Executive Assistant
Neeraj Negi, Senior Evaluation Officer
Rasec Niembro, Evaluation Analyst
Juan Jose Portillo, Senior Operations Officer
Eki Ramadhan, Evaluation Analyst
Thanicha Ruangmas, Data Scientist
Kate Steingraber, Evaluation Officer
James Sylvester-Paz, Knowledge Management Officer
Kseniya Temnenko, Evaluation Officer
Anna Vigg, Senior Evaluation Officer
Peixuan Zhou, Evaluation Analyst

Editorial team

Nita Congress, Chief Editor
Karen Holmes, Editor
Liesl Wiederkehr, Editor

Abbreviations

ADB	Asian Development Bank	MDB	multilateral development bank
AFOLU	agriculture, forestry and other land use	MMT	million metric ton
AI	artificial intelligence	NbS	nature-based solutions
CBA	community-based approach	NGI	nongrant instrument
CEO	Chief Executive Officer	OFP	operational focal point
CES	Country Engagement Strategy	OPS	comprehensive evaluation of the GEF (previously overall performance study)
CIews	climate information and early warning systems	PIF	project identification form
CO₂e	carbon dioxide equivalent	PIR	project implementation report
COP	conference of the parties	POP	persistent organic pollutant
CSO	civil society organization	PPP	private-public partnership
CSP	Country Support Program	R2R	ridge to reef
FAO	Food and Agriculture Organization of the United Nations	RBM	results-based management
FCS	fragile or conflict-affected situation	RFS	Resilient Food Systems
FCV	fragile, conflict-affected, and violent	SAP	strategic action program
FOLUR	Food, Land Use, and Restoration Impact Program	SCCF	Special Climate Change Fund
GCF	Green Climate Fund	SDG	Sustainable Development Goal
GEF	Global Environment Facility	SFM	sustainable forest management
GGP	Good Growth Partnership	SGP	Small Grants Programme
GWP	Global Wildlife Program	SIDS	small island developing states
IAP	integrated approach pilot	SLM	sustainable land management
IEO	Independent Evaluation Office	STAP	Scientific and Technical Advisory Panel
IFAD	International Fund for Agricultural Development	STAR	System for Transparent Allocation of Resources
IPLC	Indigenous Peoples and local communities	TDA	transboundary diagnostic analysis
IUCN	International Union for Conservation of Nature	UN	United Nations
KM&L	knowledge management and learning	UNCCD	United Nations Convention to Combat Desertification
LDC	least developed country	UNDP	United Nations Development Programme
LDCF	Least Developed Countries Fund	UNEP	United Nations Environment Programme
M&E	monitoring and evaluation	UNFCCC	United Nations Framework Convention on Climate Change
		WWF	World Wildlife Fund

Executive summary

BACKGROUND AND CONTEXT

In today's challenging global context, GEF-9 presents a critical opportunity for action. The Global Environment Facility's (GEF's) ninth replenishment comes at a time of mounting global crises. Despite important progress 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 had been breached in 2023, pushing humanity beyond the safe limits required for Earth's stability.¹ These escalating environmental threats are compounded by geopolitical conflict, trade tensions, and economic instability—factors that strain development finance and weaken global cooperation. The urgency for transformational, integrated, and inclusive action has never been greater.

Delays in addressing these challenges will entrench unsustainable practices, deepen vulnerabilities, and significantly raise the eventual costs of transition. Immediate and coordinated action is therefore essential if the global community is to avoid irreversible tipping points and secure a more resilient future. At

the same time, growing scrutiny from citizens, investors, and markets means institutions are increasingly measured by the credibility of their commitments. This places the GEF in a pivotal position to demonstrate leadership—advancing policy reform, catalyzing market transformation, and mobilizing innovative finance to drive the transformational change the world urgently requires.

Amid growing environmental pressures, the GEF is uniquely positioned to drive transformational action as the financial mechanism for six major multilateral environmental agreements. With more than three decades of experience, it has demonstrated an ability to deliver high-impact, performance-driven interventions, foster innovation, and take measured risks. The GEF leverages a catalytic funding model to mobilize additional resources and works through 18 implementing Agencies to connect global policy commitments with country-level action. This mandate enables it to move beyond isolated, sectoral projects toward integrated programs that address the underlying drivers of environmental degradation through cross-sectoral, systems-based solutions.

The GEF family of funds continues to evolve beyond the GEF Trust Fund. The Global Biodiversity Framework Fund now complements the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF) to support biodiversity, climate adaptation, and the needs of the most vulnerable nations. As it focuses on integrated and

¹ Stockholm Resilience Centre, [Planetary boundaries](#) web page.

transformational approaches, the GEF remains firmly aligned with its focal area priorities, supporting multiple conventions simultaneously and fostering synergies that link global priorities to national and local actions.

The Eighth Comprehensive Evaluation of the GEF (OPS8) centers on integration as a driver of change.

This emphasis reflects the need for approaches that connect sectors, actors, financing models, systems, and policy frameworks to address today's complex and interconnected environmental challenges. It builds on a core premise of the GEF's evolution: that solving these challenges requires coherent, multisectoral solutions and alignment of policies, institutions, and behaviors—while also acknowledging the complexity, transaction costs, and selectivity challenges involved. The GEF's mandate to serve multiple global environmental agreements positions it to pursue this broader vision of integration—not only through flagship impact programs but also by embedding social inclusion, private sector engagement, and risk-taking innovation across its portfolio.

OPS8 assesses how an approach focused on integration is shaping the GEF's work, drawing on 34 evaluations and studies completed since 2022. The report is organized around three core themes: GEF performance, the enablers of transformational change, and the partners and systems that underpin the GEF's effectiveness.

- **The first theme assesses performance across focal areas and country programs**, highlighting achievements and lessons on how socioeconomic co-benefits link environmental outcomes with improved livelihoods and resilience.
- **The second theme focuses on the enablers of transformational change**, reviewing the role of integrated programs in driving systemic solutions, the ways inclusion—particularly of Indigenous Peoples and local communities—has strengthened ownership and outcomes, and how private sector

engagement, risk-taking, and innovation are being advanced.

- **The third theme examines the partnership of GEF Agencies and stakeholders and evaluates the supporting systems**, including results-based and knowledge management, underscoring their importance for adaptive learning and lasting transformational impact.

OPS8 is timed to inform negotiations for the ninth replenishment of the GEF Trust Fund, at a moment when donors and countries are seeking clarity on how the GEF can deepen its impact, enhance its efficiency, and strengthen its role as a global convener of solutions that work across sectors and scales.

FINDINGS

The GEF portfolio

The GEF's portfolio reflects its long-standing role as a major source of financing for global environmental action. As of June 2025, the GEF has provided a total of \$26.5 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 \$23.5 billion across 5,505 projects. During GEF-8, \$3.9 billion has been approved for 525 projects—representing 76 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, 3,904 projects have been completed, demonstrating the GEF's delivery of results, accountability, and lasting environmental solutions.

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, GEF-8

saw an increase in Latin America and the Caribbean's allocation, which rose from 22 percent in GEF-5 to GEF-7 to 26 percent; Africa's share 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 share dropped from 9 percent to 5 percent. Global projects increased, rising from 16 percent to 19 percent over the same period. Support for small island developing states (SIDS) and least developed countries (LDCs) also increased, reinforcing the GEF's focus on vulnerable countries.

Across focal areas, allocations have adapted to reflect growing global needs.

Biodiversity remains the largest investment area, accounting for 29 percent in GEF-5 and rising to 37 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 decreased, although adaptation continues to be supported through the LDCF and the SCCF, with an increase in funding since GEF-6. Integrated programs gained significant prominence in GEF-8, now accounting for nearly 43 percent of the portfolio at this stage of the GEF-8 programming cycle—highlighting a continued shift toward more integrated, systems-based solutions.

At the institutional level, the distribution of GEF resources across Agencies has also evolved.

While the United Nations Development Programme (UNDP), the United Nations Environment Programme, and the World Bank have historically managed the majority of GEF Trust Fund resources, GEF-8 reveals notable changes. Comparing Agency shares for the replenishment periods through GEF-4 with GEF-8, UNDP's share declined from 36 percent to 29 percent, and the World Bank's fell sharply from 46 percent to just 8 percent. In contrast, the share for the Food and Agriculture Organization of the United Nations grew from 1 percent to 16 percent. 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.

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.

Performance

GEF project performance remains strong overall, with consistent outcome achievement across replenishment periods and notable results across focal areas.

The outcomes of approximately 82 percent of 2,475 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; those in Africa, Latin America and the

Caribbean, SIDS, and fragile and conflict-affected situations face greater implementation challenges. Child projects from integrated programs have shown slightly higher outcome ratings than stand-alone projects, although the differences are not statistically significant.

Although over 80 percent of projects achieve outcomes rated in the satisfactory range, only 59 percent demonstrate broader adoption of results, and nearly two-thirds are in the likely range for sustainability. While this performance is broadly in line with other international organizations, the persistent gap between high project-level outcomes and weaker impact and sustainability underscores a critical challenge for the GEF. Bridging this gap will require stronger integration of projects into national policies and budgets, adequate financing mechanisms to sustain results, more consistent attention to institutional and behavioral change, and systems for learning and support beyond project closure—so that individual project successes translate into systemic and lasting global environmental benefits.

Across focal areas, GEF interventions have contributed to biodiversity protection, improved land management, and strengthened regulatory frameworks. Fifty-nine percent of GEF-6 and GEF-7 projects achieved some form of broader adoption. This is an improvement over the performance reported for the cohorts covered in OPS7 and OPS6. 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.

At the country level, the GEF's interventions in country clusters of drylands, the Lower Mekong, and Pacific and Caribbean 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 more than a third of projects rated as unlikely to sustain outcomes at completion. Projects in chemicals and waste show the highest sustainability; while projects implemented in Africa, LDCs, SIDS, and fragile and conflict-affected situations face elevated risks. Strong implementation and execution—each rated in the satisfactory range in over 80 percent of projects—are closely linked to outcome success and long-term impact. Other factors contributing to stronger performance and sustainability include robust community engagement, cross-sectoral integration, alignment with national priorities, and strengthening of institutional and policy frameworks. Long-term financial viability remains a challenge because of continued reliance on external funding and limited integration with national monitoring systems.

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 strategic roadmap—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 focal area approaches like sustainable land and water management. Despite

these efforts, policy coherence initiatives so far have typically engaged in mainstreaming, with explicit harmonization of policy misalignments more limited.

Historical experience shows that GEF support for policy coherence can strengthen intersectoral coordination, although progress remains 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 such as 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. GEF Agencies with 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 different Agencies' comparative advantages in policy reform, alongside stronger strategic use of integrated programming and more catalytic initiatives, will be key to advancing environmental policy coherence goals in GEF-9.

GEF projects have delivered socioeconomic co-benefits alongside environmental outcomes.

These co-benefits have strengthened human and social capital, creating income opportunities and improving resilience—particularly for women, youth, and Indigenous Peoples and local communities. Many initiatives have linked conservation to sustainable livelihoods through ecotourism, sustainable agriculture, and nature-based enterprises. These co-benefits have fostered local ownership and political support, helping sustain environmental outcomes over time. However, co-benefits are often limited in scale and unevenly tracked due to short project durations, weak monitoring frameworks, and inconsistent inclusion of marginalized groups. Limited country-level coordination and enabling policies further constrain

scaling and sustainability. GEF-9 offers an opportunity to systematize collaboration, strengthen design and monitoring, and ensure socioeconomic benefits are fully integrated, supporting broader adoption of sustainable practices and long-term environmental impact.

Sustainability and clear exit strategies remain central challenges for GEF-supported interventions.

While many GEF projects achieve their intended outcomes by completion, sustaining these results beyond the life of GEF funding remains uncertain. Evaluations show that about one-third of completed projects face risks to long-term benefits, especially in fragile or capacity-constrained contexts. Key threats include inadequate financial mechanisms, limited institutional capacity, and weak integration of project outcomes into national policies and planning frameworks. Projects with strong local ownership, stakeholder engagement, and institutional reforms tend to sustain benefits more effectively, as seen in chemicals, waste management, and international waters projects. In contrast, biodiversity and land degradation projects are more vulnerable because gains often rely on continuous resource inputs, enforcement, or market conditions. Sustainability planning is often underdeveloped, with limited exit strategies, financing pathways, and postcompletion monitoring. OPS8 evidence shows sustainability improves when projects are embedded in broader programs or aligned with national priorities and budgets. Incorporating sustainability strategies into project design will help strengthen future programming and reinforce lasting impacts.

Integrated programs

The GEF's integrated programs provide a unique platform to address interconnected environmental challenges through coordinated, cross-sectoral approaches. Originally introduced in GEF-6 as integrated approach pilots, this programming reflects the

GEF's ability to align actions across multiple focal areas while supporting country-driven priorities and advancing multiple global environmental conventions.

Over successive replenishment cycles, the model has evolved from pilots to full impact programs in GEF-7 and expanded further under GEF-8. Integrated programs now account for 32 percent of allocations—up from 7 percent in GEF-6—and engage 98 countries, including 31 LDCs (up from 8) and 26 SIDS (up from 0). Nine of the 11 GEF-8 integrated programs address at least three focal areas, implemented through seven GEF Agencies and engaging governments, civil society, and the private sector. Although most remain in early implementation, initial results from the Global Wildlife, Sustainable Forest Management, Food Systems, and Sustainable Cities Programs include improved ecosystem management, sustainable commodity supply chains, and strengthened compliance systems.

The integrated programming model has matured, introducing clearer theories of change, competitive country and Agency selection, and knowledge platforms. GEF-8 expanded thematic coverage to plastic pollution and net-zero transitions, embedding nature-based solutions such as ecosystem-based adaptation, sustainable land and forest management, and regenerative food systems. When built on strong country ownership and capable coordination, integrated programs have delivered early outcomes, including improved land use planning, updated urban and spatial plans, and institutionalized governance and stakeholder engagement innovations, notably financial structuring and multistakeholder platforms.

However, these programs are complex, driving up transaction costs and increasing coordination demands at both global and national levels. Compressed design schedules have sometimes limited inclusive stakeholder consultation and alignment with national systems, while operational focal points have lacked adequate support to manage additional responsibilities. Coordination between global

platforms and country-level child projects has varied, presenting challenges for consistent knowledge exchange and program coherence. Sustaining and scaling results often depends on temporary funding or individual champions rather than durable institutional arrangements. Private sector engagement, while growing, remains below potential; and mechanisms to maintain outcomes beyond GEF support are underdeveloped.

Looking ahead, certain programs will mature and necessitate phaseout, while new initiatives will be required to address emerging and evolving challenges. This phaseout should be guided by clear principles for program selection, graduation, and sustaining knowledge resources. The reduced share of System for Transparent Allocation of Resources (STAR) allocations in GEF-8 has shifted participation incentives toward alignment with national priorities. To sustain engagement and impact under this new dynamic, it is critical to ensure program relevance, transparency in participation criteria, and access to robust knowledge systems.

These findings highlight the importance of strategic focus in program design. The focus should be on contexts with strong institutional readiness and potential for systemic transformation while supporting countries with limited capacity through targeted assistance. Integrated programs are most effective when timelines are realistic; responsibilities between global and country components are clearly defined; adaptive learning and knowledge exchange are robust; and participation is inclusive of LDCs, SIDS, and diverse stakeholders, including the private sector.

Social inclusion

The GEF has established robust environmental and social safeguards and significantly advanced inclusion, particularly in gender equality and engagement with Indigenous Peoples and local

communities. Since adopting the 2018 GEF Policy on Environmental and Social Safeguards, compliance with risk screening has improved; and gender considerations are now integrated into nearly all projects, supported by gender action plans, budgets for gender-specific interventions, and gender-disaggregated indicators. Advisory structures, including the Indigenous Peoples Advisory Group and gender partnerships, have strengthened technical expertise and promoted culturally appropriate, equitable approaches. Community-driven models such as the Small Grants Programme (SGP) continue to demonstrate how local leadership and participatory governance can deliver enduring environmental and socioeconomic outcomes. Civil society networks, including the GEF–Civil Society Organization (CSO) Network, have amplified local voices and contributed to more inclusive decision-making, while integrated programs are increasingly embedding inclusion into landscape management, value chains, and urban development.

Despite this progress, inclusion remains uneven and often dependent on individual champions rather than institutionalized practice. Youth, persons with disabilities, and other marginalized groups are still underrepresented, especially during early design stages when influence over outcomes is greatest. Projects frequently measure inclusion in terms of participation rates, such as the proportion of women in activities, rather than equitable decision-making power. Compressed preparation timelines, limited outreach budgets, and the absence of systematic indicators further limit meaningful engagement and tracking of inclusion results. Where inclusion is well implemented—particularly through community-based approaches that empower local leadership—projects show stronger performance and more sustainable results. However, sustaining inclusive outcomes beyond project closure remains challenging, especially where local institutions are weak or enabling policies are absent.

The GEF-CSO Network and other civil society mechanisms hold significant potential to enhance the scaling and sustainability of inclusion efforts. As an independent actor within the GEF partnership, the network can play an important role in strengthening country- and regional-level engagement. However, it continues to face capacity constraints, as not all members have expertise in project design or implementation; and in some countries and regions, membership lists require updating to improve communication and coordination. Strengthening these areas would enable the network to more fully realize its role in advancing the GEF’s objectives.

Private sector engagement

The GEF has significantly expanded its private sector engagement. It has moved from isolated pilot initiatives to more systemic approaches embedded within integrated programs on sustainable food systems, nature-based solutions, climate-smart agriculture, and blue economy opportunities. Partnerships with agribusiness, financial institutions, and small and medium enterprises have supported sustainable commodity supply chains, renewable energy, circular economy models, and sustainable urban services. These collaborations have accelerated the uptake of innovative technologies, including precision agriculture, remote sensing, traceability systems, and circular economy platforms for plastics and waste. GEF-supported financial innovations, particularly nongrant instruments (NGIs), have mobilized over \$10.6 billion in cofinancing and introduced mechanisms such as risk-sharing facilities and blended finance tools that de-risk private investments and influence business practices, opening new markets for environmental solutions.

Despite notable achievements, private sector engagement in the GEF remains inconsistent and below its full potential. Many projects still treat

private sector participation as supplementary rather than integral to design and implementation, relying heavily on public sector cofinancing, with private contributions often limited to in-kind support rather than significant financial commitments. NGIs remain underutilized, constrained by the \$15 million project cap, limited Agency and country experience with financial structuring, and a limited shallow pipeline of innovative proposals. Regulatory barriers, long approval timelines, and risk-averse institutional cultures further discourage engagement. In frontier markets and fragile contexts, weak enabling policies and regulatory frameworks compound these challenges. Lengthy project cycles and bureaucratic processes add to transaction costs, reducing the attractiveness of GEF initiatives for private partners.

Addressing these limitations will require expanding partnerships with the private sector arms of multilateral development banks, strengthening internal capacity for financial innovation, and embedding private sector participation as a core feature of GEF-9 programming. Realizing the full catalytic potential of the GEF also means building on its proven market transformation role—through policy reform, standards, capacity building, and value chain engagement—while scaling up the use of NGIs to mobilize private capital and de-risk innovation. By combining market transformation with catalytic financing, the GEF can better align with private sector incentives, foster systemic change, and accelerate progress toward global environmental benefits.

Risk and innovation

More explicit management of risk and innovation have gained greater visibility in the GEF portfolio, yet both are constrained by structural and operational limitations. While testing new approaches and deploying emerging technologies is often critical to transformational change, risk-taking within the GEF remains moderate and innovation is not yet

systematically embedded across the partnership. The adoption of a formal risk appetite statement in GEF-8 is an important step toward encouraging higher-risk, innovative initiatives; and several programs have successfully piloted digital monitoring tools and advanced technologies such as remote sensing, data analytics, and traceability systems for supply chains. These efforts have shown potential to increase efficiency, influence behavior change, attract additional investment, and shape national policy.

Systemic barriers limit broader uptake and scaling. Approval processes often favor established approaches, institutional and technical capacity gaps constrain innovation in lower-capacity settings, and limited incentives to take risks discourage experimentation. Strengthening risk management systems, aligning risk appetite with technological ambition, and investing in early stage innovation will be critical. Partnerships with proven innovators—including private enterprises, universities, and spin-off companies—alongside supportive policy environments and strong knowledge exchange, will be essential to embed innovation more systematically and deliver transformational environmental solutions.

Administrative and operational efficiency

Efficiency remains a GEF strength, but complexity is increasing. The GEF continues to demonstrate strong administrative and project cycle efficiency, maintaining one of the lowest overhead ratios among multilateral environmental funds at 3.7 percent of total expenditures and achieving a disbursement-to-approval ratio of 76 percent, compared to 31 percent for the Green Climate Fund. Agency fees, at around 9 percent, are also in line with those of peer climate funds. Recent reforms under GEF-8, including increasing the medium-size project cap to \$5 million and streamlining project cycle steps, have reduced the median

time from concept approval to Chief Executive Officer endorsement for full-size projects from 22 to 19 months, showing tangible progress in accelerating delivery.

Despite these gains, operational challenges remain.

Fewer than half of full-size projects meet the 18-month target. The expansion of specialized financing windows—such as NGI, innovation, inclusive conservation, and SGP initiatives—has introduced diverse objectives aimed at promoting inclusivity and innovation. However, this proliferation has also added procedural complexity, fragmented demand management, and increased transaction costs for countries and Agencies, even as it creates important opportunities to broaden participation, foster innovation, and strengthen country choice. Additionally, civil society and community-based organizations now access GEF resources through multiple entry points, each with distinct timelines and requirements, further complicating project development and alignment across the GEF partnership. To address these operational challenges, streamlining and consolidating funding mechanisms, together with harmonizing operational procedures, will be essential in GEF-9 to sustain efficiency gains, reduce administrative burdens, and enhance responsiveness to country needs, while preserving the GEF's comparative advantage as one of the most cost-effective multilateral environmental funds.

Partnership and financing

The GEF's partnership model remains a core strength but overlapping roles and differing Agency procedures have at times slowed delivery, increased transaction costs, and limited knowledge synthesis and sharing. The GEF's partnership model remains one of its defining strengths. It brings together 18 accredited Agencies—including United Nations (UN) organizations, multilateral development banks, and international nongovernmental organizations (INGOs)—alongside donors, civil society, the private

sector, and research institutions. This diversity enables countries to select Agencies best suited to their needs, leveraging the technical expertise and convention alignment of UN agencies, the financial scale and policy leverage of development banks, and the innovation and local access offered by INGOs. Combined with a country-driven approach that empowers national focal points to guide Agency selection, this network allows the GEF to deliver across levels, sectors, and geographies while aligning global environmental commitments with national priorities.

Administrative complexity remains a challenge within the GEF. Differences in Agency risk appetites and operational policies create inefficiencies, while multi-Agency projects often incur higher transaction costs and longer preparation times. In some cases, Agency components within the same project are managed and reported as separate initiatives, leading to gaps and reduced coherence. Knowledge-sharing systems also remain fragmented, limiting real-time learning across the portfolio.

Agencies often face inherent tensions in balancing their programming interests with governance responsibilities. This dynamic can limit effectiveness and collaboration, and lead to weakening national ownership and missed opportunities for strengthening local partner capacities. While conflict of interest rules exist, stakeholders note that this arrangement can discourage candid discussions of Agency performance, innovation, and comparative advantage. Additionally, competition among Agencies, particularly for leadership roles in integrated programs, has sometimes hindered collaboration and slowed delivery.

Addressing these administrative issues will require strengthening accountability, harmonizing operational practices, providing institutional support for country coordination platforms, conducting earlier and more inclusive country dialogues, and implementing a system-wide approach to knowledge management.

The Scientific and Technical Advisory Panel (STAP) remains a core strength of the GEF, and refining its mandate could amplify its scientific contributions and strategic influence across programs. The STAP ensures scientific rigor and supports innovation through early stage project reviews, thematic studies, and guidance on emerging issues. Its work has improved the technical quality and strategic orientation of GEF programs, supporting systemic, cross-sectoral approaches and advancing risk-informed design. However, its influence is shaped by an advisory mandate rather than direct implementation authority, which can limit the uptake of recommendations in country-level contexts. Stakeholders value its strategic thematic work, but note that the burden of routine project reviews may divert attention from broader horizon scanning and policy-oriented guidance to operational items that may be well covered by reviewers with deep project management and field experience. Updating the STAP's terms of reference and clarifying its focus could better align its expertise and governance with the evolving needs of the GEF, ensuring timely and impactful scientific input to the GEF's strategic directions while continuing to support innovation and quality assurance across the portfolio.

Country engagement has improved through the Country Engagement Strategy (CES), with opportunities for improvements in implementation. The CES has enhanced alignment between GEF programming and national priorities via upstream planning, national dialogues, and operational focal point support. In countries that have fully embraced the CES, cross-ministerial coordination has improved and GEF pipelines have become more strategically focused. Yet implementation has been uneven, with some dialogues occurring too late to influence programming and nonstate actor engagement remaining inconsistent. Strengthening focal point capacity, ensuring timely and inclusive dialogues, and improving monitoring systems will be critical to unlocking the full potential of the CES in GEF-9.

The GEF's financial foundation has long been regarded as one of its greatest strengths, underpinned by consistent donor confidence in its unique mandate to serve multiple conventions and deliver global environmental benefits. Successive replenishments have secured stable contributions that have enabled the GEF to maintain its catalytic role in supporting global environmental action. However, the donor base has narrowed over recent cycles, and contributions have become increasingly concentrated among a small number of donors. This concentration heightens exposure to financial and geopolitical risks. Despite record nominal funding secured for GEF-8, real-term resources have declined compared to GEF-5, although they remain higher than in GEF-6 and GEF-7. This erosion in purchasing power constrains the GEF's ability to meet rising global environmental demands. At the same time, the GEF has yet to fully leverage new sources of capital, such as philanthropic contributions and private finance, leaving significant opportunities for financial diversification untapped.

The predictability of resources provided through the STAR is widely recognized by recipient countries as a key comparative advantage of the GEF and helps them—particularly those with capacity constraints—access GEF resources more effectively. However, channeling resources through the STAR can also result in resource fragmentation. The GEF thus has introduced greater flexibility for countries to use STAR resources across different focal areas, enabling interventions to be implemented at scale. Moving forward, the GEF should maintain the comparative advantage of predictable resource allocation while ensuring that supported activities are delivered at an appropriate scale. 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.

Cofinancing remains central to the GEF model, demonstrating its catalytic effect in mobilizing additional resources; nevertheless, the quality and durability of cofinancing vary widely. Much of the reported cofinancing is derived from public sector budgets and linked to short-term project timelines rather than representing sustained commitments. Private sector participation is still limited, and contributions often take the form of in-kind support rather than significant financial investments, reducing their transformational potential. The GEF's flexible definition of cofinancing, which includes parallel financing and noncash contributions, has broadened participation but also raised questions about comparability and credibility, as these different types of contributions are not always equivalent or consistently reported. Realization rates are particularly low for loan-based cofinancing—55 percent of which goes unrealized—and for projects in LDCs and SIDS. In addition, verification of actual contributions is challenging due to incomplete documentation and difficulty tracking in-kind resources.

NGIs, designed to mobilize private capital and share risk, have demonstrated potential through blended finance models and guarantee mechanisms, but are underutilized due to structural barriers. These barriers include the complexity of structuring financial products under current GEF procedures, uneven Agency capacity for financial innovation, and the lack of robust risk-sharing mechanisms. Addressing these constraints—including revisiting the NGI operational cap and strengthening financial structuring capacity—will be critical for scaling and diversifying financing for environmentally sustainable solutions.

Results and learning systems

The GEF's systems for results, knowledge, and learning have shown meaningful improvements.

However, to support adaptive management, innovation, scaling, and transformation, these systems require deeper integration into core project functions, improved feedback loops, and sustained institutional commitment and resourcing. The GEF has strengthened its results-based management framework by expanding tracking tools and refining its corporate results system to better capture global environmental outcomes. Indicators are more harmonized across Agencies, aligned with environmental conventions, and tailored for integrated programming. These enhancements bolster the GEF's ability to monitor biophysical results such as greenhouse gas reductions, land restoration, biodiversity gains, and pollutants control.

The results-based management system remains heavily oriented toward outputs and near-term environmental outcomes. It has limited capacity to track deeper transformational changes including institutional strengthening, policy alignment, behavior shifts, and program sustainability. Reporting on socioeconomic co-benefits and inclusion outcomes remains inconsistent, making it difficult to assess broader development impacts. Weak feedback loops hinder the timely translation of data into adaptive decision-making and program refinement.

Knowledge efforts continue to grow, offering scope to overcome fragmentation and timing gaps. Knowledge management has advanced through targeted coordination platforms under integrated programs and thematic initiatives that produce technical guidance and foster exchanges within specific focal areas. Yet knowledge remains fragmented even within a program and is often confined to individual projects or Agencies. Timing mismatches—when global knowledge production does not align with country-level implementation—reduce practical value. Lessons from innovations such as blended finance initiatives, private sector engagement, and integrated programs are captured in evaluations but not consistently converted into operational tools or shared across programs.

and geographies. Notably, there is no centralized repository for knowledge generated across the integrated and impact programs despite knowledge being claimed as the core element of integrated programming value addition.

Institutional learning from challenges and failures is not yet fully systematized. While valuable insights on stakeholder engagement, financial design, and risk treatment are generated, they often remain confined to individual projects. Building on existing progress, the GEF should enhance feedback loops, create incentives for learning from failures, ensure structured uptake of evaluation findings, and translate lessons into practical guidance for both project and policy design—thereby moving toward a culture of continuous learning and improvement to support catalytic change.

RECOMMENDATIONS

The findings of OPS8 highlight both the progress and challenges facing the GEF as it strives for greater transformational impact. The GEF has demonstrated measurable environmental results, strengthened inclusion, expanded private sector engagement, and maintained one of the most efficient administrative structures among comparable funds. Its integrated programs have aligned global and national priorities, fostering innovative governance and knowledge sharing. Yet sustaining results beyond project closure, embedding innovation and risk-taking, deepening private sector engagement, and improving coordination across the growing number of financing windows remain critical challenges. These lessons point to the need for sharper selectivity, stronger sustainability planning, enhanced financial innovation, more inclusive and efficient country engagement, and a systematic approach to learning and adaptation.

The following recommendations outline how the GEF can build on its strengths while addressing these gaps to deliver deeper, more sustainable, and more scalable impact in GEF-9 and beyond.

- **Recommendation 1:** Strengthen the transformational impact of integrated programming, focusing on strategic selectivity and consolidation.
- **Recommendation 2:** Embed sustainability and financing arrangements at design to secure long-term outcomes.
- **Recommendation 3:** Pursue higher-risk, high-reward innovation with appropriate safeguards and incentives, aligned with the GEF's risk appetite framework.
- **Recommendation 4:** Unlock private sector potential and expand the use of NGIs to deliver scalable change.
- **Recommendation 5:** Streamline processes and improve efficiency across the GEF family of funds, where possible, to reduce application complexity and support countries, particularly those with limited capacity.
- **Recommendation 6:** Take decisive steps to address structural challenges within the GEF partnership and create an inclusive, transparent, and impactful country engagement process.
- **Recommendation 7:** To improve transparency and inclusivity in national planning processes, the GEF should encourage its Agencies to share their country-specific priorities and competencies.
- **Recommendation 8:** Strengthen financial sustainability and reduce reliance on a limited group of donors by improving cofinancing practices and building on current efforts to diversify the funding base.
- **Recommendation 9:** Integrate knowledge, results, and learning systems into a coherent platform that drives adaptive management and innovation across the GEF partnership.

PART I

Context for OPS8



Introduction

With over three decades of experience, the Global Environment Facility (GEF) is a leading multilateral environmental fund that supports developing countries in prioritizing and implementing environmental actions that deliver global environmental benefits. The GEF's mandate covers a broad range of environmental areas primarily tied to the 1992 Rio conventions and other multilateral environmental agreements: specifically, biodiversity, climate change, international waters, land degradation, and chemicals and waste. According to the June 2025 GEF Corporate Scorecard, since its inception in 1992, the GEF has provided more than \$23.0 billion in grants and mobilized an additional \$149.0 billion in cofinancing for more than 5,000 projects in 170 countries (GEF Secretariat 2025).

The GEF Trust Fund is replenished every four years; these replenishments are informed by a comprehensive independent assessment of GEF results and performance. There have been seven such overall performance studies of the GEF so far. This Eighth Comprehensive Evaluation of the GEF (OPS8), performed by the GEF's Independent Evaluation Office (IEO), aims to provide solid evaluative evidence drawn from 34 separate evaluations conducted since OPS7 to inform the negotiations for the ninth replenishment of the GEF ([box 1.1](#)).

Specifically, as established in the [approach paper](#) approved by the GEF Council in June 2021, the objective of OPS8 is to evaluate the progress made by the

GEF since OPS7, the extent to which the GEF is achieving the objectives set out in the GEF-8 Programming Directions (GEF Secretariat 2022a), and to identify potential improvements going into GEF-9.

The audience for OPS8 comprises the GEF donors, the GEF Council, the GEF Assembly, and the GEF partners—including the GEF Secretariat, the GEF Agencies, the GEF Scientific and Technical Advisory Panel (STAP), the convention secretariats and their conferences of the parties, the GEF–Civil Society Organization (CSO) Network—and project proponents from civil society, the public and private sectors, and the academic community.

This chapter of the OPS8 report sets the stage for understanding the evaluation by outlining its purpose, scope, approach, and methodology. It also provides essential background on the GEF as an institution, including progress made since OPS7. The chapter opens with a snapshot of the global environmental challenges and constraints the GEF must navigate—ranging from the unprecedented loss of ecosystems and biodiversity to climate change; chemical pollution; increasing pressure on forests, oceans, and wildlife; as well as persistent poverty, unemployment, social exclusion, and widening inequality.

1.1 CURRENT GLOBAL ENVIRONMENT

Escalating crises and the imperative for systemic transformation

The GEF's ninth replenishment comes at a time of escalating global environmental crises. Despite progress in areas such as biodiversity conservation, renewable energy, and sustainable agriculture, the overall pace of environmental degradation is accelerating. In 2024, global temperatures exceeded the 1.5°C threshold, triggering more frequent extreme weather events, intensifying ocean pollution, and accelerating biodiversity loss (Tollefson 2025). The Stockholm Resilience Centre reports that six of the nine planetary boundaries have already been breached, placing humanity beyond the safe operating space necessary for Earth's long-term stability.¹

Greenhouse gas emissions are at their highest recorded levels—surpassing 500 ppm carbon dioxide equivalent—with the energy sector accounting for over 60 percent of these emissions (IPCC 2023). Despite commitments under the Paris Agreement, emissions continue to rise, and the remaining global carbon budget could be depleted by 2028. Although global temperatures have already temporarily breached the 1.5°C threshold, limiting long-term warming to this target would require global emissions to decline by approximately 42 percent by 2030 and 57 percent by 2035 (Forster et al. 2025). Without rapid and sustained action, the world remains on course for 2.6°C–3.1°C of warming by the end of the century, with severe and widespread consequences (UNEP 2024b).

Biodiversity is also under severe threat. Species are going extinct at rates 10 to 100 times higher than natural background levels, with the most recent Living Planet Report 2024 noting a 73 percent decline in wildlife populations between 1970 and 2020 (WWF 2024). Key drivers include deforestation, habitat fragmentation, and climate change. The loss of biodiversity threatens vital ecosystem services—such as pollination, soil health, and water purification—which directly affects human well-being. For instance, global wetland coverage has declined by 35 percent since 1970, undermining water quality and access for over 2 billion people.² The economic impact is equally alarming: the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services estimates biodiversity loss costs the global economy approximately \$10 trillion annually, with impacts spanning agriculture, fisheries, health care, and food security (IPBES 2024). Pollinator declines alone put at risk \$235 billion worth of crop production annually.

Pollution now stands alongside climate change and biodiversity loss as a leading global crisis. It causes an estimated 9 million premature deaths annually (Fuller et al. 2022), affects ecosystem resilience (see, e.g., Sigmund et al. 2023), and imposes staggering economic costs (see, e.g., World Bank 2025). Each year, 19–23 million tonnes of plastic waste enter aquatic environments, degrading ecosystems and reducing the adaptive capacity of coastal and freshwater systems.³ Air pollution is the top environmental health risk, causing around 6.7 million deaths annually, largely due to cardiovascular and respiratory diseases. Broader chemical pollution—from air, water, soil, and food—contributes further to the burden of disease (Fuller et al. 2022). Meanwhile, global municipal solid waste is projected to rise from 2.1 billion tonnes in 2023 to

¹ Stockholm Resilience Centre, [Planetary boundaries](#) web page.

² World Health Organization, [Biodiversity and Human Health](#) web page.

³ United Nations Environment Programme, [Plastics Pollution](#) web page.

3.8 billion tonnes by 2050, with the cost of management and environmental damage expected to reach \$640 billion annually by midcentury (UNEP 2024c).

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.

Underlying these environmental crises are persistent market failures, policy incoherence, and weak governance.

In addition, institutional failures persist, with governments paying people more to exploit nature than to protect it (Dasgupta 2021). Governments continue to provide at least \$1.8 trillion annually in environmentally harmful subsidies (Koplow and Steenblik 2022), which in turn catalyze an estimated \$5 trillion in private investment in damaging sectors such as fossil fuel extraction, industrial agriculture, and commercial fishing (UNEP 2023). These financial flows undermine both environmental sustainability and efforts to achieve the Sustainable Development Goals (SDGs), especially for vulnerable populations.

The urgency of the current environmental situation cannot be overstated.

Accelerating climate change, biodiversity loss, pollution, and land degradation are converging in ways that threaten both planetary stability and human well-being. These crises are unfolding

more rapidly than earlier projections anticipated, creating a narrowing window for action. For many vulnerable populations, the impacts are already acute—manifesting as food insecurity, water stress, health risks, and displacement.

Confronting these interconnected challenges will require an integrated and ambitious global response that addresses biodiversity loss, climate change, land degradation, and social inclusion in a coordinated way.

Investments in nature-based solutions—including sustainable forest management, climate-smart agriculture, and ecosystem restoration—will be critical for enhancing resilience and securing food and water systems. At the same time, scaling up low-carbon technologies, resilient infrastructure, and circular economy models will be essential to ensure an inclusive and sustainable development pathway. Effective monitoring, knowledge exchange—including South-South cooperation—and the use of innovative platforms and technologies will be key to capturing lessons from pilot efforts and scaling impact. Given persistent funding constraints, the GEF must also pursue selectivity in its programming—focusing resources where it can deliver the greatest catalytic and transformational impact.

Financing for the environment

An investment of \$700 billion is needed to close the biodiversity financing gap (Nature Conservancy 2020).

The International Energy Agency and the International Renewable Energy Agency estimate, based on the COP28 consensus, that meeting energy system transformation goals aligned with a 1.5°C pathway requires at least \$4.5 trillion per year (IEA 2023; IRENA 2024). Agriculture, forest, and land-related initiatives received \$38 billion in 2023—just 2 percent of total climate finance (CPI 2025), even though the sector contributes about 21 percent of global emissions

(Nabuurs et al. 2022). To align with Paris Agreement pathways, investment in this sector must rise nearly 26-fold to about \$423 billion per year by 2030.

On the supply side, global climate finance, including both public and private flows, reached an estimated \$1.9 trillion in 2023; preliminary data suggest it exceeded \$2 trillion in 2024. This falls well short of the \$6 trillion-plus annual requirement (CPI 2025). Meanwhile, the green bond market has grown rapidly, with issuance topping \$620–\$700 billion in 2024, although this remains a fraction of required funding (Environmental Finance 2025).

Cleaning up chemical contaminants such as per- and polyfluoroalkyl substances (PFAS) globally is not just a massive environmental undertaking, but also a staggering economic challenge. Even the most conservative annual cleanup projections are in the trillions of dollars (approximately \$16 trillion), with added societal costs—such as health impacts, lost productivity, and ecological damage—pushing the total far higher (Ling 2024). The costs of cleaning up coastlines, waterways, marinas, and ports range between \$5.6 billion and \$15.0 billion per year just for direct cleanup efforts; addressing ocean plastic pollution is estimated at around \$150 billion in upfront investment, largely to support cleanup and shift to circular economies (Tolonen 2020).

These figures clearly show that while progress has been made in mobilizing climate and green finance, funding remains vastly insufficient across biodiversity, climate mitigation, chemicals, and water pollution. The scale of the funding shortfalls—spanning hundreds of billions to trillions annually—underscores a systemic mismatch between global environmental goals and available financial resources.

1.2 THE GEF'S ROLE

The GEF plays a strategic and distinct role in the international environmental finance architecture.

For over 30 years, it has served as the primary financial mechanism for the three Rio conventions: the Convention on Biological Diversity, the United Nations Framework Convention on Climate Change, and the United Nations Convention to Combat Desertification. Beyond these, the GEF provides financial support to other multilateral environmental agreements, including the Stockholm Convention on Persistent Organic Pollutants, the Minamata Convention on Mercury, and the Montreal Protocol on Substances that Deplete the Ozone Layer (through its Multilateral Fund). In 2023, the GEF was also designated the financial mechanism for the Global Biodiversity Framework Fund, which supports implementation of the Kunming-Montreal Global Biodiversity Framework, further consolidating the GEF's leadership in biodiversity finance.

The GEF also finances global action in other critical areas. Its international waters focal area supports transboundary cooperation aligned with global legal frameworks such as the United Nations Convention on the Law of the Sea and regional mechanisms like the United Nations Economic Commission for Europe Water Convention. In the area of sustainable forest management, the GEF contributes to the goals of the United Nations Strategic Plan for Forests 2017–2030 and the United Nations Forum on Forests. Through its integrated programming model, the GEF fosters coherence and synergy across multilateral environmental agreements, helping countries implement commitments in a coordinated and cost-effective manner while addressing systemic drivers of environmental degradation.

Although the GEF does not finance the SDGs directly, its programming is aligned with the SDG agenda.

GEF-financed projects contribute to SDG 13 (climate action), SDG 14 (life below water), and SDG 15 (life on land), as well as SDG 6 (clean water and sanitation),

SDG 7 (affordable and clean energy), and SDG 12 (responsible consumption and production). Through sustainable land management, agriculture, fisheries, and urban development, the GEF also supports SDGs 2 (zero hunger) and 11 (sustainable cities and communities). Initiatives under the Small Grants Programme (SGP) contribute to SDGs 1 (no poverty) and 5 (gender equality), reflecting the GEF's emphasis on local action, equity, and empowerment of marginalized groups.

The GEF-8 Programming Directions outline a dual strategy:

- Integrated programs targeting food systems, sustainable cities, forests, and ecosystems
- Continued investments in the five focal areas—biodiversity, climate change, international waters, land degradation, and chemicals and waste.

This approach enables the GEF to deliver both vertical (thematic) depth and horizontal (systemic) integration, maximizing synergies across environmental sectors and funding streams. GEF-8 also aimed to strengthen alignment with national priorities, enhance multistakeholder engagement (including with the private sector), and promote country ownership through a comprehensive Country Engagement Strategy.

Innovation is a core pillar of GEF-8. It is supported by mechanisms such as the Innovation Window and the Non-Grant Instrument Program, which aim to de-risk investment, scale up successful models, and mobilize private capital. The GEF-8 strategy also places emphasis on policy coherence for environmental benefits; monitoring and learning; and delivering co-benefits, such as improved livelihoods, enhanced food and water security, and gender equity. GEF-8 programs aim to be inclusive and participatory, ensuring benefits reach the most vulnerable.

On climate adaptation, GEF-8 aims to integrate resilience building into thematic programs such as

Sustainable Cities, Food Systems, and Ecosystem Restoration. The approach emphasizes ecosystem-based adaptation, nature-based solutions, and integrated natural resource management, embedding adaptation into broader development strategies rather than treating it as a stand-alone objective.

Despite its critical mandate, the GEF operates under increasingly constrained financial conditions. Funding levels have remained relatively flat across successive replenishment periods, even as environmental challenges grow more urgent and complex. To maximize its limited core resources, the GEF has historically mobilized significant cofinancing—often at a ratio of 1:7—through contributions from its Agencies, development banks, private investors, and country partners. Yet sustaining this degree of leverage is becoming more difficult. Many countries are facing heightened fiscal pressure from rising debt burdens, economic shocks, and intensifying demands on public spending. These constraints are diminishing the ability of both public and private actors to coinvest in environmental initiatives at the same scale as before.

In response, the GEF is deepening its collaboration with other major climate and environmental finance mechanisms—including the Green Climate Fund, the Climate Investment Funds, and the Adaptation Fund—to promote synergy and reduce fragmentation. It is also expanding the use of blended finance and innovative financial instruments to crowd in private capital and enhance the impact of its investments.

With its integrated approach, long-standing partnerships, and experience across sectors and geographies, the GEF remains well positioned to help countries respond to the accelerating environmental crisis. By supporting systemic transformation and aligning environmental action with socioeconomic development, GEF-8 offers a path forward that is not only environmentally effective but also economically inclusive and socially equitable.

1.3 GEF PROGRESS SINCE OPS7

The GEF-8 Programming Directions were derived from recommendations in the Seventh Comprehensive Evaluation of the GEF (OPS7). Specifically, OPS7 presented nine strategic-level recommendations to guide the GEF-8 Programming Directions and the operations of the GEF partnership (GEF IEO 2022f). GEF management expressed agreement with these recommendations and outlined planned implementation steps. Throughout GEF-8, the GEF has actively pursued these commitments, taking concrete actions aligned with OPS7 recommendations. While notable progress has been achieved in some areas, advancement in others has been slower. (Further details on progress in each of these areas is discussed in the subsequent chapters of this report.)

- 1. Demonstrate additionality of integrated programming.** Several steps were taken during GEF-8 to strengthen the effectiveness and reach of the GEF, including clearer articulation of the strategic focus and value proposition of integrated programming, improvements to coordination mechanisms, and expansion of knowledge-sharing platforms. These measures aimed to improve linkages across focal areas and promote cross-sector collaboration, though further development is needed to fully realize potential synergies and capture lessons systematically.
- 2. Incentivize innovation and manage risks.** Measures included the creation of a dedicated Innovation Window and integration of innovation features within some programs, backed by a risk appetite statement signaling tolerance for higher risk in pursuit of transformational change. As part of its risk appetite statement, the GEF established a high-risk tolerance specifically for innovation aimed at driving such transformation. Utilization of the Innovation Window has been limited, and broader

support for early stage or disruptive innovations remains insufficiently defined.

- 3. Establish ground rules for Agency interactions.** The terms of reference for integrated programs encourage collaboration among Agencies, supporting a more coordinated approach to project development and execution. Rather than adopt strict ground rules—which GEF management cautioned could limit Agency autonomy, complicate access to resources, and be difficult to enforce uniformly—efforts have focused on strengthening operational focal points through targeted training and financial support to improve Agency selection and portfolio management.
- 4. Develop a strategic approach to country engagement.** The GEF introduced measures to strengthen country engagement, including a new Country Engagement Strategy and portfolio planning dialogues and additional support for operational focal points and national partners. Adjustments to the resource allocation system increased access for least developed countries (LDCs) and small island developing states (SIDS). Some elements of the engagement strategy have been slow to roll out.
- 5. Increase support to LDCs and SIDS.** The GEF addressed the recommendation to increase support for priority country groups by modifying the System for Transparent Allocation of Resources (STAR) model and supporting their increased participation in integrated programs. Key changes included raising and harmonizing the focal area country allocation floors for LDCs and SIDS, reducing the country allocation ceiling from 10 percent in GEF-7 to 6 percent in GEF-8, and increasing the weight of the gross domestic product (GDP) index. These adjustments enhanced ex ante country allocations to priority countries.
- 6. Strengthen private sector engagement.** Engagement with the private sector was continued through initiatives on sustainable food systems, nature-based solutions, and the blue economy.

Overall progress in mobilizing private capital and removing operational barriers was limited. The use of nongrant instruments was expanded, and innovative financing mechanisms were rolled out.

7. Reappraise vision for the SGP. The GEF redefined its vision for the SGP to broaden its purpose and enhance its potential for impact. Key measures included the elimination of the upgrading policy, increased allocation of core financing, and expanded implementation modalities. The GEF also strengthened direct financing and support for youth, women, Indigenous Peoples, and local communities—most notably through the rollout of the SGP CSO (Civil Society Organization) Challenge Program, led by the International Union for Conservation of Nature; and the Microfinance Initiative, led by the World Bank.

8. Enhance efficiency of administrative processes. The GEF has undertaken several measures to enhance the efficiency of its activity cycle, including raising the funding cap for medium-size projects from \$2 million to \$5 million, establishing a streamlined project cycle for the Global Biodiversity Framework Fund, and convening a working group to explore further streamlining opportunities. To identify avenues for improving the efficiency of the project cycle, the GEF Secretariat also engages in regular consultations with operational focal points.

9. Monitor implementation of policies and strengthen systems. The GEF has taken several steps to address the recommendation to strengthen the monitoring of implementation of GEF policies and to adapt its results-based management and knowledge management frameworks to the context of integrated programs. Enhancements include shifting policy reporting toward tracking implementation progress, refining results measurement frameworks, and developing a Knowledge Management and Learning Strategy. Integrated program implementation has shown improved performance, with increased attention

to socioeconomic co-benefits and alignment of implementation timelines to support consistent monitoring. Global and regional coordination child projects now oversee program-level progress. The ability to track transformational outcomes is still lacking, however, and requires further attention.

1.4 OPS8 PURPOSE, METHODS, AND LIMITATIONS

OPS8 assesses the GEF's progress in implementing and achieving the objectives outlined in the GEF-8 Programming Directions, which emphasize greater integration, innovation and risk management, inclusion, socioeconomic outcomes, enhanced policy coherence, and more efficient delivery of impact. Drawing on evidence from GEF projects, programs, policies, and institutional frameworks, OPS8 builds on the findings of OPS7 and introduces several new evaluation themes specific to the GEF-8 period:

- Evidence on integration was drawn from four integrated programs first established in GEF-6: the Sustainable Cities Program, the Food Systems Program, the Sustainable Forest Management Program, and the Global Wildlife Program. These programs illustrate how the GEF's integrated approach supports system-level transformation across focal areas and sectors.
- To assess the GEF's relevance, contributions, and impacts across diverse country contexts, the IEO conducted three strategic country cluster evaluations focusing on dryland ecosystems, the Lower Mekong River Basin, and SIDS in the Pacific, as well as an independent portfolio review of Caribbean SIDS.
- For the first time, OPS8 evaluates the GEF's contributions to policy coherence for environmental benefits, the GEF experience with implementing nature-based solutions, the realization of socioeconomic co-benefits, the use of

advanced technologies, learning from unsuccessful or underperforming projects, and the GEF's evolving risk appetite—reflecting a broader understanding of how GEF interventions align with national priorities and respond to emerging global challenges.

Methods and scope

OPS8 is based on the findings of 34 evaluations and studies conducted by the IEO over the 2022–25 period ([box 1.1](#)). Key evaluation parameters—such as

relevance, impact, performance, and the catalytic role of the GEF—that were investigated in earlier OPSs are now a part of the regular work program of the IEO and addressed in all component OPS8 evaluations.

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,

BOX 1.1 Completed evaluations 2022–25

- Assessing the GEF Competitive Advantage
- [Assessing Inclusion in Fragile and Conflict-Affected Situations](#)
- [Assessing Portfolio-Level Risk in the GEF](#)
- Evaluating the Transition to SGP 2.0
- [Evaluation of Cofinancing in the GEF](#)
- [Evaluation of Components of the Results-Based Management System](#)
- [Evaluation of the Effects of the COVID-19 Pandemic on GEF Activities](#)
- Evaluation of the GEF Climate Change Mitigation Focal Area
- Evaluation of the GEF Country Engagement Strategy
- Evaluation of GEF Engagement with the Private Sector
- [Evaluation of GEF Food Systems Programs](#)
- [Evaluation of the GEF International Waters Focal Area](#)
- [Evaluation of GEF Interventions in the Chemicals and Waste Focal Area](#)
- [Evaluation of GEF Support to Community-Based Approaches](#)
- [Evaluation of GEF Support to Nature-Based Solutions](#)
- [Evaluation of GEF Support to Policy Coherence](#)
- [Evaluation of the GEF's Approach to and Interventions in Water Security](#)
- [Evaluation of the Global Wildlife Program](#)
- Evaluation of Innovation and Technologies Application in the GEF
- Evaluation of Knowledge Management in the GEF Partnership
- [Evaluation of Socioeconomic Co-Benefits of GEF Interventions](#)
- Evaluation of the Sustainable Cities Program
- [GEF Annual Performance Report 2023](#)
- [GEF Annual Performance Report 2025](#)
- [GEF Programs in Pacific Small Island Developing States](#)
- [GEF Support to Climate Information and Early Warning Systems](#)
- [GEF Support to Sustainable Forest Management](#)
- [LDCF/SCCF Annual Evaluation Report 2023](#)
- [LDCF/SCCF Annual Evaluation Report 2024](#)
- [LDCF/SCCF Annual Evaluation Report 2025](#)
- [Learning from Challenges in GEF Projects](#)
- [Review of the GEF Management Action Record](#)
- [Strategic Country Cluster Evaluation: GEF Support to Drylands Countries](#)
- [Strategic Country Cluster Evaluation: Lower Mekong River Basin](#)

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.** Such analysis 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. As AI tools become more integrated into evaluation, the IEO is taking care to ensure they are used ethically, transparently, and with human oversight. AI-generated findings are validated through triangulation, and the Office ensures that data privacy is protected; and that we remain alert to bias, contextual blind spots, and overreliance on automated insights when AI is applied.
- **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.

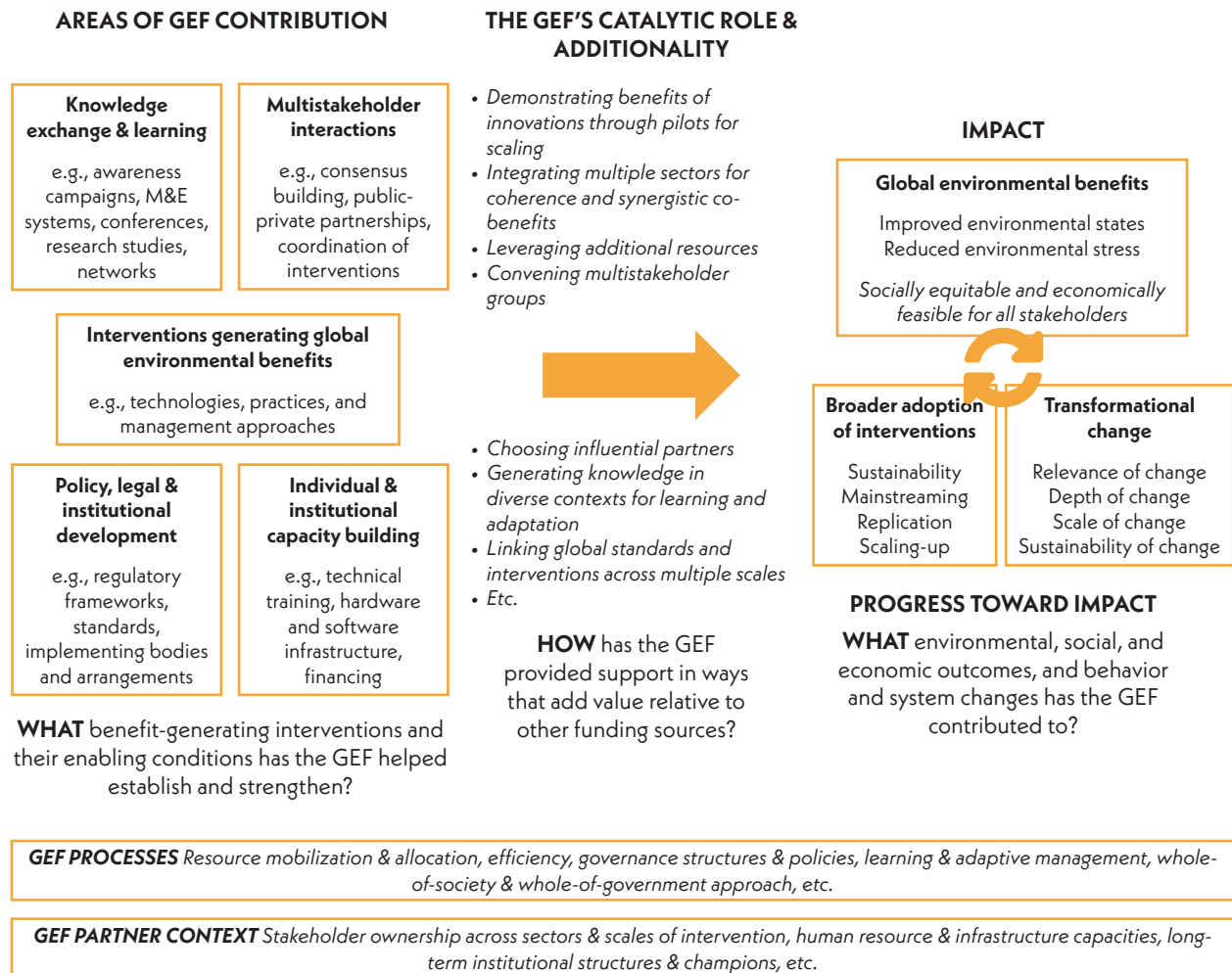
The evaluation evidence was collected by the IEO between 2022 and 2025, including field missions conducted as part of the OPS8 evaluations. Local consultants supported these efforts by assisting with fieldwork and stakeholder engagement.

Where possible, analyses in OPS8 draw on the terminal evaluation reviews of 2,475 completed GEF projects and cover the entire GEF portfolio of 6,063 approved projects from the pilot phase through June 30, 2025. Particular attention is given to 669 completed projects for which terminal evaluations were received after the close of OPS7—the OPS8 terminal evaluation cohort—and 634 projects that were approved during the GEF-8 period through June 2025. Each evaluation underpinning this report was based on the most complete data on the portfolio or on the set of completed projects available at the time the evaluation was conducted during the OPS8 period. These evaluations also draw on completed assessments conducted by the independent evaluation offices of GEF Agencies during the GEF-8 period.

The IEO theory of change framework for assessing GEF impact

[Figure 1.1](#) shows the general theory of change developed by the IEO as a framework for assessing the impacts of GEF interventions. The framework lays out the different aspects of GEF support that the IEO assesses in its evaluations:

- **Areas of contribution:** the GEF's contributions toward establishing and strengthening both the interventions that directly generate global environmental benefits and the enabling conditions that allow these interventions to be effectively

FIGURE 1.1 GEF IEO theory of change

implemented, recognizing that the GEF operates in a context where multiple actors intervene

- **Catalytic role and additionality:** how the GEF adds value relative to other funding sources and partners, including its unique ability to take risks, demonstrate the benefits of innovations, and leverage additional investment
- **Impact:** the environmental, social, and economic benefits to which the GEF has contributed, both as direct outcomes of interventions and over the long term

- **Progress toward impact:** the behavioral and systemic changes that sustain and scale intervention outcomes to achieve long-term impact beyond GEF support, including shifts in paradigms, policies, and markets.

Given the complex, long-term processes at play, the framework highlights how impact may only be evident decades after GEF support has ended. Where impact cannot yet be assessed, progress toward impact provides indicators of the GEF's impact trajectory through two main pathways: the broader adoption of interventions by stakeholders without GEF support, and

the transformational change of the social-ecological systems in which it works.

The framework explicitly links the GEF's mandate to generate global environmental benefits with the safeguards designed to ensure that positive environmental outcomes enhance—or at least do not diminish—the social and economic well-being of people who depend on these resources. This includes examining potential synergies and trade-offs both across environmental outcomes and between environmental and socioeconomic outcomes, as well as any unintended negative effects of GEF support.

In addition to assessing the results of GEF support, the IEO assesses the GEF's institutional processes and its partners' contextual conditions that are necessary for achieving these results. By learning which contextual conditions enable and hinder results, the GEF can continually adapt its interventions to influence these conditions.

Limitations

Limitations on evaluative evidence in the GEF have been highlighted in several evaluations of the IEO and in previous OPSs. For example, terminal evaluations are typically of completed projects begun in earlier GEF periods. Their findings thus may not reflect current practice but do provide valuable lessons for design and implementation. The results of recently designed programs such as the integrated programs have limited results, as they are at an early stage of implementation. To mitigate this limitation and extract useful information, formative evaluation approaches have been used to assess program/project design, quality at entry aspects, and early implementation—fully recognizing that findings could be different on completion.

Typically, impact evaluations and progress toward impact analyses search for evidence of impacts five

to eight years after projects have been completed, with sometimes limited availability of baseline data. The Office's recent use of geospatial analysis has provided flexibility in looking for environmental changes over longer periods of time, before and after project implementation, and provides a means to regenerate baseline data on important environmental indicators. Postcompletion methodologies were implemented to gain insights into the sustainability of GEF interventions and contributing factors.

Quality assurance

Quality assurance for OPS8 has been provided by a team of five senior independent advisers with expertise in relevant subject and institutional matters and evaluation: Patricia Rogers, Stefan Schwager, Vinod Thomas, Hasan Tuluy, and Monika Weber-Fahr. Their statement on the quality of the report, and the extent to which the conclusions and recommendations are based on the evaluative evidence, is included as [annex B](#).

Quality assurance of the component evaluations was conducted either through a review process or through circulation to a wide range of GEF stakeholders for comment on factual and analytical errors as well as on the feasibility of the recommendations. In all cases, the IEO responded to the various comments received; the Office remains fully responsible for any remaining errors. Most evaluations have been presented to the GEF Council and are available on the [IEO website](#); the remainder will be posted following their presentation to Council.

1.5 ORGANIZATION OF THIS REPORT

The GEF has adopted integration as a core strategy to drive transformational change and deliver global environmental benefits. In this way, it can address

the root causes of environmental degradation through coordinated, cross-sectoral actions. This approach aims 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.

Given this context, this report places a strong emphasis on integration as a unifying principle of GEF programming. It provides evidence on how integrated approaches have contributed to large-scale system transformations and supported more cohesive approaches to environmental management. Further, integration is examined across key dimensions—including social inclusion, risk and innovation, private sector engagement, and policy coherence—reflecting the GEF’s ambition to deliver holistic, people-centered, and system-wide impacts.

This report is structured around three core themes: what works in the GEF (i.e., GEF performance), enablers of transformational change, and the partners and systems that supports the GEF’s effectiveness. This approach will help us delve deeper to understand the factors underpinning recent external rankings and assessments of the GEF conducted by MOPAN (2025). Presentation of these three themes is book-ended by introductory context-setting information and conclusions and recommendations. The report’s organization follows:

[Part I: Context for OPS8](#) provides the context in which to place the evaluative evidence.

- This chapter describes the global environmental background including challenges and financing; outlines the scope and methodology of OPS8, and reviews progress made in implementing OPS7 recommendations, thus providing the contextual background for the evidence and analysis presented in subsequent chapters.
- [Chapter 2: The GEF portfolio](#) provides an overview of the GEF portfolio as of end June 2025, including

trends in resource allocation, regional distribution, and Agency participation.

[Part II: Performance](#) focuses on the performance and results of the GEF. Its chapters examine how GEF interventions deliver results across multiple dimensions of environmental and social performance.

- [Chapter 3: GEF performance](#) analyzes the performance of completed GEF projects and provides a real-time review of how GEF-8 projects are designed for transformational change. Country-level findings from strategic cluster evaluations in drylands, the Lower Mekong River Basin, and SIDS are also presented; along with pathways to transformational change through broader adoption, policy coherence, and behavioral shifts. The chapter concludes with an assessment of administrative and operational efficiency.
- [Chapter 4: Socioeconomic co-benefits](#) presents evidence on the socioeconomic co-benefits generated by GEF interventions, highlighting how environmental actions can also support livelihoods, health, and community well-being.
- [Chapter 5: Focal area performance](#) 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. The GEF’s experience in implementing multifocal projects and nature-based solutions that cut across several focal areas is also discussed in this chapter.

[Part III: Enablers of transformation](#) focuses on the enablers that support transformational change across the GEF portfolio. It examines how integration, social inclusion, innovation and risk-taking, and engagement with the private sector create the conditions necessary for systemic, scalable, and sustainable environmental

solutions. These themes are explored as cross-cutting factors that strengthen program design, foster partnerships, and accelerate the adoption of impactful approaches—reflecting GEF-8 priorities and its ambition to drive long-term change beyond individual projects.

- [Chapter 6: Integrated programming](#) examines evidence on 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, highlighting how this evolution is designed to promote systemic change and reviewing the progress achieved to date.
- [Chapter 7: Operationalizing social inclusion](#) offers insights on inclusion in the GEF portfolio, with a focus on the participation and empowerment of women, Indigenous Peoples, youth, and other marginalized groups. It reviews GEF policies on safeguards, gender, and Indigenous Peoples along with lessons from their implementation. The chapter also highlights how community-based approaches and the SGP contribute to inclusion.
- [Chapter 8: Engagement with the private sector](#) presents findings on the GEF’s engagement with the private sector, including the performance of its Non-Grant Instrument Program, highlighting the role of private investment and partnerships in advancing environmental outcomes.
- [Chapter 9: Risk and innovation](#) presents evidence on how the GEF approaches risk and fosters innovation, highlighting the role of risk and innovation in enabling transformational change and supporting the development and scaling of novel solutions.

[Part IV: GEF institutional framework](#) covers the GEF’s institutional framework.

- [Chapter 10: Partners and financing](#) examines the functioning of the GEF partnership, including the Country Engagement Strategy, the roles of the GEF Agencies, the STAP, and civil society organizations. It also analyzes GEF financing, focusing on donor contributions and cofinancing arrangements, and how these mechanisms support effective implementation of the GEF mandate.
- [Chapter 11: GEF results and learning systems](#) discusses the GEF’s results-based management and knowledge management systems, which are essential for strengthening accountability, enabling learning, and improving decision-making across the GEF partnership.

Finally, [Part V: Planning for GEF-9](#) looks to the future. It draws on the findings and lessons presented throughout the report to inform the GEF’s strategic direction in its next replenishment cycle.

- [Chapter 12: Conclusions and recommendations](#) draws together the main conclusions of the report and provides forward-looking recommendations to guide the strategic direction of GEF-9. It builds on the evidence and lessons from across the report, highlighting priorities to strengthen the GEF’s catalytic role, enhance its responsiveness to emerging global environmental challenges, and position it to deliver greater transformational impact in the next replenishment period.

The GEF portfolio

As of end June 2025, the GEF had provided \$26.5 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 \$23.5 billion across 5,505 projects (table 2.1). In total, the GEF has raised \$146.3 billion in cofinancing pledges. During the GEF-8 cycle, this translates to \$7.70 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 June 2025, the GEF had approved 76 percent of its target allocation for GEF-8, amounting to \$3.9 billion for 525 projects.¹ At the same

¹ This excludes the Country Support Program (\$28 million) and the corporate budget (\$187 million) which were part of

stage of GEF-7, the number of approved projects and the percentage of resources programmed were comparable, with 557 projects accounting for 76 percent of the \$3.9 billion funding target.²

Most 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 chemicals and waste and the Non-Grant Instrument (NGI) Program have been

the total GEF-8 replenishment (\$5.33 billion). Source: GEF (2024d).

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 (2022c).

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

Funding source	Through GEF-4		GEF-5		GEF-6		GEF-7		GEF-8		Total	
	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	2,613	9,067	964	3,617	679	3,261	724	3,645	525	3,865	5,505	23,454
LDCF	87	146	132	798	42	299	84	506	69	618	414	2,367
NPIF	0	0	14	16	0	0	0	0	0	0	14	16
SCCF	25	106	42	194	10	46	14	14	15	44	106	403
Total	2,725	9,319	1,131	4,625	771	3,658	802	4,170	634	4,729	6,063	26,501

Source: GEF Portal as of June 30, 2025.

Note: 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	Thru 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.	3.3	3.3
GET	4.3	6.1	8.3	7.5	8.2	6.3
LDCF	1.8	4.6	3.9	4.5	5.6	4.5
MTF	n.a.	8.4	3.0	4.3	8.7	6.9
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	7.7	6.1

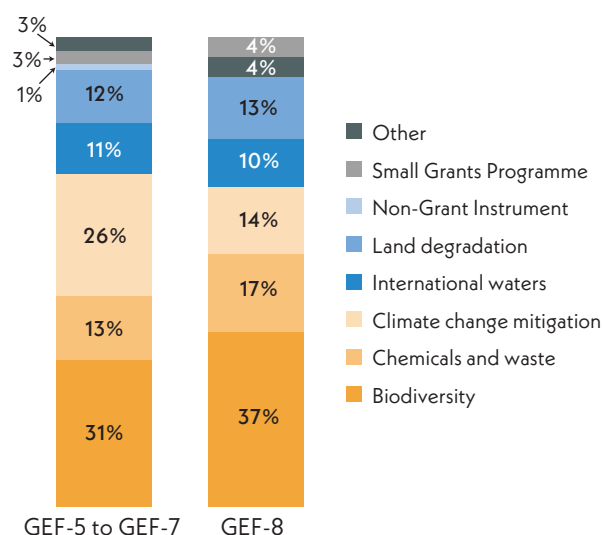
Source: GEF Portal as of June 30, 2025.

Note: 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.

programmed at a faster pace in GEF-8. As of June 2025, no resources had been programmed for the Innovation Window.

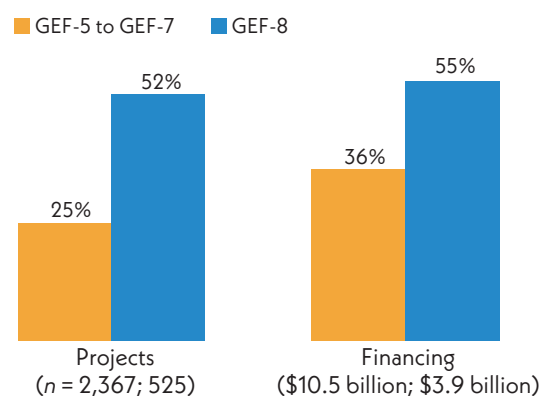
Consistent with the GEF-8 Programming Directions, financing for biodiversity has increased, whereas the share allocated to climate change mitigation has declined (figure 2.1). Multifocal area interventions have gained greater prominence in GEF-8, both in terms of number of projects and resource allocation, reflecting the strategic focus on integrated programs (figure 2.2). In terms of planned cofinancing by focal area in GEF-8, international waters has the highest cofinancing ratio at 9.8, and land degradation the lowest at 3.2. Among corporate programs, the NGI Program shows the greatest cofinancing leverage, attracting \$20.8 for every dollar of GEF financing; the Small Grants Programme (SGP) has a cofinancing ratio of 5.2.

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

FIGURE 2.1 GEF Trust Fund financing by focal area and corporate program

Source: GEF Portal as of June 30, 2025.

Note: 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. GEF-5 to GEF-7 figures are based on cumulative data.

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

Source: GEF Portal as of June 30, 2025.

Note: 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. GEF-5 to GEF-7 figures are based on cumulative data.

resources: 35 percent, 26 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 Nations (FAO's) share has steadily grown across replenishment periods, increasing from 1 percent to 16 percent. Cofinancing ratios are highest for multilateral development banks (17.1) in GEF-8, compared with 6.8 for United Nations entities and 5.0 for others ([figure 2.3](#)).

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 order, followed by Conservation International. In Asia, the predominant agencies are UNDP, FAO, and United Nations Industrial Development Organization,

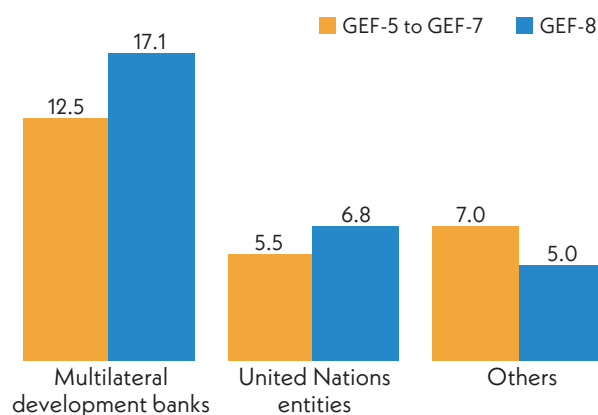
while in Europe and Central Asia, the leading agencies are UNDP, FAO, and the World Bank. For global programs, UNDP plays a dominant role, accounting for nearly half of the programmed financing in GEF-8 ([table 2.3](#)).

Overall, 12 percent of financing through the GEF Trust Fund has been delivered through child projects approved under the framework of integrated programs.

In GEF-8 to date, integrated programs account for 38 percent of projects and 43 percent of the portfolio in terms of total financing ([figure 2.4a](#)). Historically, child projects under a programmatic approach have attracted more cofinancing than stand-alone projects. In GEF-8, projects under integrated programs have attracted lower levels of cofinancing than in previous periods, with a ratio of 7.6 compared to 10.6 in GEF-6 and GEF-7. Nevertheless, this remains higher than the 6.7 ratio observed 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 6.1 ratio observed for LDCs ([figure 2.5b](#)).

FIGURE 2.3 Cofinancing ratio by GEF Agency type



Source: GEF Portal as of June 30, 2025.

Note: Considers reported cofinancing when projects enter the work program. In calculating cofinancing ratios, GEF financing excludes Agency fees and project preparation grant funding and fees. GEF-5 to GEF-7 figures are based on cumulative data.

Africa and Asia have historically held the largest shares of total GEF financing.

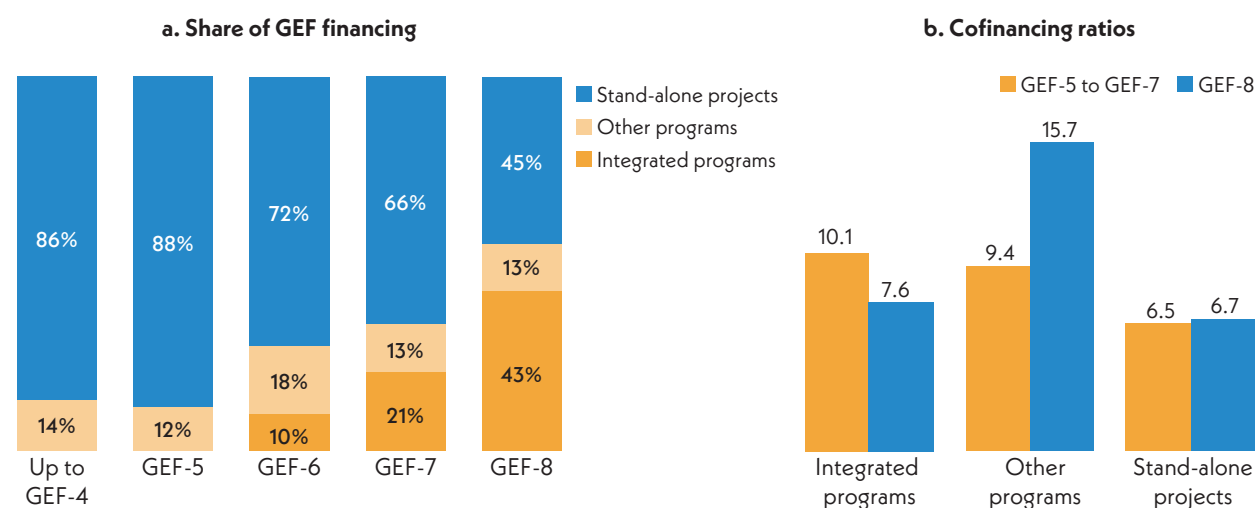
However, recent replenishment periods have shown notable shifts in regional distribution. In GEF-8, the shares for Africa and Latin America and the Caribbean have increased, with each region now accounting for slightly more than one-quarter of total GEF Trust Fund financing ([figure 2.6a](#)). In contrast, 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 in GEF-7, a trend that has continued into GEF-8. This increase is partially driven by the growing prominence of global projects implemented under integrated programs, along with a declining

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

GEF Agency	Africa	Asia	ECA	LAC	Regional	Global	Total
African Development Bank	7	0	0	0	0	0	2
Asian Development Bank	0	2	0	0	16	3	2
Brazilian Biodiversity Fund	0	0	0	3	0	0	1
Conservation International	3	1	0	7	7	4	4
Development Bank of Latin America	0	0	0	5	0	0	1
Development Bank of Southern Africa	2	0	0	0	0	0	1
European Bank for Reconstruction and Development	2	0	8	0	0	0	1
Food and Agriculture Organization of the United Nations	11	23	24	21	4	9	16
Inter-American Development Bank	0	0	0	2	52	0	2
International Fund for Agricultural Development	5	4	5	0	0	1	3
International Union for Conservation of Nature	7	4	0	4	13	2	4
United Nations Development Programme	22	36	30	23	0	44	29
United Nations Environment Programme	22	10	9	18	8	17	17
United Nations Industrial Development Organization	7	13	6	4	0	4	7
West African Development Bank	1	0	0	0	0	0	0
World Bank	10	4	18	6	0	9	8
World Wildlife Fund–US	2	3	0	4	0	6	3
Total	100	100	100	100	100	100	100
Total (million \$)	1,060	757	198	1,001	96	753	3,865

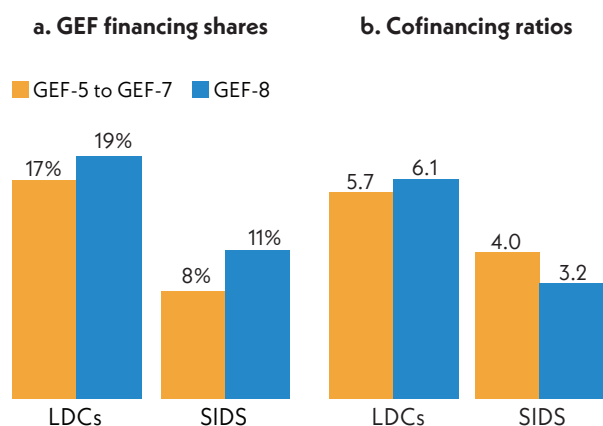
Source: GEF Portal as of June 30, 2025.

Note: Details may not sum to totals because of rounding. GEF financing includes Agency fees and project preparation grant funding and fees. ECA = Europe and Central Asia; LAC = Latin America and the Caribbean.

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

Source: GEF Portal as of June 30, 2025.

Note: Considers reported cofinancing when projects enter the work program. In calculating cofinancing ratios, GEF financing excludes Agency fees and project preparation grant funding and fees. GEF-5 to GEF-7 figures are based on cumulative data.

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

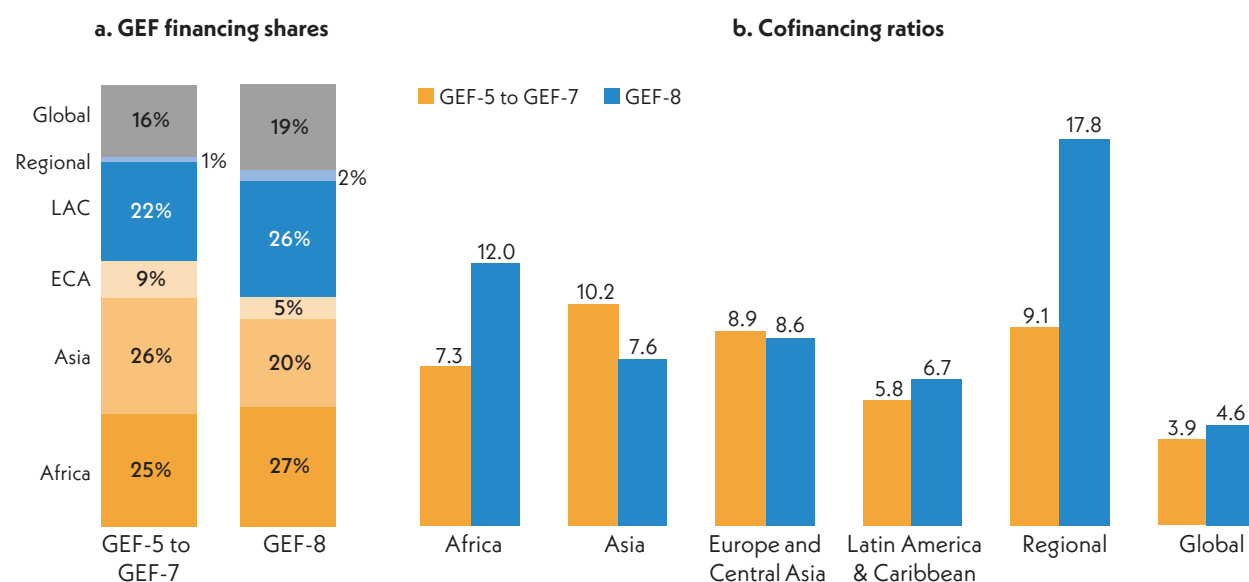
Source: GEF Portal as of June 30, 2025.

Note: GEF financing (\$10.5 billion for GEF-5 to GEF-7; \$3.9 billion for GEF-8) includes Agency fees and project preparation grant funding and fees. In calculating cofinancing ratios, GEF financing excludes Agency fees and project preparation grant funding and fees. GEF-5 to GEF-7 figures are based on cumulative data.

share of resources programmed through the STAR. 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](#)).

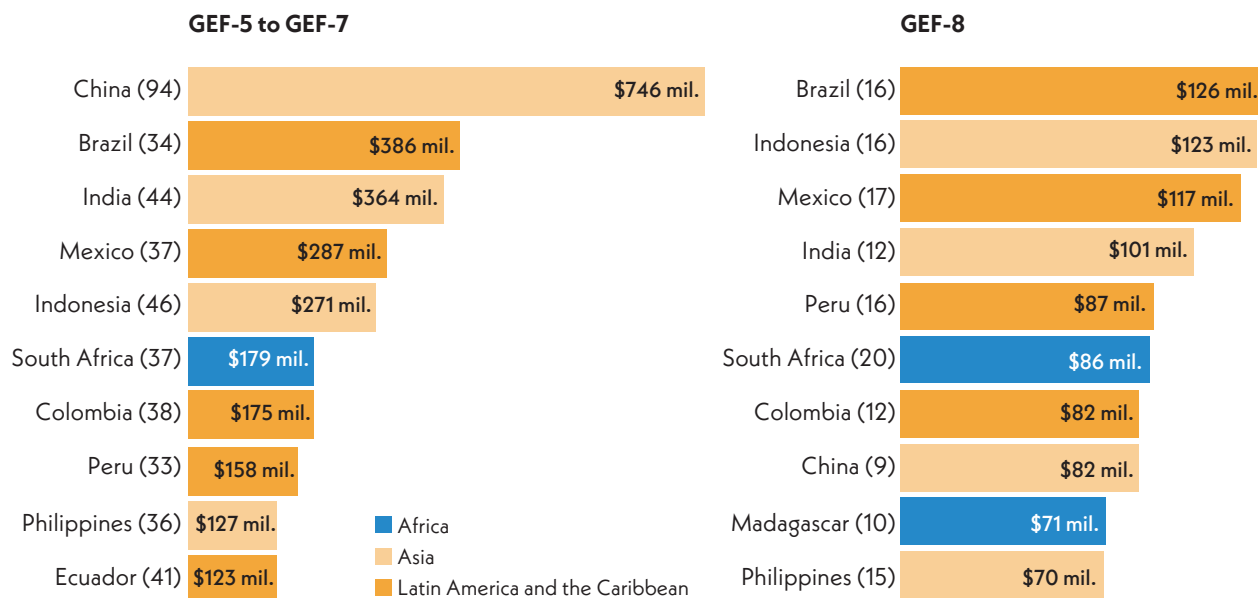
The top 10 recipients of GEF financing have remained largely unchanged since GEF-5. There have been some shifts in the rankings, however, with China falling from first to eighth place. Madagascar has joined the top 10, and Ecuador is no longer in the top 10 ([figure 2.7](#)).

Cumulatively, 64 percent of GEF projects have been completed. Out of the 6,063 projects implemented across all GEF trust funds, 6 percent are in the preparation phase, and 29 percent are currently under implementation. The total number of completed projects stands at 3,904 ([figure 2.8](#)). According

FIGURE 2.6 GEF Trust Fund financing and cofinancing ratios by region

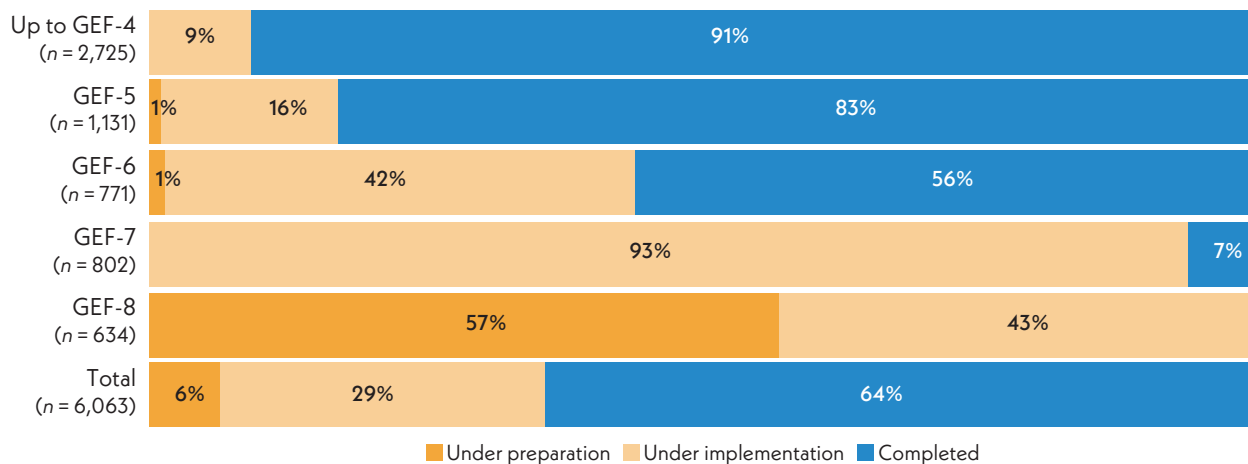
Source: GEF Portal as of June 30, 2025.

Note: GEF financing (\$10.5 billion for GEF-5 to GEF-7; \$3.9 billion for GEF-8) includes Agency fees and project preparation grant funding and fees. Considers reported cofinancing when projects enter the work program. In calculating cofinancing ratios, GEF financing excludes Agency fees and project preparation grant funding and fees. GEF-5 to GEF-7 figures are based on cumulative data.

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

Source: GEF Portal as of June 30, 2025.

Note: GEF financing includes Agency fees and project preparation grant funding and fees. Number of projects is shown in parentheses. GEF-5 to GEF-7 figures are based on cumulative data.

FIGURE 2.8 Distribution of all GEF projects by activity cycle stage, by replenishment period

Source: GEF Portal as of June 30, 2025.

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 2022b). These evaluations are independently validated either by the GEF IEO or by the evaluation units of the implementing GEF Agencies. To date, 2,475 projects have submitted terminal evaluations to the GEF Portal.³ Of these, 42 percent (1,032 proj-

ects) were independently validated by the GEF IEO, and 58 percent (1,443 projects) were validated by Agency evaluation units. The Eighth Comprehensive Evaluation of the GEF (OPS8) cohort includes 669 completed projects with terminal evaluations submitted after the OPS7 cycle.

³The cumulative portfolio of 2,475 completed GEF projects for which performance ratings were independently validated through June 2025.

PART II

Performance



GEF performance

This chapter analyzes the performance of completed GEF projects, drawing on evidence from a portfolio of 2,475 completed projects with terminal evaluations independently validated through June 2025 ([table 3.1](#)). Together, these projects represent \$10.7 billion in GEF funding and \$73.9 billion in reported materialized cofinancing. The chapter assesses portfolio performance in terms of project outcomes, sustainability, quality of implementation and execution, and monitoring and evaluation (M&E) (see [box 3.1](#) for definitions of performance-related terminology). It also looks at performance at the regional/country level, including findings from strategic country cluster evaluations focusing on GEF interventions in drylands, the Lower Mekong River Basin, and small

island developing states (SIDS) in the Pacific and Caribbean (the latter findings are from an independent portfolio review). The chapter then takes an in-depth look at enhancing the sustainability of project outcomes by GEF support to three critical areas: broader adoption, environmentally coherent national policies, and shifts in stakeholder behavior from environmentally harmful to environmentally friendly practices. This provides a real-time review of how GEF-8 projects are designed to drive transformational change. The chapter concludes with an assessment of administrative and operational efficiency.

TABLE 3.1 Portfolio of closed projects

GEF period	CEO endorsed/ approved (no.)	Closed		Closed with terminal evaluation submitted to GEF Portal		Closed with validated ratings available	
		No.	% of approved projects	No.	% of closed projects	No.	% of closed projects
Through GEF-4	1,872	1,813	97	1,749	96	1,668	92
GEF-5	839	718	86	656	91	613	85
GEF-6	601	286	48	222	78	182	64
GEF-7	671	22	3	15	68	12	55
Total	3,983	2,839	71	2,642	93	2,475	87

Sources: GEF Portal and GEF IEO Annual Performance Report (APR) 2026 data set, which includes completed projects for which terminal evaluations were independently validated through June 2025.

Note: Data exclude parent 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, 2025. 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.

BOX 3.1 Definitions of key performance-related terms

Outcome. An intended or achieved short- or medium-term effect of a project or program's outputs. A project's outcome performance is evaluated using the criteria of relevance, coherence, effectiveness, and efficiency at the time of project completion.

- The **relevance** criterion assesses the alignment of project design with GEF focal areas or operational program strategies, country priorities, beneficiary needs, and the mandates of the GEF Agency and its executing partners.
- The **coherence** criterion examines the compatibility of the project with other relevant activities within its operational context; its alignment of its theory of change, governance structure, activities, and monitoring and evaluation system; and its adherence to GEF policies and guidelines.
- The **effectiveness** criterion assesses the extent to which project results correspond to the ex ante targets, including consideration of any unintended consequences.
- The **efficiency** criterion assesses the project's cost-effectiveness, considering its cost/time versus output/outcomes equation and, where possible, comparing it to alternatives.

Impact. The positive and negative, primary and secondary long-term effects produced by a project or program, directly or indirectly, intended or unintended.

Sustainability. The continuation/likely continuation of positive effects from the project or program after it has come to an end, and its potential for scale-up and/or

replication. Projects and programs need to be environmentally as well as institutionally, financially, politically, culturally and socially sustainable.

Broader adoption. The adoption of GEF-supported interventions by governments and other stakeholders beyond the original scope and funding of a GEF-supported intervention. This may take place through sustaining, replication, mainstreaming, and scaling-up.

- **Sustaining** is when a GEF intervention continues to be implemented without GEF support through clear budget allocations, implementing structures, and institutional frameworks.
- **Replication** occurs when a GEF intervention is reproduced at a comparable administrative or ecological scale, often in different geographical areas or regions.
- **Mainstreaming** refers to when information, lessons, or specific aspects of a GEF initiative are incorporated into a broader stakeholder initiative. This may occur not only through governments but also in development organizations and other sectors.
- **Scaling-up** is when GEF-supported initiatives are implemented at a larger geographical scale, often expanded to include new aspects or concerns that may be political, administrative, economic, or ecological in nature.

Transformational change. Deep, systemic, and sustainable change with large-scale impact in an area of major environmental concern. It is defined by four criteria: relevance, depth of change, scale of change, and sustainability.

Sources: GEF IEO 2014, 2018b, 2022b; OECD 2023.

3.1 PORTFOLIO PERFORMANCE

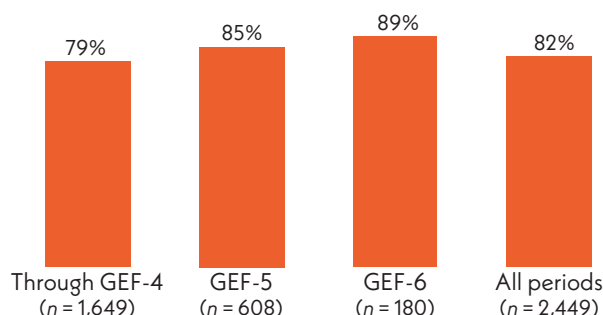
Outcomes

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.¹ Cumulatively, validated outcome ratings of 82 percent of completed projects are in the satisfactory range. Projects approved during GEF-5 show improvement compared with earlier periods, with 85 percent rated in the satisfactory range, up from 79 percent previously ([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.

While projects from GEF-5 and GEF-6 currently show higher satisfactory outcome rates, these figures may decline as more projects close as, historically, underperforming projects tend to take longer to complete and often lower overall ratings once finalized. [Box 3.2](#) provides examples of satisfactory or unsatisfactory performance in outcome achievement.

There are variations in outcome performance across focal areas, regions, country groups, and programmatic approaches. Among completed projects from GEF-5 onwards, the percentage of projects rated in the satisfactory outcome range varies across focal areas, ranging from 96 percent in land degradation to 84 percent in climate change. Regionally, a higher percentage of projects in Europe and Central Asia and Asia are

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



Source: GEF IEO Annual Performance Report 2026 data set, which includes completed projects for which performance ratings were independently validated through June 2025.

Note: The number of projects for which validated outcome ratings are available is shown in parentheses. The cumulative figure for all periods includes GEF-7, which is not shown separately due to the limited number of observations.

BOX 3.2 Examples of projects with satisfactory and unsatisfactory outcomes

The Environmentally Sound Management of Municipal and Hazardous Solid Waste project in Senegal (GEF ID 4888, United Nations Industrial Development Organization) was assessed as highly relevant, coherent, and cost-effective in supporting waste management, and in addressing the needs of vulnerable groups. It reduced emissions of unintentional persistent organic pollutants and open waste burning, and increased awareness of waste management's health and environmental implications. Therefore, its outcome achievement was rated highly satisfactory.

In contrast, the Mainstreaming Biodiversity Conservation through Low-Impact Ecotourism project in Panama (GEF ID 9889, Inter-American Development Bank) was rated highly unsatisfactory as it completed only two outputs and failed to achieve intended outcomes such as improvements in financial sustainability and management effectiveness of protected areas.

¹ See GEF IEO (2024d) for a detailed description of the GEF IEO's rating methodology.

rated in the satisfactory range for outcomes, while Africa and Latin America and the Caribbean have the lowest percentages. Since GEF-5, the share of completed projects rated in the satisfactory range for outcomes has increased across all regions compared to earlier periods. Projects in Latin America and the Caribbean showed the least improvement. A high percentage of global projects are rated in the satisfactory range.

GEF projects in SIDS or fragile and conflict-affected situations face greater challenges in achieving their intended outcomes. About a quarter of the projects in SIDS and 20 percent in fragile and conflict-affected situations are rated in the unsatisfactory range, which is lower than performance in other countries. The Evaluation of GEF Support in Fragile and Conflict-Affected Situations highlighted the challenges—such as social conflict, economic uncertainty, political fragility, and weak governance—that projects face in these settings, leading to lower achievements (GEF IEO 2024b). In SIDS, capacity constraints contribute to lower outcome achievements. While past projects in least developed countries (LDCs) were less likely to receive outcome ratings in the satisfactory range, their performance has significantly improved in recent periods.

A high proportion of completed child projects under integrated programs have achieved outcomes in the satisfactory range. Specifically, 93 percent of the 14 evaluated child projects were rated in the satisfactory

range for outcome achievement. Although slightly lower percentages were observed for child projects from other programs (87 percent) and stand-alone projects (86 percent) approved during the same period, the differences are not statistically significant.

Achievement of outcomes relative to targets

For projects to achieve their intended outcomes, it is essential that they achieve the expected results identified in their results measurement frameworks. These include both corporate-level indicators and those that are specific to individual projects.

At project completion, most indicators in project results measurement frameworks were measured and reported using consistent units. The Evaluation of Components of the Results-Based Management System reviewed 2,213 indicators listed in the results measurement framework of GEF-6 and GEF-7 completed projects with terminal evaluations (GEF IEO forthcoming-e). It found that 91 percent had achievements measured and reported. In 88 percent of cases, this reporting consistently used the units specified in the results measurement framework ([table 3.2](#)). Where indicators were specified, 64 percent fully met their targets and when considering only indicators reported using consistent units, 73 percent fully achieved their

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

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

Source: GEF IEO forthcoming-e, based on a review of 122 GEF-6 and GEF-7 completed projects with terminal evaluations.

specified targets. Thus, in majority of instances projects fully achieve the results specified in their results measurement framework.

The programming documents for each GEF replenishment period set targets for corporate environmental results indicators. The remainder of this subsection reviews progress toward achieving the corporate environmental targets established for GEF-6.

During GEF-6, 601 projects were approved, 511 of which were financed by the GEF Trust Fund. Of these 511, 147 have been completed; project results achieved have been assessed for 140 that included a corporate results-related target in its results measurement framework. Data on achievement of corporate environmental targets for completed GEF-6 projects was compiled from reporting on results achievement in terminal evaluations and/or the last project implementation report (PIR) of the given project. [Table 3.3](#) provides a summary of performance based on actual achievement of targets for these 140 projects.

The GEF has made substantial progress toward achieving the GEF-6 corporate environmental results targets, although full achievement of all targets remains uncertain. Of the 10 corporate environmental results targets for GEF-6, 5 are on track. Among 43 completed projects with available data on ex ante targets and actual results, the reported greenhouse gas emissions mitigated totaled 559 million metric tons of carbon dioxide equivalent (MMT CO₂e), surpassing the aggregate target of 363 MMT CO₂e. For direct emissions avoidance alone, projects achieved 171 MMT CO₂e compared to the target of 105 MMT CO₂e. Notably, the aggregate projected CO₂ avoidance from all project proposals nearly doubled the GEF-6 portfolio target, and completed projects significantly outperformed the combined targets; this places the GEF firmly on track to meet its goals, despite gaps in reporting.

The GEF is also on track to meet targets related to country coverage for environmental information systems, development and sectoral planning frameworks, freshwater basin coverage, and mercury reduction. Other targets show less promising trends. The corporate target for reducing ozone-depleting substances is unlikely to be met, as the total expected reductions from approved projects fall well below the target, even though one completed project met its goal. Similarly, progress on indicators for production landscapes and landscapes/seascapes under improved management for biodiversity remains below the pace required (see [table 3.3](#)), although substantial achievement is still possible. Limited reporting on the indicator for globally overexploited fisheries shifted to sustainable levels makes it difficult to assess progress or make reliable projections in this area.

Sustainability

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 Africa, SIDS, fragile and conflict-affected situations, and LDCs continue to face higher sustainability risks. In recent replenishment periods, likely sustainability ratings vary: from chemicals and waste at 81 percent to biodiversity at 66 percent. Global projects lead in terms of sustainability ratings from GEF-5 onwards, while also demonstrating the greatest improvements compared to previous periods. Although sustainability ratings in Africa have

TABLE 3.3 Achievement of GEF-6 corporate environmental targets

GEF-6 corporate indicator	GEF-6 target ^b	Aggregate targets in project proposals ^b	Completed projects ^a			
			Provided ex ante target	Provided data at completion	Aggregate target ^c	Achieved at project completion
Landscape and seascape area under improved management for biodiversity conservation	300 mil. ha	360 mil. ha	48	43	90 mil. ha	49 mil. ha
Direct coverage	n.a.	n.a.	12	11	5 mil. ha	3 mil. ha
Production landscapes under improved management	120 mil. ha	103 mil. ha	32	31	5 mil. ha	4 mil. ha
Direct coverage	n.a.	n.a.	6	7	0.06 mil. ha	0.14 mil. ha
Freshwater basins in which water-food-energy-ecosystem security and conjunctive management of surface and groundwater is taking place	10 basins	29 basins	4	3	3 basins	3 basins
Globally overexploited fisheries moved to more sustainable levels	20%	13%	5	0	n.a.	n.a.
CO ₂ e emissions avoided	750 MMT	1,419 MMT	67	43	363 MMT	559 MMT
Direct coverage	n.a.	n.a.	49	34	105 MMT	171 MMT
POPs (PCBs, obsolete pesticides) disposed	80,000 MT	76,251 MT	6	6	10,563 MT	6,941 MT
Mercury reduced	1,000 MT	638 MT	6	5	33 MT	54 MT
ODP (HCFC) reduced/phased out	303 MT	26 MT	1	1	6 MT	6 MT
Countries in which development and sectoral planning frameworks that integrate measurable targets drawn from the MEAs have been developed ^d	10 countries	15 countries	30	30	114 countries	112 countries
Countries in which functional environmental information systems are established to support decision-making ^d	10 countries	19 countries	23	20	94 countries	37 countries

Source: Project documentation and GEF Secretariat 2018.

Note: n.a. = not applicable. CO₂e = carbon dioxide equivalent; ha = hectare; HCFC = hydrochlorofluorocarbon; MEA = multilateral environmental agreement; MMT = million metric ton; MT = metric ton; ODP = ozone depletion potential; PCB = polychlorinated biphenyl; POP = persistent organic pollutant.

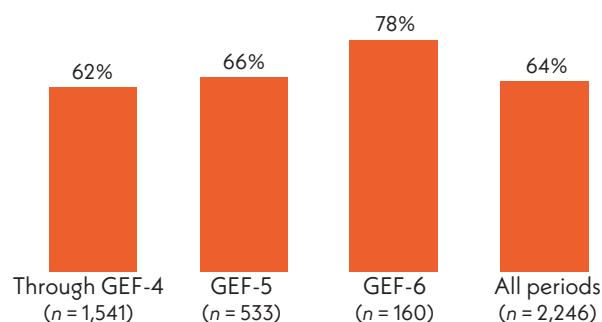
a. Results are aggregated for 140 projects that included at least one corporate environmental results target for GEF-6 and were financed through the GEF Trust Fund and had available validated terminal evaluations as of June 30, 2025. Excludes enabling activities, projects with less than \$500,000 in GEF financing, and projects from the Small Grants Programme.

b. GEF Secretariat (2018).

c. Aggregate target for projects that provide achievement data (including no achievement) at completion.

d. According to GEF Secretariat (2018), GEF-6 targets and aggregate targets in project proposals were derived from cross-cutting capacity development projects; therefore, they were likely to underestimate the number of countries that other GEF projects have supported. Data for completed projects cover all projects where these indicators were reported.

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



Source: GEF IEO Annual Performance Report 2026 data set, which includes completed projects for which performance ratings were independently validated through June 2025.

Note: The number of projects for which validated sustainability ratings are available is shown in parentheses. The cumulative figure for all periods includes GEF-7, which is not shown separately due to the limited number of observations.

also improved, projects in this region still face significant risks at implementation completion. A substantial share of projects in fragile and conflict-affected situations, SIDS, and LDCs are rated in the unlikely range for sustainability. Factors influencing sustainability in these contexts are further elaborated on in [section 3.2](#). Among the 11 child projects from integrated programs with available sustainability ratings, 8 (73 percent) were assessed in the likely range for sustainability. Despite this nominally higher share compared to child projects from other programs (68 percent) and stand-alone projects (69 percent), the differences are not statistically significant, indicating broadly comparable performance across project types.

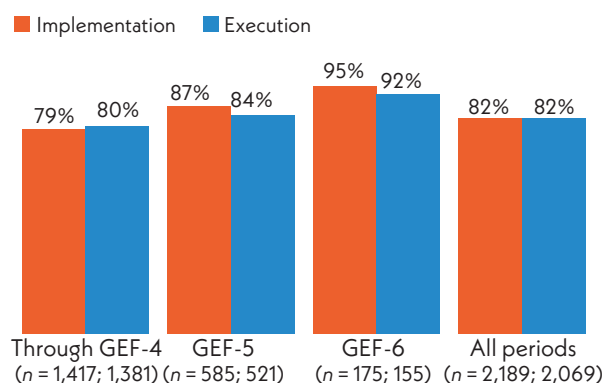
Quality of implementation and execution

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-the-ground monitoring.

Cumulatively, 82 percent of projects are rated in the satisfactory range for implementation and execution ([figure 3.3](#)). Both measures have improved since GEF-5, with implementation quality now consistent across focal areas and execution showing moderate variation. Projects in Africa and SIDS tend to face greater challenges in both implementation and execution. Interestingly, projects in fragile and conflict-affected contexts experience more pronounced difficulties in implementation than execution. All evaluated child projects from integrated programs received ratings in the satisfactory range for implementation and execution; a higher percentage of stand-alone projects were rated in this range.

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



Source: GEF IEO Annual Performance Report 2026 data set, which includes completed projects for which performance ratings were independently validated through June 2025.

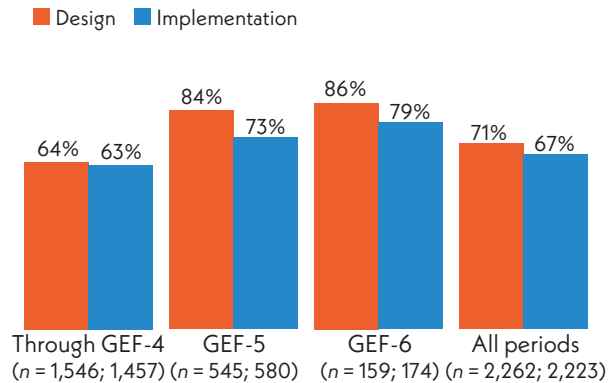
Note: The number of projects for which validated ratings for quality of implementation and execution are available is shown in parentheses. The cumulative figure for all periods includes GEF-7, which is not shown separately due to the limited number of observations.

Projects rated in the satisfactory range for implementation and execution are more likely to achieve satisfactory range outcome ratings. Outcome ratings are positively correlated with both implementation and execution (correlation coefficients of 0.59 and 0.56, respectively). Terminal evaluations highlight that effective implementation facilitates coordination and ensures timely delivery of outputs, whereas weak implementation often results in limited or incomplete output achievement. For instance, the Integrated Sound Management of Mercury in Indonesia's Artisanal and Small-scale Gold Mining (GEF ID 9707, United Nations Development Programme [UNDP]) project was rated highly satisfactory for both outcomes and implementation, owing to strong coordination and timely execution. In contrast, Scaling up Sustainable Land Management and Biodiversity Conservation to Reduce Environmental Degradation in Small Scale Agriculture in Western Kenya (GEF ID 5272, United Nations Environment Programme [UNEP]) received unsatisfactory ratings for both outcomes and implementation, with only 4 of 21 key outputs fully delivered and 7 not delivered at all because of weak implementation.

Quality of M&E

There has been substantial improvement in the quality of M&E design since GEF-5, 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-4 and earlier, ratings for design and implementation were similar ([figure 3.4](#)). From GEF-5 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 design has improved through stronger emphasis on project theories of change, more robust results

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



Source: GEF IEO Annual Performance Report 2026 data set, which includes completed projects for which performance ratings were independently validated through June 2025.

Note: The number of projects for which validated sustainability ratings are available is shown in parentheses. The cumulative figure for all periods includes GEF-7, which is not shown separately due to the limited number of observations.

measurement frameworks, the integration of corporate results indicators, and a greater focus on M&E during project appraisal.

The quality of M&E has improved across most focal areas, with the exception of land degradation. International waters shows the most significant progress, with 88 percent of projects rated in the satisfactory range for M&E design in recent periods. Multifocal area projects have also improved, but about 23 percent still fall into the unsatisfactory range—similar to land degradation, which has not seen an improvement in ratings.

For M&E implementation, chemicals and waste leads, with 85 percent of projects rated in the satisfactory range. In contrast, multifocal area and land degradation projects trail behind, with only 71 percent and 65 percent, respectively, rated in the satisfactory range. The lower ratings for land degradation are partly linked to

implementation in countries with challenging operational environments.

Regionally, 80 percent of projects in Latin America and the Caribbean since GEF-5 are rated in the satisfactory range for M&E design. However, 20 percent fall short on implementation. Global projects tend to perform better in M&E implementation than design, while projects in SIDS have the smallest percentage of satisfactory range ratings in both categories.

3.2 PERFORMANCE AT THE REGIONAL/COUNTRY LEVEL

Trends in regional performance

The performance of completed projects approved from GEF-5 onward varies across regions (figure 3.5).

Projects in Asia and in Europe and Central Asia generally outperform those in other regions for key criteria such as outcome achievement, sustainability, implementation, execution, and M&E design and implementation. While projects in Latin America and the Caribbean performed on par with Asia and Europe and Central Asia through GEF-4, their improvement in subsequent replenishment periods has been less pronounced. A smaller share of completed projects in Africa from GEF-5 onward are rated in the satisfactory range across most performance indicators. Nonetheless, the African portfolio has shown marked improvement compared to earlier GEF periods, particularly in quality of implementation and likelihood of sustainability.

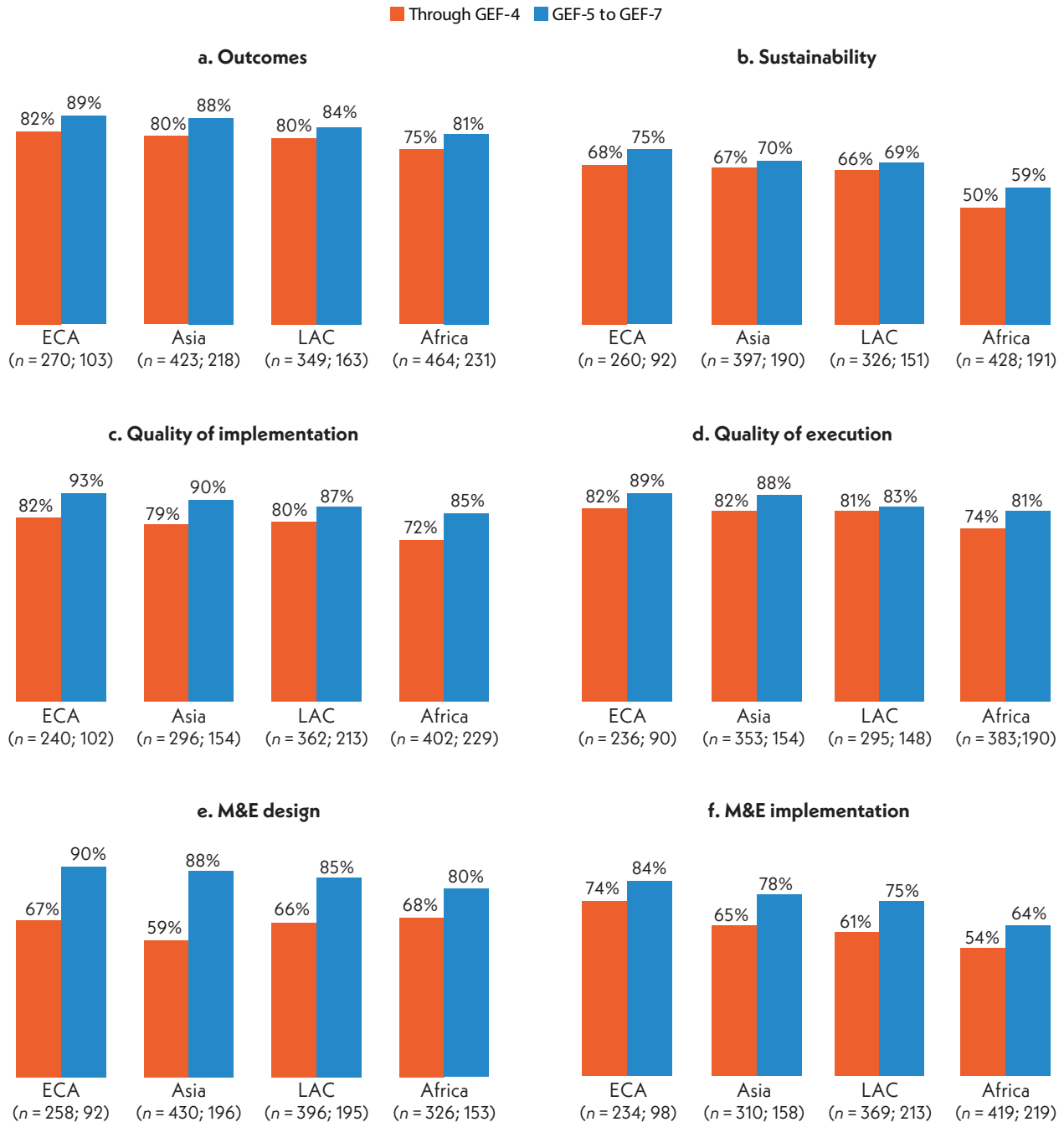
Across regions, GEF-funded projects have delivered strong environmental outcomes, especially when aligned with national priorities. In Africa, 81 percent of GEF-5 to GEF-7 projects were rated in the satisfactory range, with notable successes including

Ethiopia's Sustainable Land Management Project 2 (GEF ID 5220, World Bank) and the Community-based Climate Risks Management in Chad (GEF ID 8001, UNDP) project. Similar alignment was seen in Latin America and the Caribbean, where the Conservation and Sustainable Use of Biological Diversity in Priority Landscapes of Oaxaca and Chiapas (GEF ID 9445, Conservation International) in Mexico built on legal frameworks.

Sustainability remains a common challenge. For example, UNDP's sustainable land management (SLM) project in Malawi's Shire River Basin (GEF ID 3376) and an institutional and policy-strengthening effort to increase biodiversity conservation in Colombia (GEF ID 4111, UNDP) have struggled with limited funding, barriers to market access, lack of political support, and/or weak private sector involvement after project closure. Even in regions with stronger institutions, as in the Latin America and the Caribbean and Europe and Central Asia regions, the financial and institutional foundations for sustaining results are often fragile.

M&E weaknesses constrain adaptive management, but signs of progress are visible. While M&E weaknesses—especially in Africa—have posed challenges for adaptive management, ongoing improvements indicate positive momentum. M&E weaknesses—especially in Africa—further limit adaptive management. Projects such as the LDCF-financed climate information and early warning systems projects in Malawi and Uganda (GEF IDs 4994 and 4993, UNDP) highlight gaps in data collection and coordination. In contrast, the Gabon Wildlife and Human-Elephant Conflict Management (GEF ID 9212, World Bank) child project was an example of a functioning M&E system, used for regular progress reporting.

Several projects in Asia demonstrate promising M&E practices, including the use of information technology-based data collection tools, the establishment of information-sharing platforms, and the training of

FIGURE 3.5 Projects rated in the satisfactory/likely range, by region

Source: GEF IEO Annual Performance Report 2026 data set, which includes completed projects for which terminal evaluations were independently validated through June 2025.

Note: ECA = Europe and Central Asia; LAC = Latin America and the Caribbean. The number of projects for which validated performance ratings are available is shown in parentheses.

conservation officials in their application. Examples include Vietnam's Strengthening Partnerships to Protect Endangered Wildlife (GEF ID 9529, World Bank) and Sustainable Development in Poor Rural Areas in China (GEF ID 3608, World Bank), although these still face financing hurdles. Overall, sustaining and scaling results will require stronger institutional capacity, better M&E, and diversified funding strategies across all regions.

Interregional performance differences are more closely linked to country-level characteristics than to geography alone. Countries classified as LDCs or as fragile, conflict-affected, and violent (FCV) contexts tend to receive lower performance ratings. Africa is home to 69 percent of LDCs and 54 percent of FCV countries, while Asia hosts 23 percent of LDCs and 36 percent of FCV countries (World Bank 2020). In contrast, neither LDCs nor FCV countries are present in Europe and Central Asia, and there is only one in Latin America and the Caribbean (Haiti). Institutional constraints common in LDC and FCV contexts—such as weak governance, limited fiscal capacity, fragile institutions, and heightened vulnerability to shocks—significantly affect implementation capacity and project performance (GEF IEO 2024b).

Evidence from country cluster studies²

The GEF's portfolio in drylands, river basins, and island ecosystems highlights the growing importance of integrated approaches, strong local engagement, and cross-sectoral solutions in addressing complex environmental and socio-economic challenges. These regions are highly vulnerable yet offer significant opportunities to

demonstrate how sustainable resource management, climate resilience, and inclusive governance can deliver lasting global environmental benefits. This subsection examines the GEF's contributions in these critical landscapes and the pathways being developed to secure long-term resilience and sustainability.

The GEF's interventions across drylands, the Lower Mekong River Basin, and some SIDS in the Caribbean and the Pacific demonstrate increasing relevance to regional ecological challenges and national development priorities. Over successive replenishment periods, programming has shifted from isolated, sectoral interventions to integrated, landscape-wide approaches. This evolution is exemplified by initiatives such as the Dryland Sustainable Landscapes Impact Program, the Mekong Integrated Water Resources Management framework, and the Pacific R2R (ridge to reef) program. 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 on 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. A growing 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

² The material in this subsection is drawn from three strategic country cluster evaluations covering drylands, the Lower Mekong River Basin, and Pacific SIDS and an independent portfolio review of Caribbean SIDS.

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.

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 the 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.

DRYLANDS

The GEF's dryland strategy has shown increasing relevance over time, transitioning from isolated, sector-specific projects in GEF-5 to integrated, landscape-wide 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.

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. Socio-economic 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.

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.

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 structures—such 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.

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 basin-wide 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.

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.

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.

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.

SIDS

The GEF's engagement with SIDS reflects a context-sensitive, systems-based approach tailored to the unique environmental and institutional challenges of these nations. Emphasizing integrated, multifocal programming—such as the ridge to reef approach and the Implementing Sustainable Low and Non-Chemical Development in SIDS (ISLANDS) program (GEF ID 10185, UNEP)—the GEF has aligned global environmental goals with national and regional priorities, notably in biodiversity conservation, climate resilience, and chemicals management. Regional partnerships with organizations such as the Secretariat of the Pacific Regional Environment Programme, the Organisation of Eastern Caribbean States, and the Basel Convention Regional Centre for Training and Technology Transfer for the Caribbean have been instrumental in providing technical support and fostering knowledge exchange. Increasingly, GEF projects in SIDS have aimed to mainstream environmental considerations into national planning and budgetary frameworks, particularly in sectors such as tourism, fisheries, and disaster risk management. However, persistent structural constraints—including

high transaction costs, weak coordination, and limited national capacity—hamper effective delivery and sustainability, raising questions about the long-term viability of the current delivery model.

GEF programming in both Pacific and Caribbean SIDS has demonstrated strong contextual relevance, reflecting the environmental vulnerabilities and socioeconomic realities of these regions. In the Pacific, integrated approaches like the ridge to reef model were tailored to the ecological interdependence of terrestrial and marine systems and aligned with traditional governance structures. Caribbean projects emphasized marine governance, pollution control, and disaster resilience, addressing priorities such as coastal degradation and the growing importance of circular economy models. Both regions benefited from regional institutional partnerships and alignment with national development strategies, although execution was often hindered by limited capacity and fragmented governance.

In both regions, GEF projects have supported policy reform, institutional development, and localized environmental outcomes. The Pacific R2R (GEF ID 5395, UNDP, FAO, and UNEP) program led to protected area designations and integration of environmental planning into budget systems (as in Tonga). In the Caribbean, marine spatial planning was advanced in five countries under the Caribbean Regional Oceanscape Project (GEF ID 9451, World Bank), and the Integrated Transboundary Ridges-to-Reef Management of the Mesoamerican Reef (GEF ID 5765, World Wildlife Fund–US) initiative enhanced watershed and coastal zone management. While pilot successes were evident, many projects in both regions struggled to scale impacts or translate frameworks into systemic change in the face of weak coordination and underutilized resources.

Sustainability remains a shared challenge. In the Pacific, initiatives with strong policy integration—such as the Niue Ocean Wide Trust—show promise, but

many projects lacked exit strategies and continued funding. In the Caribbean, several projects embedded environmental priorities into legal frameworks and piloted innovative finance mechanisms, although staff turnover and limited postproject investment threatened continuity. Across both regions, weak institutional capacity and limited domestic financing were persistent barriers to sustaining project gains.

Common operational challenges included high transaction costs, limited technical expertise, and fragmented institutional coordination. In the Pacific SIDS, geographic isolation and vulnerability to natural disasters added significant logistical complexity. Caribbean projects, while generally benefiting from stronger institutions and infrastructure, still encountered coordination issues and delays in procurement and policy implementation. Regional organizations played important supporting roles, but their engagement varied across project cycles and contexts.

While both regions face similar structural constraints, key differences influence implementation and sustainability. Caribbean SIDS generally benefit from stronger institutional frameworks, better connectivity, and more robust infrastructure, all of which support higher implementation efficiency. For their part, Pacific SIDS face greater geographic and logistical barriers that increase costs and complicate coordination. Also, Caribbean countries have made greater strides in embedding reforms within national legal and planning systems, while Pacific projects often rely more heavily on regional platforms and external support. These contextual distinctions shape the enabling environment for project execution and highlight the need for tailored delivery models that reflect regional realities.

3.3 ENHANCING ACHIEVEMENT OF LONG-TERM IMPACT

The GEF enhances the likelihood of sustaining outcomes and achieving impact over the long term by supporting three critical areas: broader adoption of interventions by stakeholders, environmentally coherent national policies, and shifts in stakeholder behavior from environmentally harmful to environmentally friendly practices. Broader adoption, reinforced by behavior change, reflects strong stakeholder ownership that drives continued action and expands environmental benefits beyond project completion. Coherent environmental policies help create synergies and reduce trade-offs with nonenvironmental goals that might otherwise undermine system-level gains. By catalyzing replication and scaling of successful interventions, fostering shifts in societal norms, and aligning national and local policies with global environmental goals, the GEF helps move individual project results toward long-term transformational change. This section reviews the extent to which completed projects are achieving broader adoption and examines how GEF-8 projects are being designed to incorporate features that support transformational change.

Broader adoption

The GEF's resources are limited; 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. Six case studies were also conducted—in Azerbaijan, Georgia, the Philippines,

Uruguay, and Zambia—to evaluate postproject outcomes.

Fifty-nine percent of projects achieved some form of broader adoption. The most common form was the mainstreaming of enabling conditions, such as policy, legal, and institutional development (58 percent) and individual and institutional capacity building (40 percent). Examples include government adoption of national strategies or environmental laws developed with GEF support, and the institutionalization of monitoring systems into regular government operations. In contrast, broader adoption of technologies, practices, and approaches that directly generated environmental benefits—such as crop rotation or electric vehicle use—was reported in only 18 percent of projects. Climate change and multifocal area projects exhibited the highest rates of broader adoption. Compared to older cohorts, a greater proportion of more recent projects achieved broader adoption at completion, and at a larger scale. [Table 3.4](#) provides a detailed comparison.

The Implementation of SLM Practices to Address Land Degradation and Mitigate Effects of Drought (GEF ID 5767, UNDP) project undertaken in the Philippines has been replicated by the city government using its own agriculture budget; the provincial government has also scaled up SLM efforts. At the national level, SLM has been integrated into agricultural programs, prompting additional local governments to allocate funding for further adoption.

A UNDP-led project in Uruguay provided capacity building for mercury analysis (GEF ID 4998). 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

TABLE 3.4 Broader adoption reported at project completion (% of cohort)

Broader adoption taking place?	OPS6 (n = 568)	OPS7 (n = 161)	OPS8 (n = 81) ^a
Yes	55	40	59
At large scale	19	28	47
At local scale	36	12	12
No	45	60	40
Plans present but not yet implemented, or not taking place	43	55	38
Unable to assess	2	5	2

Source: Terminal evaluation reports.

Note: OPS = comprehensive evaluation of the GEF.

a. Completed GEF-6 and GEF-7 projects, 50% random sample.

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 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.

Set up as pilots or demonstration initiatives, Small Grants Programme (SGP) projects are designed to be replicated, scaled up, or integrated into broader frameworks. Common pathways for scaling include strong community ownership, capacity building, leadership development, integration into policies and institutions, and expansion through partnerships and follow-up financing. GEF SGP monitoring reports from FY 2020–21 to FY 2023–24 show that 566 completed projects (15.2 percent) have been replicated or scaled by partners. Since 2020–21, approximately 13 percent (470 projects) have influenced policy. These figures likely represent conservative estimates, as scaling and

replication often occur after project completion and may be underreported. [Table 3.5](#) provides examples of replication and scaling from SGP initiatives in practice.

GEF-supported interventions often serve as a foundation for projects supported by the Green Climate Fund (GCF). The GEF's Annual Performance Report 2025 found that of 253 projects financed by the GCF through June 2024, 17 percent indicate an intent to build on GEF projects (GEF IEO forthcoming-s). 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 SGP in the Federated States of Micronesia, offering grants of up to \$10 million per project. The program 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 pair of World Bank–implemented initiatives—funded respectively by the GEF Trust Fund and the Special Climate Change Fund (SCCF) for a combined \$8.73 million—in the West Balkans Drina River Basin totaling (GEF IDs 5556 and 5723). The GCF project aims to upgrade and expand the hydrometric monitoring network while scaling up proven solutions and technologies developed under the SCCF project, among others.

TABLE 3.5 Examples of pathways to replication and scaling under SGP OP7 (2020–24)

Pathway	Illustrative evidence
Scaling through national programs	Plant-a-Forest watershed model in Seychelles fed directly into the GEF-6 A Ridge-to-Reef Approach for the Integrated Management of Marine, Coastal and Terrestrial Ecosystems in the Seychelles (GEF ID 9431, UNDP) project, broadening coverage from one watershed to a national island portfolio
Market-based rollout	Women-led eco-briquette enterprise in South Africa attracted new capital from South African National Parks to replicate near Kruger National Park, using SGP funds as seed finance
Policy dialogue platforms	Armenian SGP project piloted incentives for consumers to switch from plastic to reusable bags, collected behavior change data, and collaborated closely with the Ministry of Environment; the findings were translated into formal policy recommendations which helped fine-tune Armenia's 2019 environmental levy and 2022 nationwide plastic bag ban
Social enterprise sustainability model	Guatemalan youth organization, trained through the SGP, has implemented regenerative agriculture practices based on Mayan ancestral knowledge, thereby empowering local communities to adopt sustainable farming methods; an innovative financial model—including small-scale reinvestment of sales, a microfund for members, and partnerships with schools and cooperatives—ensures sustainability without dependence on donor funding and fosters strong community ownership of climate adaptation initiatives

Sources: SGP 2024a, 2024b; SGP [Plastic Free Armenia Behavioral Change and Awareness Raising Campaign](#) web page; UNDP [Juventud Guatemalteca Lidera La Acción Climática](#) web page.

The GEF's structured approach to transformational change is closely linked to its commitment to enabling broader adoption and scaling up of impactful solutions. Since the launch of GEF-6, the GEF has taken a more intentional and strategic approach to achieving transformational change, aiming to drive systemic shifts in key economic sectors for lasting global environmental benefits. This GEF strategy is based on four key levers: governance and policy, financial leverage, innovation, and multistakeholder dialogue. It is thus important to assess how these levers are being deployed through GEF projects. The GEF IEO introduced a theory of change framework to assess transformational interventions supported by the GEF (GEF IEO 2018b). This framework identifies relevance, ambition and systemic focus, attention to contextual conditions and actors, and transformational mechanisms as key project design areas that may contribute to transformational change.

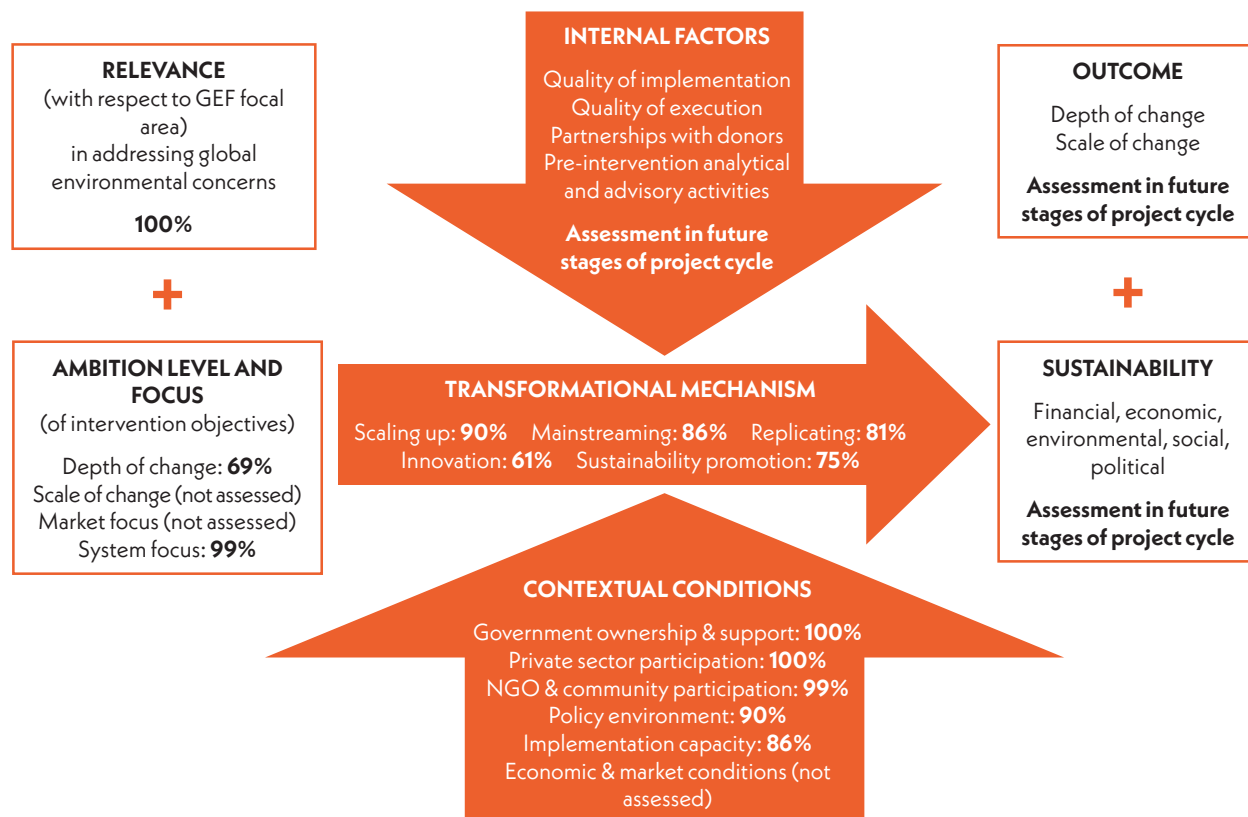
The IEO reviewed a sample of 83 full-size GEF-8 projects approved and endorsed by the Chief Executive Officer (CEO) through December 2024, applying its framework for assessing transformational change. The review found that nearly all projects are purposefully

designed to support transformational outcomes ([figure 3.6](#)). These projects consistently align with focal area priorities, define clear system boundaries, consider contextual conditions, and outline pathways for broader adoption and scale-up. Most also integrate key design features such as knowledge management, capacity building, stakeholder engagement, legal and policy reforms, and the piloting of innovative approaches. Notably, 60 percent of the reviewed projects include innovations or technologies that are new to the project area.

Integrated programs demonstrate greater potential than stand-alone projects to deliver transformational outcomes. This is further discussed in [chapter 6](#).

Policy coherence for environmental benefits

The GEF-8 Programming Directions identify “governance and policies” as a key lever for system transformation (GEF Secretariat 2022a). Consequently, in October 2023, the GEF Council approved a strategic roadmap to strengthen policy coherence through

FIGURE 3.6 Percentage of GEF projects addressing transformational change in design

Source: Project design documents for random sample of 83 GEF-8 full-size projects endorsed by Chief Executive Officer as of December 31, 2024.

Note: NGO = nongovernmental organization.

projects, programs, and corporate activities. A recent IEO evaluation looked at policy coherence in terms of the alignment between environmental and other public policy objectives, or between different environmental objectives such as biodiversity and climate change, to better achieve global environmental benefits.

Emerging findings from document reviews and field-based case studies of completed projects, other IEO evaluations, and stakeholder interviews have found that while this new focus more deliberately introduces initiatives at the program and corporate levels, the GEF has historically supported the alignment of environmental and nonenvironmental goals through policy reform at the project level (GEF IEO

forthcoming-m). Biodiversity mainstreaming, sustainable forest management, land degradation neutrality, and integrated water resource management are some of the focal area approaches that have worked on improving policy coherence as a means to achieve project outcomes. Completed projects show contributions to increased policy coherence between environmental and nonenvironmental sectors, although progress has at times been constrained by political, technical, and implementation challenges.

Contributions to policy coherence have primarily been through multilevel institutional collaboration and legal reforms. In a sample of 48 completed GEF-6 and GEF-7 projects reviewed for policy coherence

outcomes,³ 39 included activities designed to contribute to such outcomes. Of these, 87 percent (34 projects) implemented the planned activities, and 46 percent (18 projects) achieved one or more tangible intersectoral policy coherence outcomes, confirming stakeholder experiences that policy reform processes often take longer to complete than the typical project implementation period.

Projects supported policy coherence in several ways.

These included integrating agrobiodiversity and sustainability principles into national development plans, budget programs, and sectoral policies; formalizing transboundary agreements; and operationalizing data-sharing frameworks among ministries to facilitate the development of climate-resilient legislation across sectors. National and local policies were harmonized by strengthening the capacities of local governance structures in areas including participatory forest management, municipal waste management, and urban environmental integration.

Strong ownership among governments and other stakeholders contributed to the effectiveness of policy coherence-focused interventions. This ownership was attributable in part to project alignment with existing priorities and partnerships. On the other hand, limited progress was attributed to factors such as limited political support, lack of technical capacity, and insufficient implementation time relative to the duration of political and other institutional processes.

Projects from earlier GEF replenishment periods demonstrate how GEF interventions have contributed to policy coherence. In Morocco, the Energy Efficiency Codes in Residential Buildings and EE Improvement in Commercial and Hospital Buildings (GEF ID 2554) project approved under GEF-3 played a key role in the development of Energy Efficiency Law

No. 47-09, which introduced building codes, mandatory audits, and environmental impact requirements for urban development. It also spurred the launch of a national green cities program. In the Western Balkans, the Protection and Sustainable Use of the Dinaric Karst Aquifer System (GEF ID 3690) project established interministerial committees in four countries to harmonize water policies, contributing to the creation of Albania's Water Resources Management Agency.

While challenges such as staff turnover and funding delays affected progress, GEF-supported tools and approaches helped strengthen national policy coherence. The Forest Conservation and Sustainability in the Heart of the Colombian Amazon (GEF ID 5560, World Bank) project leveraged integrated planning processes to embed biodiversity conservation into municipal, regional, and sectoral programs in postconflict areas. Success was driven by strong government commitment, institutional stability, cross-sectoral champions, and a long implementation period of over 10 years.

Several other examples highlight that GEF projects did not always achieve policy coherence. In Malawi, the Private Public Sector Partnership on Capacity Building for Sustainable Land Management (GEF ID 3376) supported policy development across the forestry, charcoal, agriculture, and energy sectors. Conflicting maize subsidies and weak enforcement of the charcoal strategy made sustainable land management economically nonviable for farmers, leading to continued land and forest degradation. Similarly, Uruguay's mercury management project (GEF ID 4998) contributed to a national ban on mercury-containing medical products and supplied mercury analysis equipment to the Ministry of Public Health, but limited institutional capacity hindered full coordination with the environment ministry in these initiatives.

³The sample was drawn from the 161 completed GEF-6 and GEF-7 projects with terminal evaluations submitted as of June 30, 2024.

Behavior change

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 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, Uruguay, and Zambia to evaluate postproject outcomes. Knowledge and skill building in pro-environment practices emerged as the most frequently used approach to behavior change. Across these projects, 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, 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, the Strengthening Ecological Connectivity in Natural and Productive Landscapes Between the Amistad and Darien Biomes (GEF ID 11209, UNDP) project 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. The majority of projects successfully met their behavior change targets, with nearly half also achieving the associated environmental outcomes. 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. Other targeted behavioral changes include practices such as planting native crops, segregating waste, and complying with stricter fishing regulations. Some projects, such as those in the climate change focal area, have promoted the adoption of technologies like LED lighting and renewable energy microgrids; projects in other focal areas aim to reduce environmentally harmful behaviors such as poaching and mercury use. However, fewer than half of the projects include explicit behavior change indicators.

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 continued to invest in climate-resilient agricultural measures three years after project closure. In contrast, those trained but without benefiting from material support were less able to implement the full suite of practices, resulting in economic losses that

hindered further adoption. Similarly, in the Philippines SLM project (GEF ID 5767), some farmers replicated sustainable practices postproject through continued government support. Others continued to practice conventional farming given its quicker 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 enable scaling beyond initial pilot efforts. Projects that integrate these elements into their design are more likely to produce lasting and replicable environmental benefits.

3.4 EFFICIENCY IN RESOURCE USE

This section reviews administrative and operational efficiency, comparing the GEF's administrative costs with those of peer environmental funds. It also examines operational efficiency across the project cycle, focusing on how quickly GEF-committed resources move from approval to disbursement, reach beneficiaries, and support the achievement of intended objectives.

Administrative efficiency

The GEF ranks as the most efficient among the vertical climate funds in terms of administrative costs/expenditure ratios. Administrative costs typically account for between about 1 and 18 percent of total expenditures across various funds.⁴ The GEF's LDCF had the lowest administrative cost share at 1 percent,⁵

⁴ World Bank, [Financial Intermediary Funds \(FIFs\)](#) web page.

⁵ Some of the LDCF administrative costs are shared with the GEF Trust Fund administrative costs.

while the GCF recorded the highest at 17.63 percent over 2021–23. With an administrative cost-to-expenditure ratio of 3.7 percent, the GEF Trust Fund 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, which is 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 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.

The GEF has sustained—and, in some areas, improved—its activity cycle efficiency in GEF-8 compared to previous replenishment periods. Over the past four years, notable operational efficiency gains have been observed in some stages of the activity cycle ([table 3.6](#)). 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 Chief Executive Officer (CEO) endorsement also improved, with approved full-size projects from GEF-8 reaching endorsement in a median of 18 months, compared to 23 and 22 months for the GEF-7 and GEF-6 periods, respectively. Seventy-three percent of GEF-8 full-size project approvals met the 18-month threshold for CEO endorsement, which is a substantial improvement over GEF-7 and GEF-6, where only

TABLE 3.6 Efficiency of activity cycle: median time taken between steps in months

Cohort	Medium-size projects				Full-size projects			
	Integrated program	Other	Stand-alone	Total	Integrated program	Other	Stand-alone	Total
PIF submission to PIF approval: by period of PIF submission								
GEF-8	—	—	—	—	—	—	2	2
GEF-7	—	—	—	—	—	—	2	2
GEF-6	—	—	—	—	—	—	9	9
GEF-5	—	—	—	—	—	—	5	5
PIF approval to CEO endorsement/approval: by period of PIF approval								
GEF-8	—	—	—	—	18	17	19	19
GEF-7	—	—	13	13	23	22	24	23
GEF-6	—	—	14.5	14	20	23	22	22
GEF-5	—	—	16	16	—	23	21.5	22
CEO endorsement/approval to project start: by year(s) of CEO endorsement/approval								
2022–23	—	—	6.5	7	10	9	11	10
2020–21	—	4	6	5	8	4.5	6	6
2016–19	—	—	4	4	3.5	6	5	5
2012–15	—	—	4	4	—	4	4	4
CEO endorsement/approval to first disbursement: by year(s) of CEO endorsement/approval								
2022–23	—	—	15.5	16.5	23	17	20	20
2020–21	—	9	9	9	15	10.5	11	11
2016–19	—	13	4	8	6	11	9.5	9.5
2012–15	—	—	7.5	7	—	10	9	9
Time taken from project start to completion: by start year(s)								
2014–17	—	—	59	59	74	82	78	78
2010–13	—	65	55	60.5	—	77	74.5	75

Source: GEF Portal through June 2025.

Note: — = not applicable/not analyzed because of small number of observations.

14 percent and 25 percent, respectively, of approvals had met this threshold. In contrast, the transition from CEO endorsement to first disbursement has slowed, partly because of pandemic-related delays. Projects endorsed in 2022–23 disbursed funds in a median of 20 months, compared to 9- and 11-month medians for GEF-7 and GEF-6, respectively. In terms of implementation, full-size projects take about 75–78 months from start to completion, and medium-size projects take about 60 months.

Different project modalities differ in preparation time and time taken to reach key implementation milestones. For example, while recent child projects approved under integrated programs require a similar amount of preparation time as those prepared under other programs and stand-alone projects, they have taken longer to reach first disbursement. Notably, the implementation duration for child projects under integrated programs has been somewhat shorter than that of child projects in other programs and stand-alone

projects. Medium-size projects typically have shorter preparation and implementation durations than full-size projects.

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 Civil Society Organization (CSO) Challenge Program (GEF ID 11757, IUCN), 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, as do some components of the Gustavo Fonseca Youth Conservation Leadership Program. The LDCF and the SCCF have a competitive window as well: the Challenge Program for Adaptation Innovation. CSOs and community-based organizations 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; the SGP Microfinance Initiative (GEF ID 11903, World Bank), 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.

3.5 SUMMARY

The GEF continues to perform strongly, with more than 80 percent of completed projects rated in the satisfactory range for outcomes and over 80 percent rated in this range for quality of implementation and execution. These results reflect a mature institution capable of delivering consistent project-level success. However, impact assessments paint a less encouraging picture: only 59 percent of projects demonstrated broader adoption, and sustainability was rated likely in nearly two-thirds of projects. These findings are broadly consistent with those reported by other international organizations. Challenges with broader adoption and sustainability, compounded by underinvestment in environmental public goods, create a disconnect: despite strong project-level performance, systemic impact remains limited. To translate high project success rates into durable environmental gains at scale, the GEF must sharpen its catalytic role—mobilizing cofinancing, strengthening policy coherence, crowding in partners for delivery and learning, and fostering innovation that can be replicated and scaled. Greater emphasis is also needed on sustainability—ensuring the environmental, financial, and institutional viability of achievements beyond the life of GEF support.

Socioeconomic co-benefits

There is growing recognition that environmental protection is more effective and sustainable when it delivers tangible improvements in the lives of affected communities, especially the most vulnerable. As the GEF deepens its commitment to transformational change, enhancing and understanding these socioeconomic outcomes of its projects has become an important priority. Addressing global challenges such as biodiversity loss, climate change, land degradation, and pollution requires integrated approaches that reflect the socioeconomic realities in which these issues unfold.

As used in this chapter, “socioeconomic co-benefits” refers to the additional positive outcomes of environmental interventions that go beyond their primary ecological goals. These may include improved livelihoods and incomes, better health and food security, employment opportunities, gender equality, market development, and enhanced access to services and capacities.

While the pursuit of co-benefits is not new to the GEF, there has been a recent strategic shift toward more systematically identifying, tracking, and leveraging these outcomes across the portfolio. The GEF has provided long-standing support for community-based initiatives, inclusive approaches, and the Small Grants Programme (SGP), all of which aim at socioeconomic benefits. The GEF-8 Programming Directions formalize this emphasis by promoting integrated solutions that address both environmental degradation and social vulnerability (GEF Secretariat 2022a).

Historically, GEF-funded projects have given limited attention to monitoring and assessing co-benefits during design and implementation. As a result, there is a risk that the full scope of results and impacts may be overlooked or undervalued by donors and partners. Tracking socioeconomic co-benefits is essential for project managers and stakeholders, as it helps identify which benefits are emerging, the constraints limiting their realization, and the distribution of these benefits across different groups. To address this gap, the GEF recently presented a paper to the Council on monitoring co-benefits (GEF 2024c), outlining a broader set of tools and approaches for assessing these outcomes. If systematically applied by lead and executing agencies, these tools could improve the measurement of co-benefits and offer a more comprehensive picture of the developmental impacts of GEF-funded interventions.

This chapter draws on a dedicated study by the GEF IEO to examine how socioeconomic co-benefits are being realized in practice, despite gaps in systematic monitoring (GEF IEO forthcoming-q). Using a novel methodology relying on geospatial analysis, the evaluation reviewed how GEF-funded projects have contributed to socioeconomic outcomes across a portfolio of 111 projects across 11 countries. To validate and contextualize the geospatial findings, the evaluation incorporated evidence from other IEO evaluations under GEF-8—including findings from strategic country cluster evaluations in drylands, the Lower Mekong region, and small island developing states (SIDS) in the Pacific and Caribbean—and conducted in-depth

case studies in Chad, Mexico, and Nepal, covering 33 projects in total. These case studies enriched the analysis by providing qualitative insights from stakeholders, project sites, and communities. Together, these sources provide the evidence base for the chapter.

4.1 SOCIOECONOMIC CO-BENEFITS IN PROJECT DESIGN

Starting in GEF-5, GEF-funded projects began placing greater emphasis on socioeconomic co-benefits, reflecting the GEF's strategic shift toward integrating environmental and development goals. Project documents show growing recognition that addressing environmental degradation is more effective when aligned with local socioeconomic priorities. Although most projects considered socioeconomic co-benefits in their design, their relative emphasis depended on the project's focus, which in turn tended to depend on the lead GEF Agency. It is useful to distinguish between two main project focuses:

- **Projects primarily focused on environmental conservation, with secondary or complementary socioeconomic co-benefits.** These are typically implemented by United Nations entities, international nongovernmental organizations, or conservation organizations. The Conflict to Coexistence (GEF ID 11156) project in Mexico, led by the World Wildlife Fund (WWF), exemplifies this approach. Another example is the Restoring Ecological Corridors in the Mayo-Kebbi Quest, Chad, to Support Multiple Land and Forests Benefits (RECONNECT; GEF ID 9417), led by the International Union for Conservation of Nature (IUCN), built on earlier initiatives in forestry and the management of agro-sylvo-pastoral systems, with the aim of reducing greenhouse gas emissions and protecting wildlife migration corridors. In both cases, project designs acknowledged the importance of co-benefits as incentives for natural resource

conservation. However, the projects' consideration of co-benefits was limited in scope and detail at the design stage.

- **Projects with socioeconomic development as the primary entry point, with environmental benefits integrated as complementary objectives.**

This approach is more commonly observed in projects led by international financial institutions such as the World Bank and the African Development Bank. An illustrative example is the African Development Bank–led project Building Resilience for Food Security and Nutrition in Chad's Rural Communities (GEF ID 9050). The theme of food security was central to its rationale and the design linked environmental objectives such as restoring degraded lands and protecting biodiversity to improved local food production. The theory of change emphasized small-scale irrigation, crop diversification, and the establishment of cereal banks. Another example is the Sustainable Productive Landscapes (GEF ID 9555) project in Mexico, implemented by the World Bank. This project prioritized rural development, including support for agricultural production and small and medium enterprises, while also addressing biodiversity conservation and the sustainable management of forests and soils.

Building on this dual-entry approach, where environmental and socioeconomic objectives are intentionally interlinked, GEF projects increasingly incorporate at least one socioeconomic co-benefit for marginalized groups, with women being the most frequently targeted. According to a recent IEO evaluation on inclusion, 70 percent of 111 completed projects and 79 percent of ongoing projects planned capacity-building activities specifically for women, making it the most consistently reported co-benefit (GEF IEO forthcoming-b). Other common co-benefits included civic empowerment and economic empowerment. In contrast, fewer projects explicitly targeted Indigenous Peoples, local communities, or youth. Youth did, nonetheless, receive

notable support for capacity building (38 percent of completed and 32 percent of ongoing projects) and economic empowerment (14 percent and 26 percent, respectively). Some projects also generated unintended co-benefits for marginalized groups, such as increased health awareness among women, as documented in the terminal evaluation of a United Nations Development Programme (UNDP) project in Uzbekistan, Reducing Pressures on Natural Resources from Competing Land Use in Non-irrigated Arid Mountain, Semi-desert and Desert Landscapes (GEF ID 4600). While a range of other co-benefits—including improved services, public health, governance, and resilience—were also reported, they appeared in fewer than one-quarter of projects. Notably, the share of planned co-benefits that were fully implemented was similar for both completed and ongoing projects, suggesting consistent follow-through on social inclusion objectives once they are incorporated into design.

There is significant scope to strengthen project design by clearly articulating the pathways through which socioeconomic co-benefits are expected to be achieved. In many cases—particularly in conservation-focused projects—theories of change did not explicitly identify the mechanisms through which co-benefits would be realized. The connections between environmental interventions and socioeconomic outcomes were often assumed rather than clearly defined in these projects, with limited detail on how project activities would lead to outcomes such as improved market access, enterprise development, or diversified livelihoods.

A second area requiring greater attention in project design is the identification and mitigation of potential adverse socioeconomic impacts from environmental conservation measures. Among the 33 projects reviewed through case studies, only about 10 percent explicitly assessed these risks and identified mitigation measures. While environmental protection is widely recognized as beneficial at the societal level, it can impose short-term costs on

individuals, households, and communities—such as restricted access to forests, fisheries, or other natural resources. Although the GEF Policy on Environmental and Social Safeguards (GEF 2018b) provides a framework for addressing such risks, its effective implementation depends on robust analysis and the incorporation of specific design features to mitigate negative socioeconomic effects.

4.2 CO-BENEFIT OUTCOMES

Building on the analysis of project design, evidence from country case studies, focal area evaluations, and portfolio reviews shows that GEF-funded projects have generated a wide variety of socioeconomic co-benefits, where environmental and development outcomes reinforce each other. These co-benefits are diverse, with the most frequently observed being gains in human capital and social capital, followed by economic and financial benefits ([figure 4.1](#)). The following discussion begins with human capital co-benefits, which often have the most immediate and visible impacts on local livelihoods and resilience.

Human capital co-benefits

Human capital development emerged as one of the most consistently observed co-benefits across the portfolio, as confirmed by the evaluation and recent IEO assessments. Several projects focused on strengthening local knowledge, skills and decision-making capacities, particularly in climate risk management and environmental stewardship. For example, the UNDP-implemented Community-Based Climate Risk Management project in Chad (GEF ID 8001) used local radio networks to disseminate weather information in local languages, offering guidance on optimal timing for sowing, fertilization, and other agricultural practices. As a result, farmers became more aware of climate-related risks, such as crop losses from flooding during the rainy

FIGURE 4.1 Main categories of co-benefits and examples

season, and adjusted their cropping calendars and practices accordingly.

GEF-funded interventions have contributed to the development of specific technical skills among local communities, particularly in sustainable agriculture and environmentally friendly land management practices. These skills have supported both environmental objectives and improved livelihood outcomes. In Mexico, the World Bank's Sustainable Productive Landscapes project enabled local farmers to adopt low-chemical crop management techniques through hands-on training in the production of organic inputs. With support from local universities and agricultural extension centers, farmers learned to prepare compost, bokashi, vermiculture systems, and organic fertilizers.

In Chad, the Enhancing the Resilience of the Agricultural Ecosystems (GEF ID 5376, International Fund for Agricultural Development) project used the farmer field school approach to test and disseminate integrated soil fertility management techniques. These included the use of animal manure and the application of a biological herbicide to reduce chemical inputs. A similar focus on technical skill development was seen in Nepal, where the WWF-led Integrated Landscape Management (GEF ID 9437) project promoted

sustainable land management practices aligned with biodiversity conservation and community resilience.

GEF-supported initiatives have also highlighted the benefits of integrating traditional knowledge with modern technological tools to strengthen environmental monitoring and management. In the Sierra Norte region of Oaxaca, Mexico, the UNDP-led SGP facilitated a collaboration between Indigenous communities and local university institutes ([box 4.1](#)). Through this partnership, community-based students applied modern monitoring tools to track natural resources and wildlife, fostering intergenerational knowledge exchange and strengthening youth engagement in sustainable resource management at the local level.

Social capital co-benefits

Social capital enhancement emerged as a notable co-benefit of GEF-funded projects, with two key dimensions:

- Strengthening intra-community cohesion and improving local governance of natural resources, particularly through community-based approaches

BOX 4.1 Matching traditional knowledge and information technology for natural resource conservation in Mexico

In Capulalpán de Méndez (Sierra Norte of the state of Oaxaca) the GEF's Small Grants Programme (SGP) worked with a federation of Indigenous organizations, the Unión de Comunidades Productoras Forestales Zapotecas y Chinantecas de La Sierra Juárez. The union covers a very large area, 23,890 hectares, of which 5,097 hectares is dedicated to forest management.

The SGP supported a collaboration between the union and the Department of Computer Science of the Universidad de la Sierra Juárez on the use of information technology and camera traps to monitor soil health, water conditions, vegetation cover, and wildlife. This collaboration provided students—including young women—from the Indigenous communities with updated technological skills, while allowing traditional community maps to be matched with scientific data and indicators, tracking the results of natural resource management and the effects of climate change.

In an area characterized by substantial outmigration and where the youth are said to have little interest in traditional community activities, access to technical know-how provided the younger generations with distinct opportunities:

- A fresh lens through which to view the local natural resource base and new ideas about initiatives that would suit their interests (e.g., sustainable logging, spring water bottling, ecotourism, payment for environmental services schemes)
- A chance to address the local assemblies (traditionally dominated by elder males), be recognized for their new skills, and receive their support to experiment with new activities.

- Building and reinforcing relationships with external stakeholders, including neighboring communities, local governments, universities, technical agencies, and public programs.

Community-based approaches played a pivotal role in strengthening social capital.¹ Notably, they anchored project activities within existing grassroots structures such as resource management committees, conservation groups, and village councils. By working through these local institutions, projects fostered ownership, empowered community participation, and enhanced governance. For example, Chad's RECONNECT project revitalized traditional grassroots organizations, empowering them to participate in decision-making processes related to natural resource management and advocate for local development priorities. In Mexico, Indigenous communities involved in the Conservation and Sustainable Use of Biological Diversity in Priority Landscapes of Oaxaca and Chiapas (GEF ID 9445, Conservation International) project strengthened governance capacities that enabled them to achieve sustainable forest management certification, register areas voluntarily designated for conservation, and engage in participatory land use planning. Similarly, project documentation for Lao PDR's Effective Governance for Small-Scale Rural Infrastructure and Disaster Preparedness in a Changing Climate (GEF ID 4554, UNDP) project indicates that efforts focused on raising community awareness about the importance of maintaining water infrastructure was achieved through active engagement with village committees.

In Botswana, the Using SLM [Sustainable Land Management] to Improve the Integrity of the Makgadikgadi Ecosystem and to Secure the Livelihoods of Range-land Dependent Communities (GEF ID 5789, UNDP) project worked directly with livestock associations

¹ Community-based approaches are discussed further in [chapter 7](#).

and community trusts, helping to build their capacity and supporting them in accessing external funds from the National Environment Fund and local mining companies. Similarly in Tanzania, the Enhancing the Forest Nature Reserves Network for Biodiversity Conservation in Tanzania (GEF ID 5034, UNDP) project facilitated commercial joint ventures between the private sector, the Tanzania Forest Services Agency, and local communities in large-scale tourism enterprises.

Economic and financial co-benefits

Economic co-benefits from GEF-funded projects were observed primarily through two pathways: (1) increases in agricultural productivity and income, and (2) diversification into new income streams and employment opportunities.

Several GEF projects reported measurable improvements in agricultural output and cost efficiency.

In Mexico, the adoption of biofertilizers led to a rise in maize yields from 0.8 to 1.2 tons per hectare, a 48 percent reduction in tomato production costs, and a doubling of carrot yields. In Chad, improved beekeeping practices enhanced both the quantity and quality of honey production, enabling producers to command prices approximately 40 percent higher. In Côte d'Ivoire's Obsolete Pesticides Management Project (GEF ID 5362, World Bank), training in pesticide management contributed to reduced crop production costs. In Cambodia's Promoting Climate-Resilient Water Management and Agricultural Practices (GEF ID 3404, UNDP) project, local communities saw their income double, from around \$25 per month to \$50–\$100 per month after the project. This gain was achieved through diversified farming activities (multiple crops, double cropping, cash crops, animal husbandry) and access to clean water through water ponds, irrigation, and solar water pumping technologies. Further indirect financial benefits of the project included reduced time spent collecting water,

improved hygiene, and the enabling of more home gardening.

GEF interventions also supported income diversification by promoting new livelihood options.

In Mexico, initiatives included artisanal handicraft production using forest wood waste (under the SGP) and ecotourism development in areas such as the Chachahua lagoons, as part of the sustainable landscapes project led by Conservation International (GEF ID 9445). In Viet Nam, the Sustainable Management of Peatland Ecosystems in Mekong Countries (GEF ID 9232, IUCN) project facilitated tourism-related income opportunities—many led by women—by highlighting the global ecological significance of the site. The associated national park now sustains its operations through a combination of government support and self-generated revenue from entrance fees and tour packages. In the Arab Republic of Egypt, the Protect Human Health and the Environment from Unintentional Releases of POPs [persistent organic pollutants] Originating from Incineration and Open Burning of Health Care and Electronic Waste (GEF ID 4392, UNDP) is generating new business opportunities and employment, including the formalization of previously informal waste collectors.

Many projects have achieved notable improvements in agricultural production and diversification, particularly in recent GEF cycles, creating opportunities to further strengthen support for market access and integration into value chains. This is especially true in conservation-focused projects where these were not primary objectives. In Chad, for example, the evaluation of an agricultural ecosystems project found that farm productivity had increased, but weak market linkages constrained the sustainability of income gains. Similarly, in Mexico, Conservation International's sustainable landscapes project provided technical assistance to ecotourism enterprises but did not extend comparable support to coffee cooperatives to strengthen their marketing strategies, limiting opportunities for broader economic impact.

To further discern and assess the economic co-benefits engendered by GEF projects, the IEO employed an innovative analytic framework that combined geospatial analysis with quantitative data from demographic, economic, and health surveys in areas where GEF projects were implemented. The geospatial analysis covered 111 projects across 11 countries—Bangladesh, Botswana, Cambodia, Chad, Costa Rica, Ecuador, India, Lao PDR, Mexico, Nepal, and Viet Nam—spanning GEF-4 to GEF-8. Projects and countries were selected based on the availability of Global Positioning System (GPS) coordinates and compatible socioeconomic survey data from international sources; together, the projects accounted for total GEF financing of \$533 million.

Geographic information system (GIS) data were matched with household and health surveys in Chad, India, Mexico, and Nepal to examine the relationship between GEF-funded activities and household wealth (figure 4.2). To assess this relationship, multiple econometric models were applied to account

for potential location inaccuracies and data aggregation errors. Across all models, the analysis revealed a statistically significant positive association between the presence of GEF activities and increased household wealth. This is illustrated by all bars falling to the right of zero on the x-axis, indicating consistent positive percentage changes in wealth across project areas. The findings are robust and suggest that GEF interventions are associated with tangible socioeconomic improvements.

Some challenges and adverse impacts

While many GEF-funded projects generated positive co-benefits, some also led to unintended adverse impacts. In Chad, the establishment of ecological corridors restricted farming activities for some households, and unresolved land use conflicts between farmers and pastoralists occasionally gave rise to social tensions. In Nepal, growing

FIGURE 4.2 Positive correlation between GEF activities and household assets



Source: Quasi-observational propensity score analysis implemented under conditions of uncertainty.

Note: The height of each bar represents the number of cross-sectional models that estimated a given effect on household wealth. $p < 0.05$.

wildlife populations within protected areas resulted in increased crop depredation and human-wildlife conflicts, posing risks to both local livelihoods and community safety.

Findings from the Lower Mekong, drylands, and Pacific and Caribbean SIDS country cluster evaluations confirm and further illustrate the advantages and challenges of GEF-supported projects in delivering socioeconomic co-benefits. These co-benefits included alternative livelihoods, gender equity,

Indigenous participation, traditional resource stewardship, and youth engagement, which strengthened community resilience, promoted social inclusion, and created new income opportunities. At the same time, the evaluations highlight challenges and limitations: many benefits remained localized, pathways for scaling were weak due to limited market linkages and enabling conditions, and monitoring gaps—such as missing baseline data and standardized indicators—constrained the ability to track and compare long-term outcomes ([box 4.2](#)).

BOX 4.2 Socioeconomic co-benefits in country clusters

In the Lower Mekong region, GEF-supported projects delivered notable socioeconomic co-benefits by supporting alternative livelihoods, advancing gender equity, and fostering Indigenous participation. In the upland areas of Lao PDR and northeastern Cambodia, smallholder farmers adopted agroecological practices such as agroforestry and contour planting, improving productivity while reducing land degradation. Women's cooperatives and participatory land use mapping led by Indigenous groups strengthened equity and local empowerment, while community-based coastal protection initiatives, including mangrove planting, created jobs and delivered vital ecosystem services. Projects supporting ecotourism and handicraft development generated additional income streams for rural households. However, these benefits tended to remain localized and lacked clear pathways for scaling up, constrained by weak market linkages and growing commercial pressures on land and water resources. Furthermore, socioeconomic evidence was often anecdotal, with limited baseline data and monitoring frameworks reducing the ability to quantify or track long-term impacts.

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.

In the Pacific and Caribbean SIDS, GEF-supported projects generated community-level co-benefits including improved food security, job creation, and strengthened resilience. Pacific initiatives emphasized traditional practices and community stewardship through activities such as mangrove restoration and agroforestry; Caribbean projects promoted sustainable fisheries and youth engagement programs such as Tide Turners. However, the absence of standardized indicators and baseline data limited the ability to systematically measure or compare long-term socioeconomic outcomes across the two regions.

4.3 SUSTAINABILITY OF CO-BENEFITS

While there is evidence that GEF-funded projects generated socioeconomic co-benefits, these were often at an early stage and geographically limited at the time of completion. Continued support and consolidation were required for these benefits to scale and be sustained over the long term. Sustaining socioeconomic co-benefits is particularly important, as doing so can enhance the durability of environmental outcomes. Case studies and country cluster evaluations highlight that the sustainability of co-benefits was influenced by a combination of factors, including local ownership, market viability, supportive policy and institutional frameworks, effective project cycle management, and the integration of community-based approaches. Evidence shows substantial postproject community engagement, but underscores the persistent challenge of maintaining these benefits without external support.

Projects that adopted community-based approaches demonstrated stronger potential for sustaining both socioeconomic and environmental benefits beyond project closure. In Chad, grassroots organizations supported by the RECONNECT and agricultural ecosystems projects maintained a strong commitment to continuing conservation and livelihood activities, building on preexisting local initiatives that were revitalized through project support. In Mexico's Sierra Norte, Indigenous communities sustained and expanded eco-friendly enterprises rooted in long-standing traditions of sustainable forest management. Similarly, in Indonesia, the Citarum Watershed Management and Biodiversity Conservation Project (GEF ID 3279, Asian Development Bank) achieved lasting outcomes as project-initiated activities became embedded in community practices. Community members reported continued—sometimes voluntary—support for the protection of nearby areas, driven by increased awareness fostered during project implementation.

By contrast, sustainability was weakened where projects established organizations lacking local legitimacy or where interventions remained heavily reliant on external funding. In Nepal, several community-based initiatives faced an uncertain future after project completion due to the absence of clear legal mandates and long-term financial mechanisms.

The sustainability of socioeconomic co-benefits from GEF-funded projects is strongly influenced by their alignment with policy and institutional frameworks. Several GEF-funded projects facilitated integration with existing policies. Examples include the application of established legal norms to register community-based protected areas in Mexico and the integration of natural resource management into cantonal development plans in Chad. In Nepal, collaboration with national parks, forestry authorities, and local governments produced mixed results in terms of sustainability. While national parks and forestry agencies often operated through top-down bureaucratic structures, the continuation of support for project interventions largely depended on the willingness of higher-level authorities to internalize and sustain them. In contrast, local governments, with their own budgetary authority, demonstrated greater potential to fund and maintain selected interventions beyond the project cycle.

Economic sustainability remained a persistent challenge across GEF-funded projects. While many initiatives achieved initial success in diversifying livelihoods, sustaining enterprise profitability and securing integration into formal markets often proved difficult. In Mexico, ecotourism cooperatives expanded their range of services but lacked adequate financial monitoring systems and struggled with the volatility of niche markets. In Chad, honey producers achieved improvements in yield and product quality, but remained disconnected from formal market channels, hindered by limited capacity for branding and packaging. In Indonesia, the Strategic Planning and Action to

Strengthen Climate Resilience of Rural Communities in Nusa Tenggara Timur Province (GEF ID 4340, UNDP) project failed to establish adequate market access, limiting the long-term viability of its economic activities.

Sustainability of outcomes—both environmental and socioeconomic—was often undermined by the limited duration of project support and the lack of clearly defined responsibilities for country portfolio management. Most projects did not include a consolidation or exit strategy to ensure continuity of results postcompletion. Improved sustainability could have been achieved through better coordination and sequencing—both between successive GEF-funded projects and between GEF initiatives and with those supported by other international agencies or national programs—to facilitate scaling up. However, field assessments revealed no clear responsibility for leading such coordination at the country level. The division of roles between GEF Agencies and national partners remained ambiguous. Moreover, operational focal points did not receive consistent guidance, and their office capacity was uneven.

The factors affecting the sustainability of socioeconomic co-benefits—such as short project duration, limited follow-up mechanisms, weak institutional ownership, and inadequate coordination—mirror those observed in the sustainability of environmental outcomes. Just as environmental gains often depend on long-term engagement, local capacity, and integration with national systems, socioeconomic benefits require similar conditions to endure and scale. This underscores the interconnectedness of environmental and development objectives, and the importance of addressing systemic constraints that affect both.

4.4 SUMMARY

GEF-funded projects frequently generate important socioeconomic co-benefits alongside environmental results, particularly through strengthened human and social capital. These co-benefits include enhanced skills, improved local governance, diversified livelihoods, and greater community resilience. Such co-benefits are not secondary—they are central to building ownership, sustaining environmental gains, and unlocking pathways for systemic change.

Persistent challenges exist. Many benefits remain localized, market access and value chain integration are limited, and sustainability often depends on continued external support. Weak monitoring systems and short project timelines further constrain the ability to track and scale these outcomes. As a result, co-benefits too often stop short of broader adoption and transformational impact.

Looking ahead, leveraging co-benefits more strategically is critical for the GEF's catalytic role. Greater selectivity will also be required—focusing resources where co-benefits can be scaled, embedded in market systems, and reinforced by strong policy and institutional linkages. By doing so, the GEF can amplify results well beyond individual projects and ensure that socioeconomic co-benefits drive scaling and transformational change.

Focal area performance

This chapter presents an analysis of performance and key findings across the GEF focal areas, drawing on evidence from GEF-8 evaluations of the climate change mitigation, international waters, and chemicals and waste portfolios, alongside multiple evaluations covering biodiversity, climate change adaptation, and land degradation. The assessment focuses on strategic alignment, relevance, performance, and sustainability, using portfolio data from the GEF Portal and performance ratings from IEO-validated terminal evaluations through June 2024.

The chapter also examines how the GEF's focal areas have evolved from GEF-5 to GEF-8, reflecting a shift toward integrated, cross-sectoral, and systems-level approaches. It highlights core interventions such as conservation, restoration, sustainable use, climate-resilient agriculture, and waste management. The chapter concludes with an overview of the multifocal area portfolio and findings from a recent evaluation of nature-based solutions (NbS)—interventions that cut across multiple focal areas.

5.1 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 (GEF IEO 2022e, forthcoming-n, 2024a, 2022a).

Portfolio and evolution since GEF-5

In the biodiversity focal area, the GEF has progressively shifted from traditional conservation efforts toward a more integrated, area-based approach to address the growing complexity of biodiversity loss.

The evolution of its biodiversity strategy demonstrates a shift from isolated interventions to more holistic, cross-sectoral efforts. During GEF-5, the focus was on strengthening protected area systems, mainstreaming biodiversity into productive landscapes, and supporting biosafety and access to genetic resources. GEF-6 expanded on this approach by emphasizing the integration of biodiversity and ecosystem services into broader development and financial planning. Building on these foundations, GEF-7 further advanced the strategy through integrated and impact programs that aimed to address the underlying drivers of biodiversity loss through support for policy reforms and mainstreaming across sectors to achieve broad, systemic change.

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 (IPLCs), civil society, and the private sector. The introduction of 11 integrated programs (discussed in [chapter 6](#)) aims to address the underlying drivers of biodiversity loss with more coordinated and comprehensive action. GEF-9 will offer an opportunity to align with the implementation of the post-2020 Global Biodiversity Framework Fund (GBFF), enhancing synergies between the two funds 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 the number of projects and volume of GEF financing.

Since the pilot phase, the focal area has financed 2,309 biodiversity-related projects and allocated \$7.9 billion of financing from the GEF Trust Fund ([table 5.1](#)). Biodiversity projects accounted for 37 percent of total GEF projects in GEF-5, increasing to 48 percent in GEF-8; the share of biodiversity financing also increased—from 29 to 37 percent—over the same period. Regionally, while allocations have fluctuated over time, the Latin America and the Caribbean region

has received the largest share of biodiversity funding, closely followed by Africa. 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:

- **Conservation, restoration, and sustainable use remain central.** Interventions include the creation and effective management of terrestrial and marine protected areas, wildlife conservation (e.g., the

TABLE 5.1 Overview of GEF Trust Fund biodiversity portfolio

GEF period	Approved projects ^a		GEF financing ^b		Cofinancing ratio at approval ^c
	Number	Percent of total	Million \$	Percent of total	
Through GEF-4	1,071	41	3,201	35	2.7
GEF-5	352	37	1,049	29	4.1
GEF-6	302	44	1,034	32	4.7
GEF-7	329	45	1,225	34	5.2
GEF-8	254	48	1,435	37	4.0
Total	2,309	42	7,943	34	3.4

Source: GEF Portal as of June 30, 2025.

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

Global Wildlife Program), and the combat against illegal wildlife trade. Efforts also focus on integrating biodiversity into productive sectors—such as agriculture, forestry, fisheries, and tourism—and restoring degraded landscapes and ecosystems to sustain vital ecosystem services.

- **Biosafety and access and benefit sharing are supported through the implementation of the Nagoya and Cartagena Protocols.** Activities include species conservation, developing national biosafety frameworks, institutional capacity building, and managing alien species through prevention, detection, and eradication measures. The Nagoya Protocol supports the development of national systems for the regulated use and benefit sharing of genetic resources and piloting their implementation.
- **Biodiversity-related financial mechanisms are promoted to support natural capital accounting and ecosystem service valuation.** These efforts aim to inform policy decisions, guide investment, and ensure more equitable and effective biodiversity outcomes.

Cross-cutting interventions enhance impact by promoting ecosystem-based approaches, SFM, and NbS for biodiversity conservation, climate change adaptation, and disaster risk reduction. The GEF also supports biodiversity-based livelihoods, particularly for IPLCs, the development of green enterprises, and policy and institutional reforms. Additional efforts include strengthening biodiversity monitoring systems, supporting knowledge management, and aligning national biodiversity strategies and finance plans with the Global Biodiversity Framework.

Relevance

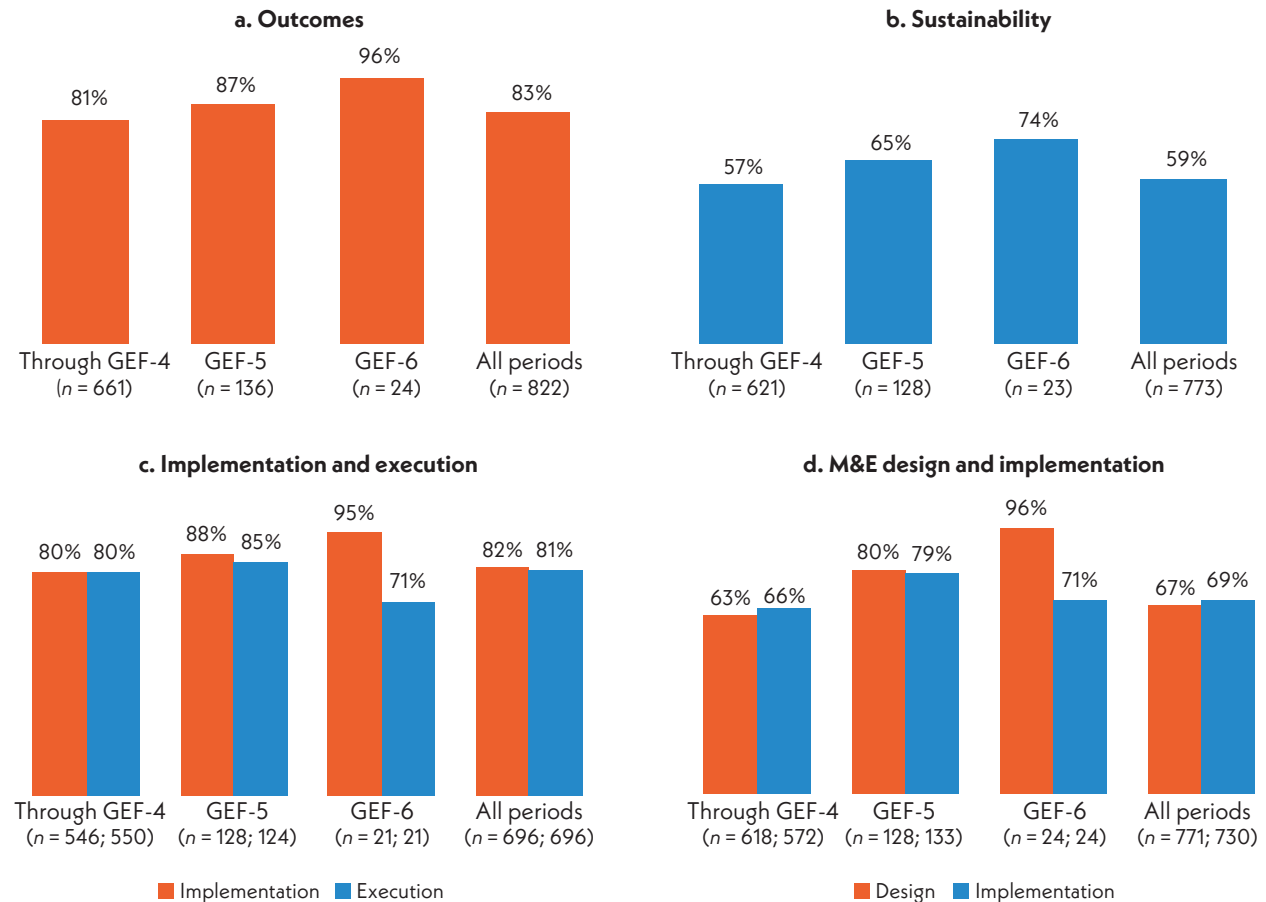
GEF biodiversity interventions show strong alignment with the objectives of the Convention on Biological Diversity and national biodiversity strategies and

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 IPLCs—as essential to achieving equitable and lasting conservation outcomes.

Performance and effectiveness

GEF biodiversity projects have strong performance ratings for outcomes, less so for sustainability (figure 5.1). Biodiversity project outcome ratings are consistently strong (83 percent across all periods) and have steadily improved across GEF replenishment periods since GEF-4. However, these projects continue to underperform in key areas such as sustainability and monitoring and evaluation (M&E) design and implementation. While the overall proportion of projects rated as likely to be sustainable remains relatively low at 59 percent, this proportion 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 across the GEF replenishment periods.

FIGURE 5.1 Biodiversity: percentage of projects rated in the satisfactory/likely range

Source: GEF IEO Annual Performance Report 2026 data set, which includes completed projects for which performance ratings were independently validated through June 2025.

Note: The number of projects for which validated outcome ratings are available is shown in parentheses. The cumulative figure for all periods includes GEF-7, which is not shown separately due to the limited number of observations.

GEF biodiversity projects have delivered effective conservation results despite a range of implementation challenges.

These projects have achieved such outcomes as habitat protection, species conservation, and reduced deforestation. However, progress has often been hindered by bureaucratic delays and capacity constraints, further compounded by disruptions caused by COVID-19. Further, the absence of standardized indicators and data gaps limit adaptive management. In addition, weak law enforcement, shifting government priorities, and difficulties in

securing cofinancing have affected overall implementation efficiency.

For example, the Hwange-Sanyati Biological Corridor Project (GEF ID 4645, World Bank) significantly improved land use and natural resource management among corridor managers and local communities, directly benefiting approximately 20,000 people. Notable interventions—including the installation of creosote-treated gum pole barriers and the use of chili guns—effectively reduced human-elephant conflict, with incidents dropping from 100 to just nine per

year. Despite these achievements, the project faced implementation challenges. Delays in government disbursements disrupted time-sensitive activities such as fire management, while the sustainability of alternative livelihoods remained uncertain due to weak market linkages and vulnerability to theft or vandalism of community assets.

GEF biodiversity interventions have delivered socio-economic co-benefits through various initiatives that support local livelihoods and increased 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 ([box 5.1](#)). 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 5.2](#)).

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

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

BOX 5.1 Involving Indigenous communities

The GEF-supported Innovative Use of a Voluntary Payment for Environmental Services project (GEF ID 5668, World Bank) in Paraguay was restructured in October 2020 to strategically engage and empower Indigenous communities. The Ministry of Environment and Sustainable Development revised the environmental services regime requirements and waived registration fees, enabling largely forested lands of the Guarani Ñandeva, Ayoreo, and Yshir peoples to participate in conservation incentives. From the outset, project leaders developed a free, prior, and informed consent (FPIC) protocol in partnership with the Federation for the Self-Determination of Indigenous Peoples and reactivated an interinstitutional working group with the Paraguayan Indigenous Institute to guide land use certification. Indigenous representatives were consulted on every aspect of the work plan, with their culture, governance structures, and land rights respected throughout. As a result of this inclusive approach, the project certified 116,993 hectares of land, exceeding the initial target of 20,940 hectares, and traded 58,140 hectares under the Environmental Services Regime. By integrating payment for ecosystem services schemes, households earned income from reforestation and conservation activities that funded wells, water pumps, and skills training, with special attention to women and other vulnerable groups. While the project faced challenges such as aligning public-bidding criteria for certificate purchases and safeguarding traditional uses of nontimber forest products, the project's continuous learning process and close collaboration with Indigenous partners created a durable model of forest stewardship that delivers both biodiversity and livelihood benefits.

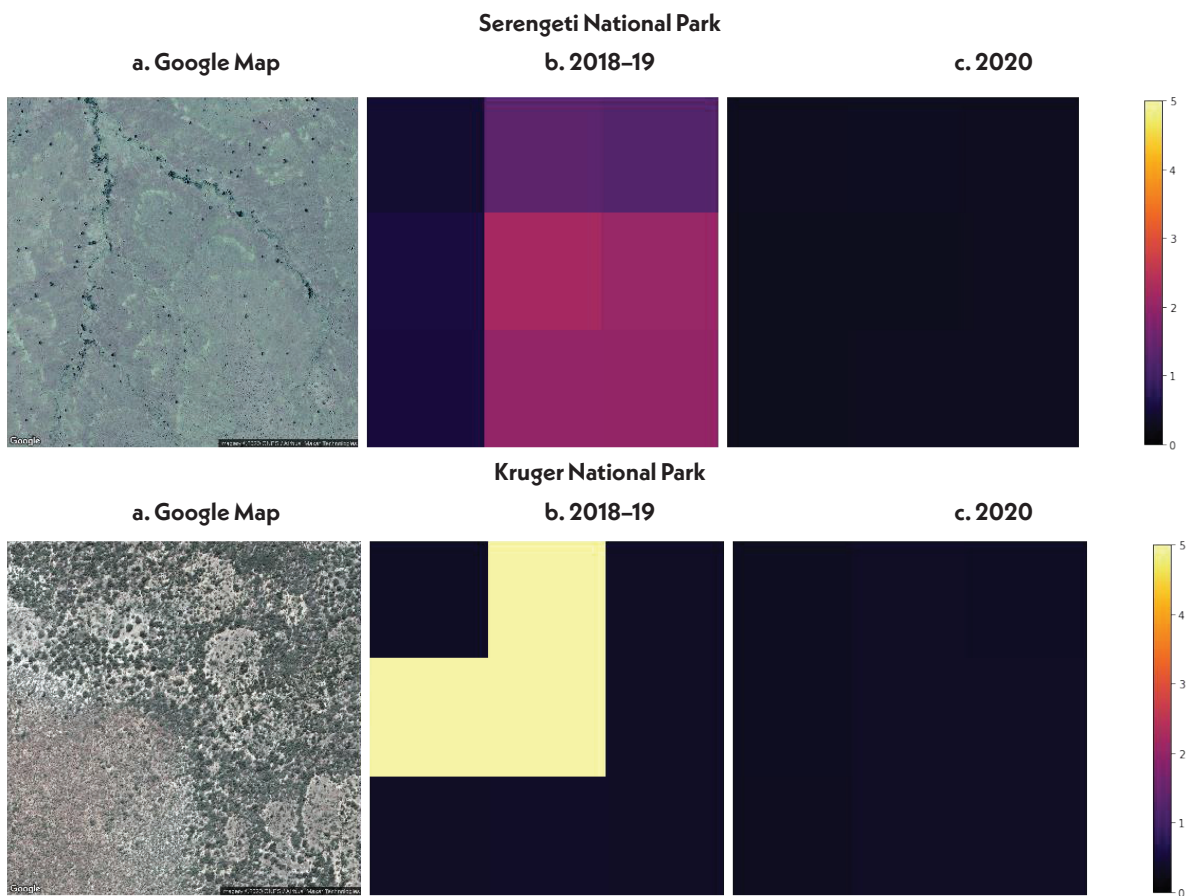
and procedural delays, inadequate institutional and technical capacity, and political instability undermine sustainability. In some cases, the absence of secure tenure and rights, fragile contexts, or the shifting of government priorities away from biodiversity have further eroded the long-term viability. Even where

BOX 5.2 Effects of COVID-19 on economic activities around Global Wildlife Program protected areas

Nature-based tourism and related economic activities are common features of many GEF-supported protected areas, often concentrated around park sites. The COVID-19 pandemic and associated travel restrictions brought these activities to a standstill, significantly affecting local economies. To assess the economic disruption, the IEO used pre- and postpandemic nighttime light data as a proxy indicator for changes in economic activity (GEF IEO 2022a). The analysis revealed that 75 percent of 8,427 protected areas across Africa experienced a decline in light intensity—suggesting reduced economic activity—regardless of country or International Union for Conservation of Nature protected area category. This trend was evident even in well-known destinations,

highlighting the widespread impact of the pandemic on tourism-dependent regions.

A focused analysis of 40 protected areas under the Global Partnership on Wildlife Conservation and Crime Prevention for Sustainable Development program (GEF ID 9071) further confirmed these findings, showing reduced light intensity in the Serengeti and Kruger National Parks. These declines illustrated the far-reaching consequences of the pandemic on income generation, park operations, and conservation programs. A key recommendation from this analysis was to manage risks and develop contingency plans that anticipate and address disruptions from pandemics, natural disasters, and other large-scale crises.

FIGURE B5.2.1 Serengeti and Kruger National Parks nighttime light data at different observation times

scientific expertise or favorable policies exist, the lack of integration into national budgets and insufficient financial continuity pose risks to maintaining results beyond project life spans.

Technological and institutional innovations have played a key role in enhancing the sustainability of biodiversity conservation in GEF-supported projects.

Tools such as GPS tracking, drones, AI, forensic DNA analysis, and satellite systems have been used to address illegal wildlife trade, human-wildlife conflict, and deforestation. Platforms like eCITES, SMART, and W-MIS have strengthened data collection and enforcement in countries including South Africa, Thailand, Mozambique, and Ethiopia. GEF-supported projects have also contributed to forest monitoring systems through the use of satellite data. To promote sustainability, many of these technologies have been embedded in national planning and monitoring frameworks. In parallel, institutional innovations—such as the creation of national wildlife enforcement units and improved coordination among enforcement agencies—have improved biodiversity governance. The Thailand and Viet Nam cases show how aligning institutional reforms with technology can enhance conservation outcomes in the long term.

5.2 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 (GEF IEO 2024f, 2025b, 2024e, 2025c, forthcoming-u).

Portfolio and evolution since GEF-5

The LDCF/SCCF portfolio has transitioned from focusing on targeted vulnerability reduction to

embracing integrated, system-level adaptation.

Interventions under GEF-5 and earlier periods concentrated on reducing vulnerability and increasing adaptive capacity. Since GEF-6, programming has shifted toward addressing the systemic drivers of climate risk, aligning more closely with national planning and institutional frameworks. GEF-7 emphasized innovation and private sector engagement, while GEF-8 introduced transformational adaptation and systems resilience as core concepts (GEF 2022b).

Recent projects have adopted a catalytic approach, leveraging external finance and partnerships.

Whereas earlier efforts were primarily pilot initiatives, GEF-7 and GEF-8 projects increasingly aim to mobilize additional investments from the Green Climate Fund and other multilateral or bilateral sources. This approach aligns with the strategic focus on scaling up finance and delivering broader impacts.

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 5.2). The number of projects approved has declined, while the ratio of expected cofinancing has remained stable. UNDP has historically played a leading role in the adaptation portfolio, but in GEF-8, international financial institutions—particularly the World Bank—have taken on a larger share of programming. Africa has received by far the largest share of financing, which has further increased under GEF-8.

Main areas of intervention

The adaptation portfolio has advanced beyond conventional classification frameworks, evolving into more sophisticated and integrated programming. Interventions now span five main thematic areas and incorporate a combination of hard infrastructure, soft measures, capacity building, technology transfer, and ecosystem-based approaches to comprehensively address systemic climate vulnerabilities. These climate

TABLE 5.2 Overview of LDCF/SCCF climate change adaptation portfolio

GEF period	Approved projects ^a		GEF financing ^b		Cofinancing ratio at approval ^c
	Number	Percent of total	Million \$	Percent of total	
Through GEF-4	112	4	252	3	3.7
GEF-5	173	18	992	27	5.4
GEF-6	52	8	344	11	4.4
GEF-7	91	13	520	14	4.5
GEF-8	81	15	662	17	5.6
Total	509	9	2,770	12	5.0

Source: GEF Portal as of June 30, 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.

change adaptation efforts can be broadly categorized into five main groups:

- **Agriculture.** Agricultural interventions have evolved significantly, progressing beyond basic crop adaptation to integrate agroecological transformation approaches, climate-resilient varieties, aquaculture systems, digital agricultural tools, and social protection mechanisms such as crop insurance pilots.
- **CIEWS.** These investments emphasize meteorological infrastructure modernization and weather station networks.
- **Water resource management.** Water interventions consistently emphasize integrated approaches, incorporating rainwater harvesting, efficient irrigation technologies, and hydrological modeling systems.
- **Coastal and marine management.** Key interventions include integrated coastal zone management, fisheries adaptation, marine protected area establishment, and blue economy initiatives.
- **Climate-resilient infrastructure.** Investments in public infrastructure aim to reduce climate-related risks in critical sectors.

Relevance

GEF adaptation interventions under the LDCF/SCCF remain aligned with guidance from the United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP) and the objectives of the Paris Agreement. As financial mechanisms of these agreements, the LDCF and SCCF have responded to evolving COP priorities, particularly those highlighted at COP27, COP28, and COP29. COP decisions emphasized improving access to finance for least developed countries (LDCs) and small island developing states (SIDS), supporting gender-responsive and locally led adaptation, advancing national adaptation plans, and enhancing coherence among climate funds. In response, GEF-8 programming has prioritized country ownership, institutional capacity building, and regional collaboration through multicountry initiatives and workshops. At COP29, Parties requested the GEF to strengthen coherence across funds, streamline access for eligible countries, and deepen engagement with national and regional institutions in underserved regions. While approaches have evolved, the climate change adaptation portfolio continues to reflect the priorities and guidance set forth by the COP and the Paris Agreement, Paris Agreement, and the LDCF/SCCF also have

aimed to prioritize the needs of individual countries and communities.

Over time, GEF-funded adaptation has evolved to include both upstream investments in climate data and services and downstream actions that enhance preparedness and response. The IEO's CIEWS evaluation (GEF IEO 2025b) found that most interventions have been implemented at the local level (39 percent), focusing on livelihood resilience, ecosystem-based adaptation, and early warning systems. National-level interventions (33 percent) have strengthened climate governance and policy integration. State and regional-level efforts (20 percent) have enabled transboundary cooperation, promoting coordinated climate risk management. Multicountry interventions (7 percent) have supported regional collaboration on shared climate challenges such as desertification and extreme weather events.

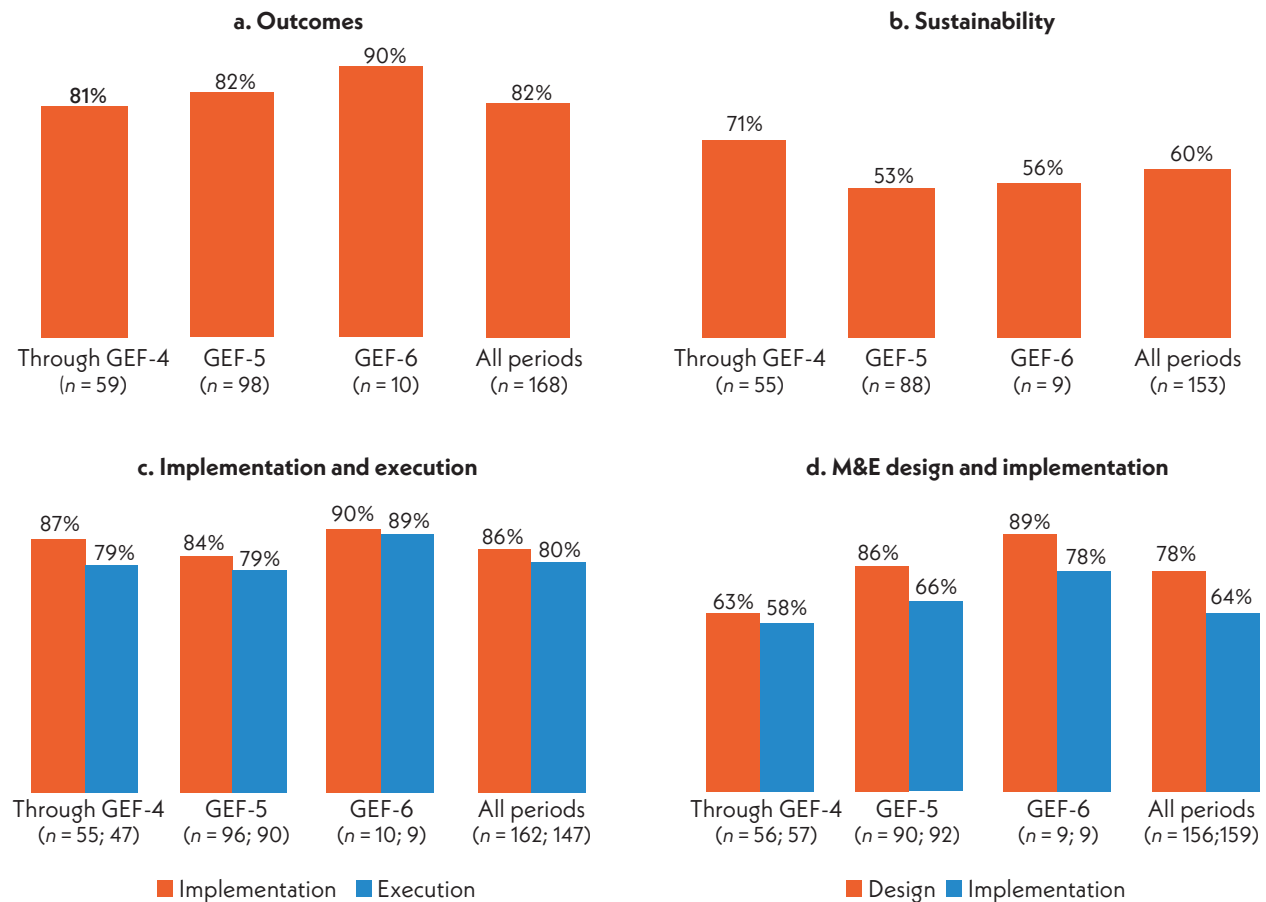
Performance and effectiveness

Data available for completed projects show different trends in outcome achievement and sustainability. The percentage of completed projects assessed as moderately satisfactory or higher for outcome achievement increased from 81 percent under GEF-1 to GEF-4 cumulatively to 82 percent under GEF-5 and 90 percent under GEF-6 ([figure 5.2](#))—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 M&E design and implementation show improving rating trends. [Box 5.3](#) presents examples of more and less effective projects and selected explanatory factors.

The CIEWS evaluation found that LDCF/SCCF 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 to 50 percent increase in forecasting accuracy in target regions, enabling earlier disaster response. Early warning coverage reached over 60 percent of vulnerable populations in 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), 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, projects led by the Food and Agriculture Organization of the United Nations (FAO) on farmer field schools trained over 15,000 farmers in drought-tolerant techniques, boosting yields by 25 to 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,

FIGURE 5.2 Climate change adaptation: percentage of projects rated in the satisfactory/likely range

Source: GEF IEO Annual Performance Report 2026 data set, which includes completed projects for which performance ratings were independently validated through June 2025.

Note: The number of projects for which validated outcome ratings are available is shown in parentheses. The cumulative figure for all periods includes GEF-7, which is not shown separately due to the limited number of observations.

drip irrigation, and hydrological modeling. The 2023 and 2025 LDCF/SCCF annual evaluation reports underscore improved water access in drought-prone regions (GEF IEO 2024c, forthcoming-u), with projects in Sub-Saharan Africa and 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 climate change adaptation into broader development planning has shown mixed results. While some projects have successfully

BOX 5.3 Examples of more and less effective projects in climate change adaptation

Enhancing Sustainability and Climate Resilience of Forest and Agricultural Landscape and Community Livelihoods in Bhutan (GEF ID 9199, UNDP)

- **Outcome rating:** Highly satisfactory
- **Sustainability:** Likely across financial, institutional, sociopolitical, and environmental dimensions
- **Cofinancing:** \$42.6 million in cofinancing confirmed, with strong government engagement
- **Community participation:** Regular consultations led to local ownership, especially in human-wildlife conflict mitigation and agroecological interventions
- **Institutional uptake:** Integrated into the 12th National Plan (2018–23) and National Key Result Areas, with links to Bhutan for Life for sustainable finance

Building Shoreline Resilience to Protect Local Communities and Their Livelihoods in Timor-Leste (GEF ID 5671, UNDP)

- **Outcome rating:** Moderately unsatisfactory
- **Sustainability:** Unlikely, no clear postproject maintenance or budget allocation
- **Implementation gaps:** Many mangrove planting efforts and livelihoods deemed unsustainable; three of four ecotourism projects abandoned
- **Planning and coordination issues:** Strategies and plans not formally adopted by government and showed weak alignment with broader national systems

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.

Successful innovations within the LDCF/SCCF portfolios have emerged mainly in information-sharing platforms and data usage. Risk and vulnerability platforms have improved links between beneficiaries and policymakers, with the SCCF portfolio for non-LDCs showing higher innovation rates. Notable examples include the Southeastern Europe and Caucasus Catastrophe Risk Insurance Facility (GEF ID 4515, World Bank) and Costa Rica's rural aqueduct associations project (GEF ID 6945, UNDP), which successfully implemented low-maintenance sensor systems for water monitoring. Additionally, the integration of social networks and messaging platforms has enhanced communication with local communities.

A major gap remains between innovative planning and implementation. While 22 percent of evaluated CIEWS projects included innovative features at the design stage, only 5 percent successfully implemented them by project completion. Innovation also varies by sector. Remote sensing and mobile technologies show promise in climate-smart agriculture, early warning systems, and ecosystem-based adaptation, but challenges to scaling persist. These include weak private sector partnerships, limited technical capacity, and inadequate funding. The 2025 LDCF/SCCF annual evaluation report notes that pilots often lack scaling pathways, and coordination with research institutions remains underdeveloped.

Sustainability

The sustainability of GEF-funded adaptation interventions has remained a challenge. The LDCF/SCCF

annual evaluation reports for 2023, 2024, 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 climate change 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.

5.3 CLIMATE CHANGE MITIGATION

Key sources of evidence include the Evaluation of the GEF Climate Change Mitigation Focal Area and the Evaluation of the Sustainable Cities Program (GEF IEO forthcoming-f, forthcoming-r).

Portfolio and evolution since GEF-5

The GEF climate change mitigation portfolio has experienced a marked decline in programming since GEF-5. Over the past two decades, the emergence of several multilateral climate funds dedicated to large-scale mitigation investments has shifted the global funding landscape. As support from these other sources has grown, the GEF's role in climate change mitigation has correspondingly diminished.

Over time, the GEF climate change mitigation portfolio has shifted away from stand-alone projects toward more programmatic and integrated approaches. In GEF-5, only 5 percent of climate change mitigation financing was delivered through programmatic modalities, rising to 36 percent in GEF-7 and provisionally reaching 58 percent in GEF-8. Initially, GEF-5 focused on sector-specific interventions such as technology deployment, urban transport, and land use. GEF-6 marked a turning point with the launch of the Sustainable Cities Integrated Approach Pilot, which deepened the programmatic approach and emphasized integration to address cross-sectoral and multiscale challenges.

This evolution has expanded opportunities for generating synergies across focal areas, engaging the private sector, and leveraging innovative financing mechanisms. GEF-8 has continued this trajectory, placing a strong emphasis on integrated programs and enabling activities that support systemic mitigation strategies, rather than funding large-scale emissions reduction projects directly.

Since GEF-5, the climate change mitigation portfolio has experienced a sharp decline in financial allocations, number of projects, and expected cofinancing ratios (table 5.3). Despite this overall reduction, Asia, Latin America and the Caribbean, and Africa continue to receive the largest shares of mitigation financing. The World Bank, previously the leading agency for climate change mitigation under the GEF, has seen a notable decrease in its share of funding. Currently, the primary recipient agencies for climate change mitigation projects are UNDP, the United Nations Environment Programme (UNEP), and FAO.

The GEF-8 approach to climate change mitigation builds on GEF-7, with a strong emphasis on rapid decarbonization, coherence across mitigation efforts, and enhanced private sector engagement, in alignment with the 2020 Private Sector Engagement Strategy. It focuses on driving a transformational shift

TABLE 5.3 Overview of GEF Trust Fund climate change mitigation portfolio

GEF period	Approved projects ^a		GEF financing ^b		Cofinancing ratio at approval ^c
	Number	Percent of total	Million \$	Percent of total	
Through GEF-4	755	29	2,894	32	6.9
GEF-5	322	33	1,123	31	10.0
GEF-6	309	46	905	28	15.7
GEF-7	267	37	698	19	8.3
GEF-8	253	48	558	14	3.9
Total	1,907	35	6,178	26	8.4

Source: GEF Portal as of June 30, 2025.

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

toward net-zero greenhouse gas emissions and fostering climate-resilient development pathways:

The GEF-8 climate change mitigation strategy is built around two main pillars:

- **Mitigation with systemic impacts.** This pillar emphasizes innovation, technology transfer, and enabling policies to drive transformational action. It targets efficient energy and material use, decarbonization of power systems through renewable energy and storage, scaling up zero-emission mobility, and advancing NbS with high mitigation potential.
- **Enabling conditions for mainstreaming mitigation.** This pillar focuses on integrating mitigation into broader development strategies by strengthening capacity for transparency under the Paris Agreement and supporting convention obligations and enabling activities, including the enhanced transparency framework.

Relevance

The GEF's climate change mitigation strategy has evolved to align with UNFCCC guidance, national priorities, and the need for cost-effective delivery

of global environmental benefits. Over the past two decades, the emergence of larger, better-resourced multilateral climate funds has enabled countries to access financing for large-scale mitigation projects through alternative channels. This shift has coincided with a steady decline in the GEF's climate change mitigation funding since GEF-5.

In response, the GEF has recalibrated its strategy to prioritize capacity building and the creation of enabling environments—areas increasingly emphasized in guidance from the UNFCCC. Historically, the UNFCCC has called on the GEF to support convention obligations and capacity development. More recent COP decisions have specifically urged the GEF to assist countries in meeting the reporting requirements for Nationally Determined Contributions and the enhanced transparency framework under Article 13 of the Paris Agreement. Reflecting this emphasis, the GEF has placed greater focus on its enabling activity pillar, shifting from large-scale investments to targeted support that strengthens institutional capacity and compliance with global climate commitments.

Country needs and GEF priorities for climate change mitigation finance are generally aligned, though not

entirely. In recent years, the UNFCCC has improved its assessments of funding needs through the work of the Standing Committee on Finance and the Global Stocktake. Countries have identified their financial requirements in GEF-funded reports submitted to the convention, and the Standing Committee on Finance has compiled these into a summary of aggregate funding needs. These assessments reveal that the energy sector continues to represent the highest demand for climate change mitigation financing, followed by land use and forestry, transportation, and agriculture.

In comparison, GEF-8 climate change mitigation priorities place a slightly different emphasis. While land use and forestry receive the largest share of indicative funding—particularly through integrated programs and NbS—they are followed by the energy sector, transportation, and agriculture (GEF Secretariat 2022a). This allocation reflects a strong, though not exact, alignment between country-identified needs and GEF programming, highlighting both the responsiveness of the GEF to national priorities and areas where further calibration may enhance strategic coherence.

Of the 11 GEF-8 integrated programs, 10 receive funding from the climate change mitigation focal area, and six are expected to contribute significantly to mitigation. Two integrated programs—the Net-Zero Nature-Positive Accelerator and Sustainable Cities—are explicitly designed for climate change mitigation; several other integrated programs also have mitigation benefits and track these 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. The Sustainable Cities Program, with 21 approved child projects totaling \$165.6 million, is still mostly under preparation. Its program framework document was approved in June 2024, and through June 2025, only two of its child projects had obtained CEO endorsement.

While GEF-8 integrated programs leverage agriculture, forestry and other land use (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, while Sustainable Cities and the Net-Zero Nature-Positive Accelerator are primarily focused on non-AFOLU activities. Although 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. Nonetheless, the GEF has supported SIDS in advancing renewable energy, even though this has occurred primarily through stand-alone projects.

Measures supporting exit from coal mining and coal-bed methane elimination, 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.

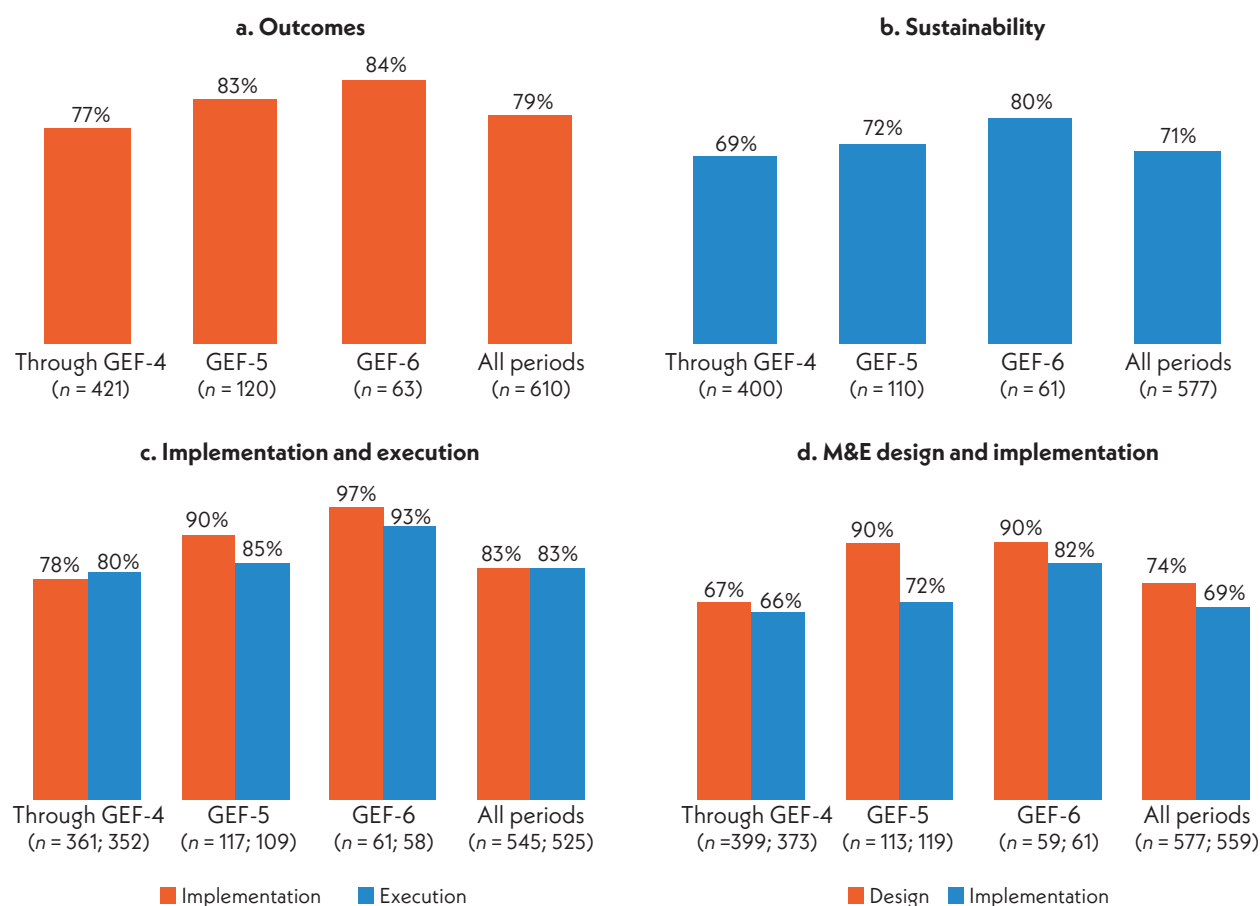
Performance and effectiveness

Effectiveness and sustainability have shown steady improvement in projects approved during recent GEF cycles, particularly those with a substantial

number of completed projects. The share of projects rated moderately satisfactory or higher for outcome achievement rose from 77 percent cumulatively in GEF-1 to GEF-4 to 83 percent in GEF-5 and 84 percent in GEF-6 (figure 5.3). Similarly, the proportion of projects rated moderately likely or higher for sustainability of outcomes at completion increased from 69 percent in GEF-1 to GEF-4 to 72 percent in GEF-5 and 80 percent in GEF-6. Similar upward trends are also evident in the quality of project implementation and execution and the design and implementation of monitoring and evaluation systems.

The Bhutan Sustainable Low-emission Urban Transport Systems (GEF ID 9367, UNDP) project exemplifies effective GEF-supported climate change mitigation. The project aimed to facilitate Bhutan's urban transport transition to a low-carbon system by promoting the adoption of low-emission vehicles, with a particular emphasis on electric vehicles. It focused on the early stages of this transition, including strengthening the policy and regulatory environment, providing financial incentives to encourage investment in low-emission transport, and supporting capacity development and knowledge sharing. By project

FIGURE 5.3 Climate change mitigation: percentage of projects rated in the satisfactory/likely range



Source: GEF IEO Annual Performance Report 2026 data set, which includes completed projects for which performance ratings were independently validated through June 2025.

Note: The number of projects for which validated outcome ratings are available is shown in parentheses. The cumulative figure for all periods includes GEF-7, which is not shown separately due to the limited number of observations.

completion, the Bhutanese government had adopted the supported policy and regulatory changes. Most, but not all, of the expected results—such as the implementation and use of incentives, mobilization of investment, capacity development, and knowledge sharing—were achieved. Given these achievements and a moderate risk to sustainability, the project's outcome was rated satisfactory, with sustainability assessed as moderately likely.

In contrast, the Public Lighting Replacement Project in Colombia (GEF ID 9354, IDB) achieved only partial success. While it produced analytical studies in three municipalities and built stakeholder support, it failed to implement the planned transition to LED lighting due to the absence of a subsidized credit line. The GEF IEO rated it moderately unsatisfactory for outcomes and moderately unlikely for sustainability, citing limited municipal capacity and high institutional and financial risks.

According to the available terminal evaluations, climate change mitigation projects in GEF-6 have supported broader socioeconomic benefits. For example, in Morocco, the Renewable Energy for the City of Marrakesh's Bus Rapid Transit System project (GEF ID 9567, UNDP) not only reduced greenhouse gas emissions but also enhanced sustainable urban mobility—benefiting women, who comprise half of the system's users. In Uganda, the Strengthening the Capacity of Institutions project (GEF ID 9814) promoted gender inclusion by integrating gender focal points into key greenhouse gas intensity sector hubs and building their capacity, thereby strengthening institutional responsiveness and inclusivity.

The climate change mitigation focal area has long supported numerous innovative, technology-focused initiatives. In 2008, the GEF Council and the LDCF/SCCF Council approved the Poznan Strategic Program on Technology Transfer to assist countries with technology needs assessments, pilot low-carbon and climate-resilient technologies identified in these

assessments, and facilitate knowledge sharing. The GEF has pioneered efforts in establishing energy service companies and has piloted innovative financial instruments. During GEF-6, financing for electric vehicles and mini-grids in Africa is an example of GEF support for innovation. In GEF-7, the Global Cleantech Innovation Programme was launched to enhance coordination and ecosystem connectivity, and accelerate the uptake and investment in innovative cleantech solutions. In GEF-8, the programs centered on electric vehicles and clean hydrogen—areas where the GEF has an established track record—underscore its continued commitment to fostering innovation.

The GEF Council's adoption of a risk-friendly approach in 2024 (GEF 2024b) signals a commitment to encouraging greater institutional, policy, technological, and financial risk-taking. However, thus far, emerging innovative technologies are less prevalent in the GEF-8 portfolio. Other climate finance funds may provide good examples of actively advancing emerging innovations. For example, over the past four years, the Climate Investment Funds have launched three major programs targeting industrial decarbonization, renewable energy integration into existing power grids, and battery electric storage. Similarly, the UK's Ayrton Fund has committed £1 billion to support 12 technology-focused challenges across comparable sectors.

Several promising innovation opportunities—such as integrated energy efficiency, circular economy solutions, smart grids, and vehicle-to-grid technologies—remain underused globally. This situation presents a strategic opportunity for the GEF to play a leading role in accelerating their deployment. Similarly, technologies with significant market potential, such as sustainable cooling, could benefit from a programmatic approach similar to that used for electric vehicles and mini-grids, which has proven effective for scaling impact and driving broader adoption.

5.4 INTERNATIONAL WATERS

This section draws from the recent IEO Evaluation of the International Waters Focal Area (GEF IEO forthcoming-j).

Portfolio and evolution since GEF-5

From GEF-5 to GEF-8, international waters interventions addressed a range of topics, including pollution reduction and sustainable fisheries, while increasingly promoting integrated approaches like integrated water resource management, integrated coastal management, and ridge to reef. Terminal evaluations confirm that most GEF-5 and GEF-6 projects included at least one such approach. In GEF-8, active projects emphasize knowledge management, institutional capacity building, and policy and regulatory strengthening. An emerging area of engagement involves providing technical support for the implementation of 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)—the new international agreement under United Nations Convention on the Law of the Sea adopted in 2023—positioning the GEF to play an important role as part of the BBNJ Agreement financial mechanism.

From GEF-7 to GEF-8, the international waters focal area increased its emphasis on integrated programming, with over \$137 million allocated to child projects within integrated programs. This trend follows a broader movement toward increased financing of integrated programs across the entire GEF-8 portfolio of approved projects. The focal area now actively contributes to multifocal initiatives such as Clean and Healthy Ocean, Circular Solutions to Plastic Pollution, and Amazon, Congo, and Critical Forest Biomes,

while also reducing concentration among implementing agencies. While this shift presented opportunities to generate multiple environmental benefits, it also raised concerns that integrated programs might dilute the core focus on transboundary cooperation, because they do not always include all countries sharing transboundary water bodies.

The number of projects approved hovered around 70 between GEF-5 and GEF-7, with an increase under GEF-8 ([table 5.4](#)).¹ The GEF financing per period remained stable, while the expected cofinancing at approval has increased since GEF-5. The lead Agencies with the highest share of financing are now UNDP and UNEP. Under GEF-8, the Latin America and the Caribbean region has the highest share of financing, followed by Africa.

Relevance

GEF international waters programming has demonstrated strong alignment with national, regional, and global priorities. Terminal evaluations from GEF-5 and GEF-6 show that 98 percent of projects were rated as relevant, underscoring their contributions to national priorities such as water security, irrigation, drinking water, and fisheries management. An example is the Buzi, Pungwe, and Save (BUPUSA) Basins project in Zimbabwe and Mozambique (GEF ID 9593), led by IUCN, which addressed water security and flooding challenges while supporting the establishment of the BUPUSA Commission to enhance transboundary water cooperation.

Despite these achievements, the Transboundary Waters Assessment Programme (GEF ID 4489, UNEP) identifies waterbodies facing the most severe environmental risks that could benefit from international waters investments. Although GEF-8

¹GEF-8 is ongoing, and thus the data might not be complete.

TABLE 5.4 Overview of GEF Trust Fund international waters portfolio

GEF period	Approved projects ^a		GEF financing ^b		Cofinancing ratio at approval ^c
	Number	Percent of total	Million \$	Percent of total	
Through GEF-4	197	8	1,255	14	4.8
GEF-5	72	7	389	11	8.5
GEF-6	57	8	310	10	11.3
GEF-7	65	9	438	12	8.1
GEF-8	87	17	406	11	9.8
Total	478	9	2,797	12	6.9

Source: GEF Portal as of June 30, 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.

programming has drawn on these findings to improve alignment, remaining gaps suggest a need for more strategic targeting of interventions. Strengthening the link between scientific assessments and project selection could further enhance the relevance and impact of the portfolio while still upholding the principles of country ownership and demand-driven design.

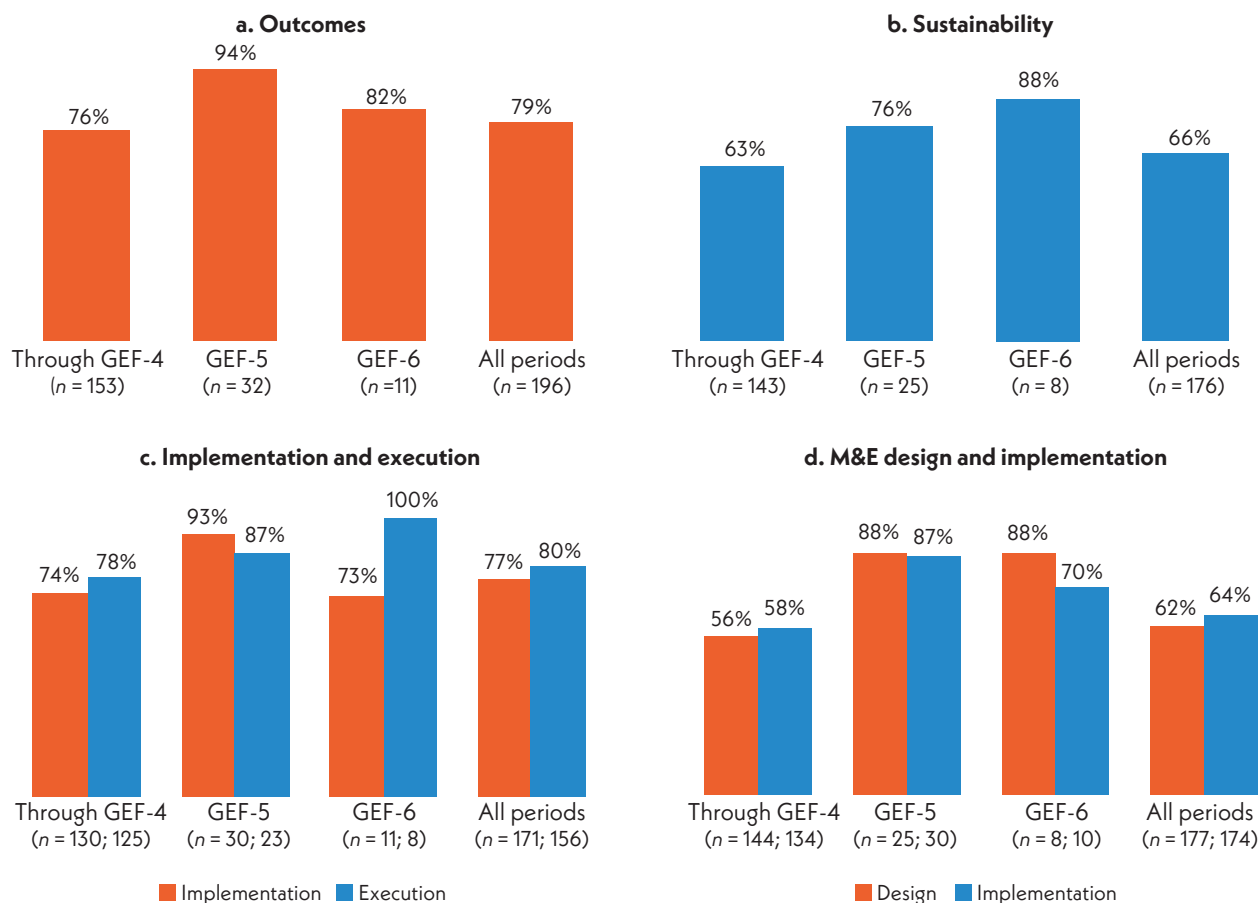
Performance and effectiveness

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 through GEF-4 ([figure 5.4](#)); the proportion decreased in GEF-6, but that number is based on fewer project observations. The trends for sustainability, quality of implementation and execution, and M&E design and implementation are improving.

Several GEF-funded international waters projects have demonstrated strong catalytic effects, sustaining and scaling up results beyond the project period. A key example is the Transforming the

Global Maritime Transport Industry Towards a Low Carbon Future Through Improved Energy Efficiency (GEF ID 5508) project, led by UNDP, which promoted energy-efficient shipping to reduce greenhouse gas emissions. One of its major outcomes was the creation of the Global Industry Alliance in 2017—a public-private partnership where 16 companies collectively committed \$320,000 annually to support low-carbon shipping innovation. This alliance enabled ongoing research, capacity building, and technology demonstration, and helped attract further private sector participation. After project closure, the initiative was sustained through continued support from the International Maritime Organization and the Government of Norway via the GreenVoyage2050 project.

Another example is the Chu and Talas River Basins project (GEF ID 5310, UNDP), which facilitated transboundary water cooperation between Kazakhstan and Kyrgyzstan. By leveraging existing partnerships and support from the United Nations Economic Commission for Europe, the Chu-Talas Water Commission continued to advance the strategic action program approval process even after the project ended, with no additional GEF funding. A transboundary example and its contribution to policy coherence is presented in [box 5.4](#).

FIGURE 5.4 International waters: percentage of projects rated in the satisfactory/likely range

Source: GEF IEO Annual Performance Report 2026 data set, which includes completed projects for which performance ratings were independently validated through June 2025.

Note: The number of projects for which validated outcome ratings are available is shown in parentheses. The cumulative figure for all periods includes GEF-7, which is not shown separately due to the limited number of observations.

Several projects applied innovative technologies that contributed to reducing environmental stress in international waters. The Yellow Sea Large Marine Ecosystem project (GEF ID 4343, UNDP) applied integrated multitrophic aquaculture, which improves aquaculture productivity while reducing water pollution through natural food chain processes. Knowledge from this project was shared with three Caribbean countries via the International Waters Learning Exchange and Resource Network ([IW:LEARN](#)), a platform for exchanging good practices and solutions across the international waters portfolio.

IW:LEARN has served as a successful knowledge management hub for the international waters focal area by facilitating training and learning exchanges and providing a repository for knowledge products. In addition, projects in the Yellow Sea, Kura River Basin, and Drina River Basin used constructed wetlands to treat polluted water through natural filtration and biological processes, with evidence of an 85 percent reduction in nitrogen levels at a pilot site in the Kura River Basin.

Over the years, the GEF's international waters focal area has laid a strong foundation for tackling plastic

BOX 5.4 TDA-SAP contribution to policy coherence in Georgia and Azerbaijan

The TDA-SAP projects in the international waters focal area have continued to facilitate coherent policies and actions in more than 90 countries. Transboundary diagnostic analysis (TDA) is a tool adopted by the international waters focal area to foster transboundary cooperation and identify shared threats. This process informs the development of a strategic action program (SAP), outlining strategic actions to address these threats in the region. 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 provides a specific example of GEF contributions to policy coherence through TDA-SAP implementation. As a result, Georgia and Azerbaijan agreed on monitoring standards for water quality and quantity for the first time, thereby strengthening cooperation. GEF investments also contributed to the enactment of a new water law in Georgia and the establishment of the State Water Resources Agency in Azerbaijan, both advancing integrated water resources management.

pollution, culminating in the GEF-8 Circular Solutions to Plastic Pollution program. This initiative emphasizes upstream and midstream interventions, including risk assessments in large marine ecosystems, and builds on lessons from past projects that underscore the value of community-driven solutions alongside policy and regulatory action. Effective engagement of women and youth, as seen in Indonesia, has supported behavior change and improved waste management, although sustaining these gains remains a challenge—as demonstrated by recurring pollution in Tonga’s Fanga’uta Lagoon.

Recent strategic shifts toward integrated programming highlight the need for national policy coherence to

address transboundary pollution. Projects like Blueing the Black Sea (GEF ID 10563) promote regional policy harmonization, while the global platform of the Circular Solutions to Plastic Pollution program (GEF ID 11197) identified the lack of enabling policy frameworks as a major barrier. In response, it supports the development of integrated policy tools that align environmental, economic, and social objectives—critical for achieving long-term, systemic reductions in plastic pollution.

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 contributed toward a 6.25 percent increase in fisheries sector employment from 2010 to 2019. Other terminal evaluations also noted increased employment and learning opportunities for women, improved economic conditions for fishers, and better food security. As with the other focal areas, measurement of socioeconomic co-benefits lacked a systematic approach, challenging the comparison and aggregation of findings.

Sustainability

Sustainability planning in GEF-5 and GEF-6 projects—including international waters projects—has been a challenge.

A review of 42 terminal evaluations from GEF-5 and GEF-6 found that fewer than 30 percent of projects developed sustainability or exit plans. Among 52 ongoing projects assessed, 56 percent lacked explicit sustainability strategies, and 34 percent planned to develop them late in the project cycle—limiting time for institutional strengthening and follow-through. However, recent projects have shown improvement by initiating sustainability planning earlier. For instance, the Sargasso Sea project (GEF ID 10620, UNDP) plans to develop an exit strategy before the midterm review, and the Ecuador–Peru SAP project (GEF ID 10700, UNDP) initiated its

postproject sustainability planning during the second year of implementation.

Similarly, there are opportunities to improve long-term financing strategies in sustainability planning. Some ongoing projects have committed to preparing detailed financial strategies. Examples include the North Brazil Shelf fisheries project (GEF ID 10919, UNDP), which will develop a financial plan in its final year, and the Limpopo River Basin project (GEF ID 10182, UNDP), which aims to prepare a financial sustainability plan for the basin's commission secretariat by project end.

It remains a challenge to engage the private sector in the international waters focal area. Evaluation surveys, interviews, and stakeholder feedback consistently identified this as a major weakness. Contributing factors common across the GEF include limited private sector expertise, lengthy approval processes for private participation, and the long-term nature of international waters projects, which often lack immediate financial returns.

5.5 LAND DEGRADATION

Key sources for this section include evaluations of GEF interventions in dryland countries, SFM, and the Lower Mekong River Basin (GEF IEO 2024f, 2022e, 2023c).

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.

GEF-8 Programming Directions emphasize drought management, including support for national drought plans and land degradation neutrality targets. The GEF land degradation project number and financing volume remained rather stable over the GEF periods ([table 5.5](#); financing increased in nominal terms since GEF-6). FAO and UNDP are the largest lead Agencies in terms of financing; the World Bank's share declined steadily. The Africa region maintains the highest share of financing, followed by Latin America and the Caribbean.

Main areas of intervention

GEF-supported land degradation focal area projects and programs have primarily focused on sustainable land and/or forest management. These initiatives incorporate community-led approaches such as afforestation, agroforestry, fire management, and conservation agriculture. Integrated watershed and river basin management interventions have addressed the interconnected nature of land and water systems, focusing on the restoration of hydrological cycles, improved land use practices in catchment areas, and enhanced local participation in water governance—particularly in vulnerable regions such as the Lower Mekong River Basin. The GEF has increasingly embraced the concept of land degradation neutrality,²

² 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,

TABLE 5.5 Overview of GEF Trust Fund land degradation portfolio

GEF period	Approved projects ^a		GEF financing ^b		Cofinancing ratio at approval ^c
	Number	Percent of total	Million \$	Percent of total	
Through GEF-4	180	7	450	5	5.2
GEF-5	207	21	337	9	4.7
GEF-6	189	28	402	12	10.3
GEF-7	198	27	487	13	6.0
GEF-8	201	38	493	13	3.2
Total	975	18	2,168	9	5.5

Source: GEF Portal as of June 30, 2025.

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

combining the restoration of agricultural lands with the promotion of regenerative farming practices, and carbon sequestration strategies such as conservation tillage and cover cropping. These climate change adaptation measures are designed to foster resilient landscapes capable of withstanding environmental shocks while supporting local livelihoods.

Relevance

GEF interventions historically demonstrated strong alignment with national and regional land management priorities and international environmental commitments, including those under the United Nations Convention to Combat Desertification (UNCCD) framework. Many GEF-funded projects are strategically designed to complement national action plans, embedding land degradation control efforts with broader sustainable development

agendas. In drylands, improvements in data and information systems and 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 plays an important role in the framework of the UNCCD, with [Decision 26/COP.14](#) on land tenure, adopted at the 14th session of the Conference of the Parties to the UNCCD, providing a basis for deeper consideration in future GEF-funded projects.

GEF land degradation interventions have promoted cross-sectoral integration. By linking land restoration efforts with climate change 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

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 United Nations Convention to Combat Desertification.

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 5.5](#)). Among the projects approved through GEF-4, 72 percent received outcome ratings in the satisfactory range at completion. This figure increased to 95 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 67 percent for GEF-5. Similar trends are observed in project implementation and execution quality and M&E design and implementation.

The effectiveness of GEF-supported land degradation projects has varied based on context, scale, and intervention design. A consistent finding is that projects with strong community engagement tend to achieve the most significant and lasting impacts. Community-led restoration initiatives—in which local stakeholders are actively involved in decision-making and implementation—have demonstrated higher success rates in sustaining positive environmental and economic outcomes, as illustrated in the Niger case ([box 5.5](#)).

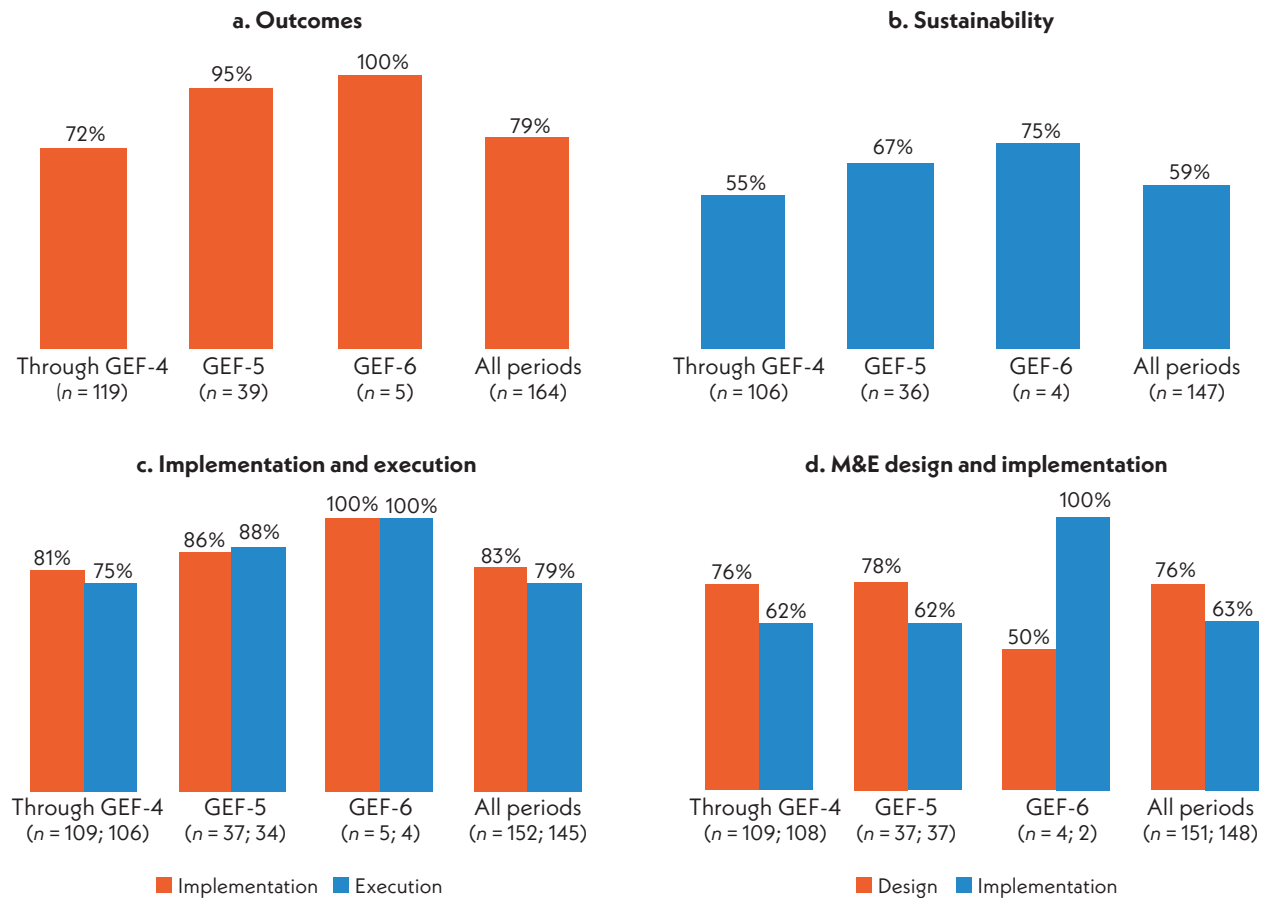
By addressing land degradation within a landscape-wide framework, integrated approaches in drylands have tackled multiple drivers of degradation, leading to more substantial ecosystem restoration and improved livelihoods. Examples of integrated programming support relevant to drylands in the GEF portfolio over time include Ter-Africa, the Central Asian Countries Initiative for Land Management, the Sahel and West Africa Program in Support of the Great Green Wall Initiative,

the Resilient Food Systems Integrated Approach Pilot, and—most recently—the Dryland Sustainable Landscapes Impact Program. Programmatic approaches are seen by GEF stakeholders as important to help 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.

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. 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 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.

Achieving synergies can be challenging when interventions aim to address multiple objectives with limited resources and institutional capacity. A case in point is a project in Azerbaijan ([box 5.6](#)), where efforts to tackle two loosely related water management issues, without fully accounting for capacity limitations, resulted in fragmented implementation and limited impact.

Challenges also 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

FIGURE 5.5 Land degradation: percentage of projects rated in the satisfactory/likely range

Source: GEF IEO Annual Performance Report 2026 data set, which includes completed projects for which performance ratings were independently validated through June 2025.

Note: The number of projects for which validated outcome ratings are available is shown in parentheses. The cumulative figure for all periods includes GEF-7, which is not shown separately due to the limited number of observations.

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 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, 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. The reported number of hectares under improved management does not specify the type or quality of change. The integration of land degradation neutrality indicators into national land use monitoring is a promising development that could better measure the environmental changes to which GEF-funded projects are contributing.

BOX 5.5 Niger Community Action Programs

Across three successive phases, the GEF-cofinanced World Bank Community Action Programs (CAP) in Niger demonstrated positive performance and sustained results. The projects applied a participatory, community-driven approach to restore degraded lands and strengthen local governance. Over 250,000 hectares were brought under improved soil and water management practices. These included assisted natural regeneration, conservation agriculture, and agropastoral land restoration. Niger CAPs are community-driven initiatives, which established 700 local management committees and created land tenure commissions in 160 communities. These initiatives helped clarify land rights and sustain resource use. Examples of results are improved vegetation coverage and reduced erosion and soil salinity through assisted natural regeneration, agropastoral land restoration, conservation agriculture practices, livestock corridors, and improved cookstoves.

BOX 5.6 Integrating climate change risks into water and flood management in Azerbaijan

The Integrating Climate Change Risks into Water and Flood Management by Vulnerable Mountainous Communities in the Greater Caucasus Region of Azerbaijan (GEF ID 4261, UNDP) project was designed to address two interlinked issues—climate-related disaster risk reduction and irrigation together with residential water supply improvements. However, the terminal evaluation noted that, while both challenges are related to climate change and shared some of the same institutional partners, there were limited synergies to be generated by trying to address them simultaneously. Outcomes related to managing scarce water resources were not achieved, owing to limited capacity in water use associations and a reportedly ambitious and fragmented project design. The terminal evaluation reported low reduction in environmental stress.

Sustainability

The long-term sustainability of land degradation control efforts has shown mixed results. Sustainability has been strongest 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.

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.

5.6 CHEMICALS AND WASTE

This section draws from the recent IEO evaluation of the chemicals and waste focal area (GEF IEO forthcoming-k).

Portfolio and evolution since GEF-5

The GEF has made progress in addressing many relevant chemicals and waste-related issues. For example, the GEF supported countries with significant industries in textiles, dental amalgam, and skin-lightening products, aligning 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, sector-wide 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 5.6](#) 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 in financing approved and the increase in expected cofinancing at project approval. At a more disaggregated level, 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 the 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 an important role in supporting implementation of the Stockholm and Minamata Conventions, with recipient countries generally recognizing its alignment with convention guidance.³ The GEF's responsiveness to Stockholm Convention

³ At COP-5 in 2023, the Minamata Convention COP conducted the second review of the financial mechanism, confirming its alignment with the convention's guidance (IISD 2023).

TABLE 5.6 Overview of GEF Trust Fund chemicals and waste portfolio

GEF period	Approved projects ^a		GEF financing ^b		Cofinancing ratio at approval ^c
	Number	Percent of total	Million \$	Percent of total	
Through GEF-4	242	9	609	7	1.4
GEF-5	158	16	396	11	3.8
GEF-6	148	22	436	13	5.0
GEF-7	108	15	573	16	7.7
GEF-8	98	19	660	17	7.0
Total	754	14	2,675	11	5.0

Source: GEF Portal as of June 30, 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.

COP guidance received a strong average rating of 4.3 out of 5, according to a survey of recipient countries conducted by the Stockholm Convention (UNEP 2024a). Challenges persist, however, in low-income economies, because of the high costs of alternatives, limited access to resources, funding delays, and narrow project scopes. In addition, the GEF has supported 59 enabling activities related to the Stockholm Convention in GEF-5, of which 56 aimed to update existing national implementation plans in response to added POPs. However, only about 30 percent of countries submitted updated national implementation plans to the Stockholm Convention Secretariat within the required two-year time frame, highlighting significant delays in national delivery and compliance.

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 one—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 three received GEF support, leaving the needs of several countries unaddressed.

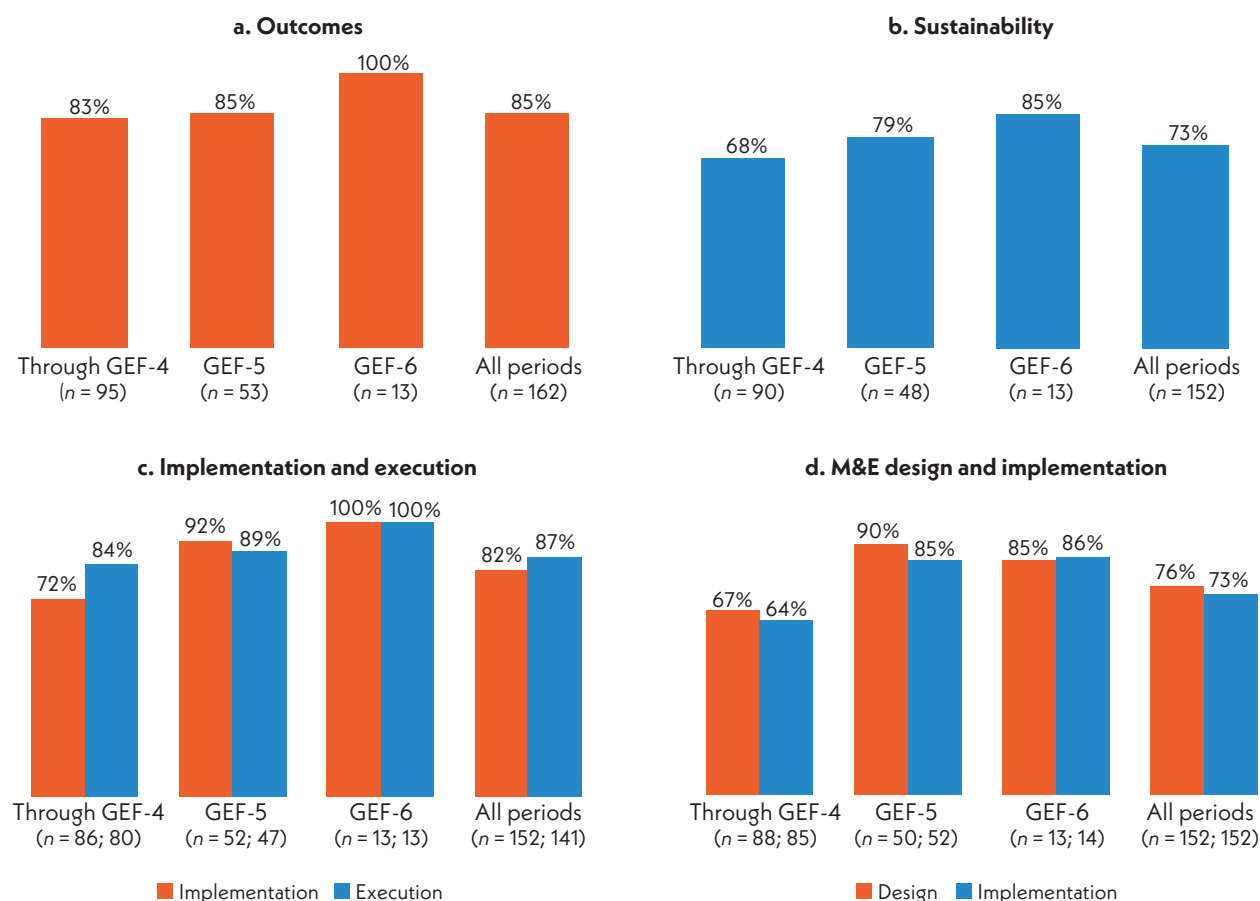
The shift from a chemical-by-chemical to a sector-based approach in GEF-7 has enhanced integrated chemical management across industries but risks neglecting legacy chemicals. An integrated approach to programming is essential for effective chemicals and waste management, particularly in the garment and food packaging sectors, where chemicals are used extensively throughout the supply chain. The GEF's focus on addressing chemicals at every stage is appropriate 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 and help with other legacy chemicals to combat pollution and enhance public health. Meanwhile, and in response to COP-10, the GEF acted on the PCB deadline by approving a global PCB management program at its December 2024 Council meeting. While the transition to a sector-wide approach presents risks of gaps in targeted chemical management support, the GEF is addressing this challenge through complementary measures to ensure support where it is most needed.

Performance and effectiveness

Chemicals and waste projects have shown positive performance overall. Through 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 5.6](#)). 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 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 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,

FIGURE 5.6 Chemicals and waste: percentage of projects rated in the satisfactory/likely range

Source: GEF IEO Annual Performance Report 2026 data set, which includes completed projects for which performance ratings were independently validated through June 2025.

Note: The number of projects for which validated outcome ratings are available is shown in parentheses. The cumulative figure for all periods includes GEF-7, which is not shown separately due to the limited number of observations.

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 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 initiative fostered safer, more sustainable e-waste management and created formal employment opportunities.

GEF-funded projects demonstrate that technological innovations—while not always new

globally—can be transformational within the countries where they are implemented, delivering significant environmental benefits in chemicals and waste management. In Viet Nam (GEF ID 9379), green chemistry approaches in the metal plating industry have reduced the use and release of hazardous substances. In Trinidad and Tobago (GEF ID 5558) and Senegal (GEF ID 4888), the deployment of autoclaves to replace CO₂-emitting incinerators and the introduction of laboratory equipment have improved the safe treatment and monitoring of hazardous waste. Safer pesticides use in Trinidad and Tobago (GEF ID 5407) and expanded recycling infrastructure have further advanced chemical safety and supported circular economy practices. Additionally, the replacement of dental amalgam (GEF ID 10936) in Senegal, Uruguay, and Thailand has reduced mercury pollution and health risks. These interventions also contribute to global efforts toward safer, more sustainable chemical management along supply chains.

However, 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 enterprises and microenterprises, facing challenges in adopting sustainable practices due to limited financial resources and technical expertise. For industry-wide transitions to eco-friendly practices, targeted support for smaller players is essential, as supported by the IFC/GEF Green Global Supply Chain Decarbonization Platform project (GEF ID 11326), for example. 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.

Efforts to prevent and remediate chemical pollution in GEF-funded 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, often extending beyond project timelines. A case in point is Indonesia's project 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), which successfully remediated a contaminated site where local communities had been dismantling e-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.

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.⁴

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 use the new technologies. However, in countries with insufficient training, limited technical expertise, constrained maintenance budgets, and supply chain challenges, imported machinery—such as autoclaves and laboratory equipment—has often remained underused. Additionally, integrating informal waste pickers into

⁴This 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.

formal waste management systems enhances both environmental outcomes and social equity, creating a more comprehensive and inclusive strategy for waste management.

Private sector involvement has been vital for sustainability. 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 eco-industrial 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 ([box 5.7](#)).

5.7 MULTIFOCAL AREA, INCLUDING NATURE-BASED SOLUTIONS

The discussion here of multifocal area projects is brief, given that the majority of such initiatives fall under the rubric of the GEF's integrated programs, which are discussed in the next chapter.

Performance and effectiveness

The share of multifocal area projects and associated funding has grown significantly over the past four GEF replenishment periods. As of June 2025, multifocal area projects accounted for 52 percent of approved projects and 55 percent of total approved funding ([table 5.7](#)). This increase is largely driven by

BOX 5.7 Eco-industrial park legislation in Viet Nam

The Implementation of Eco-Industrial Park Initiative for Sustainable Industrial Zones in Viet Nam (GEF ID 4766, UNIDO) exemplified transformational change by integrating environmental, economic, and social improvements across industrial zones. The project introduced resource-efficient, low-emission practices in 676 small and medium enterprises and established 10 industrial symbiosis schemes across three pilot zones. In Ninh Binh, for instance, a gas company captured byproducts from a fertilizer factory and sold them to a beverage company, demonstrating practical and profitable resource sharing. These interventions contributed to an estimated annual reduction of 2.9 million metric tons of carbon dioxide emissions. Crucially, the adoption of Decree 82 enabled the national scaling of the eco-industrial park model by providing a formal regulatory framework and institutional backing. Sustained collaboration among government ministries, the private sector, and local communities further reinforced trust, policy alignment, and social equity—key ingredients for durable environmental impact. Transformational outcomes in Viet Nam were enabled by strong internal design features, including a barrier analysis that addressed low awareness, weak enforcement, and limited recycling confidence. Cross-sectoral coordination through a high-level steering committee ensured government ownership, while capacity-building activities—training, study tours, and joint planning—supported adaptive learning and long-term change.

the rise in financing for integrated programs. However, not all multifocal projects are part of such programs—27 percent of multifocal projects approved under GEF-8 up to June 2025 fall outside the integrated program modality. Notably, under GEF-8, child projects within integrated programs accounted for 78 percent of total multifocal area funding.

TABLE 5.7 Overview of GEF Trust Fund multifocal area portfolio

GEF period	Approved projects ^a		GEF financing ^b		Cofinancing ratio at approval ^c
	Number	Percent of total	Million \$	Percent of total	
Through GEF-4	307	12	725	8	4.5
GEF-5	211	22	987	27	5.4
GEF-6	204	30	1,497	46	7.3
GEF-7	171	24	1,346	37	8.1
GEF-8	273	52	2,124	55	8.9
Total	1,166	21	6,680	28	7.4

Source: GEF Portal as of June 30, 2025.

a. Excludes dropped and canceled projects without a first disbursement and multifocal area projects that are part of the Non-Grant Instrument Program or the Small Grants Programme.

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.

Regionally, Africa, Latin America and the Caribbean, and Asia received the largest shares of multifocal area funding under GEF-8, with 33 percent, 28 percent, and 23 percent, respectively. Among implementing agencies, UNDP, FAO, and UNEP were the primary recipients of multifocal funding, securing 26 percent, 21 percent, and 15 percent of the total, respectively.

A high percentage of projects classified as multifocal have outcomes rated in the satisfactory range, consistently exceeding 80 percent across all GEF replenishment periods reviewed (figure 5.7). However, as noted in previous sections, the proportion of projects rated positively for sustainability is lower, with a cumulative average of 64 percent across all GEF phases—though there are signs of improvement in GEF-6. Positive trends are also evident in the quality of project implementation and execution and the design and implementation of M&E systems.

Nature-based solutions

This section summarizes key findings from the recent IEO evaluation on NbS (GEF IEO forthcoming-I), an

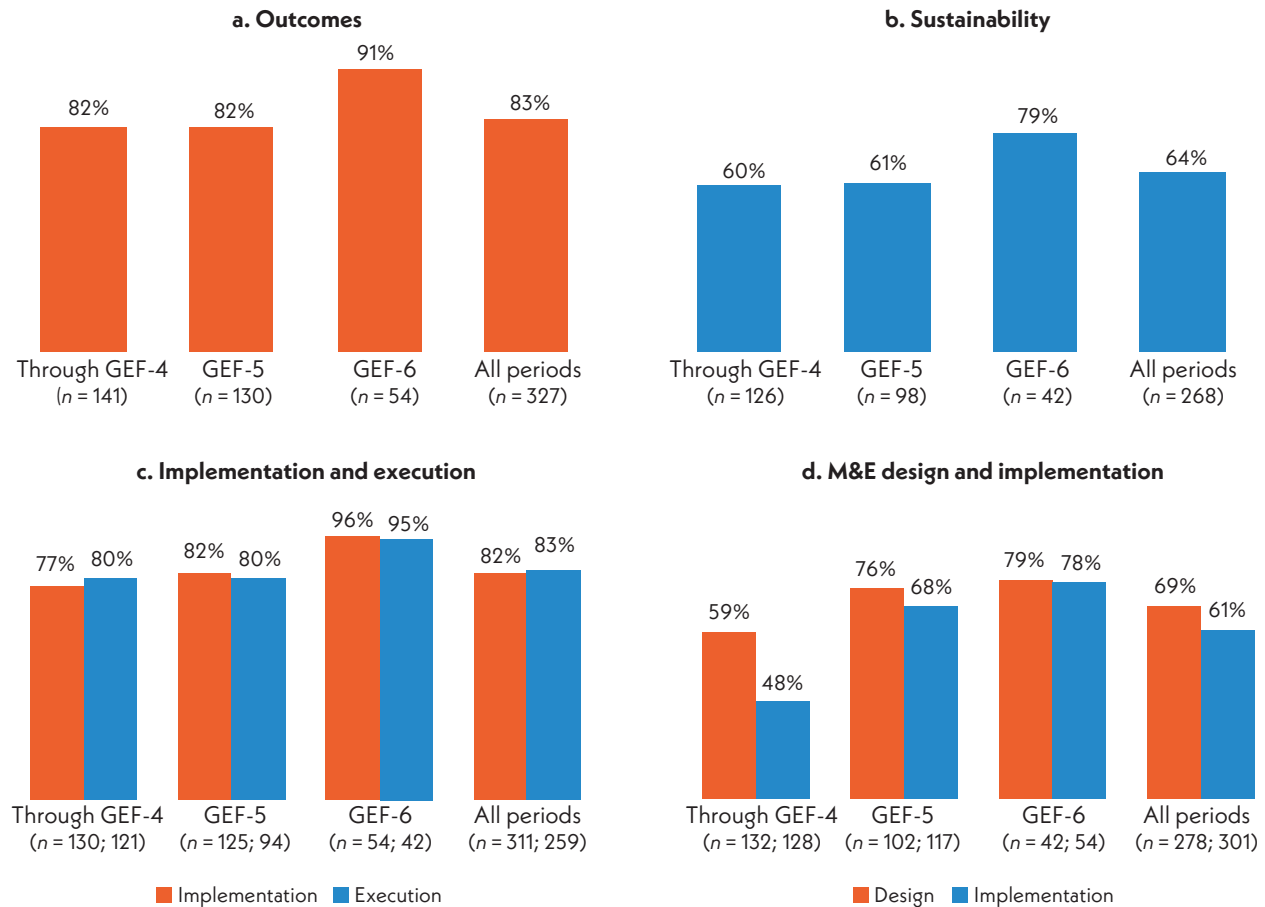
area of work that spans multiple focal areas and exemplifies integrated approaches. NbS offer the potential to address biodiversity conservation, climate change adaptation and mitigation, water security, and land degradation, while also delivering broader societal benefits through the sustainable management of ecosystems.

PORTFOLIO AND EVOLUTION SINCE GEF-5

In the absence of a formal classification system, the NbS portfolio was identified through a tailored three-layered screening and scoring process. This method applied internationally recognized criteria and led to the identification of 933 NbS-aligned projects between GEF-5 and GEF-8. The portfolio includes projects funded through the GEF Trust Fund, the LDCF, the SCCF, the GBFF, or a combination of these funding sources.

MAIN AREAS OF INTERVENTION

The GEF-supported NbS project portfolio encompasses a wide range of approaches, often employing a diverse mix of interventions. Projects commonly combine multiple NbS approaches to tackle

FIGURE 5.7 Multifocal area: percentage of projects rated in the satisfactory/likely range

Source: GEF IEO Annual Performance Report 2026 data set, which includes completed projects for which performance ratings were independently validated through June 2025.

Note: The number of projects for which validated outcome ratings are available is shown in parentheses. The cumulative figure for all periods includes GEF-7, which is not shown separately due to the limited number of observations.

issues such as biodiversity loss, climate change, land degradation, and community resilience in a holistic and scalable manner. The most common are ecosystem-based management strategies, including integrated watershed, forest, coastal zone, and landscape management, which typically merge area-based conservation with active restoration efforts such as reforestation and soil rehabilitation. Projects also promote agriculture-centered NbS (such as climate-smart agriculture, agroforestry, and conservation agriculture), ecosystem-based approaches to climate and disaster risk reduction, and nature-infrastructure

hybrids (such as green or blue infrastructure and mixed green-gray systems) aimed at enhancing resilience and supporting biodiversity and local livelihoods.

RELEVANCE

The GEF's NbS portfolio is well aligned with its core mandate and multilateral environmental agreements but remains underused within the overall project pipeline. Drawing on a diverse set of interventions, from capacity building and policy reform to

ecosystem restoration and green infrastructure, these projects contribute to multiple multilateral environmental agreements targets and help address complex environmental and development challenges. Despite this strategic fit, NbS initiatives make up only about 30 percent of the total GEF portfolio. The lack of a clear operational definition and systematic tagging constrains strategic coherence and comprehensive relevance assessments.

Despite strong alignment with GEF and national priorities, questions persist regarding the cost-effectiveness of NbS. The relevance of NbS within the GEF stems from their ability to foster integrated approaches that create synergies. NbS also offer ways to balance environmental and social benefits, ensuring fair distribution among stakeholders and across different levels of implementation. However, it is not clear whether certain NbS projects can deliver outcomes more cost effectively than alternatives. The current portfolio contains too few systematic cost-benefit assessments, leaving the economic case underdeveloped and constraining investment decisions by both GEF and private sector stakeholders, who typically favor interventions with shorter payback periods. The lack of rigorous cost-effectiveness studies undermines informed resource allocation and constrains the broader adoption and scaling of NbS within the GEF portfolio.

PERFORMANCE AND EFFECTIVENESS

The GEF's NbS-aligned projects perform comparably to the broader portfolio in delivering planned environmental outputs but lower in terms of sustainability. Approximately 80 percent of NbS projects achieved or surpassed key targets, such as improved land management, habitat restoration, and species protection, compared to 78 percent across all GEF-funded projects. However, only 62 percent of NbS initiatives were rated "likely" or "highly likely" to sustain outcomes, in contrast to 68 percent

of non-NbS projects. Persistent issues were limited follow-on funding, weak integration of adaptive management practices, and insufficiently embedded local governance systems. Projects with strong stakeholder co-management and clear financing strategies tended to perform better, highlighting the value of inclusive governance and aligned policies in securing long-term NbS impacts.

GEF-funded projects that incorporate NbS deliver important socioeconomic co-benefits that help sustain global environmental benefits, but their effectiveness is difficult to systematically demonstrate due to measurement challenges, limited adaptive management, and fragmented learning across the portfolio. NbS-aligned projects generate benefits such as improved livelihoods, higher farm incomes, greater resilience, and employment opportunities—all critical for sustaining global environmental benefits. However, demonstrating these results is limited by the uneven inclusion of socioeconomic indicators in project designs, the absence of robust baseline data, and the limited scope of the GEF's official co-benefit metric (Core Indicator 11). Moreover, learning across the NbS portfolio remains fragmented and largely reactive, due to the lack of dedicated guidance, a shared theory of change within the GEF, and effective mechanisms for integrating evidence-based Indigenous and local knowledge with scientific expertise. These gaps limit the potential for systematic learning, adaptive management, and the realization of transformational impact through NbS.

The engagement of diverse stakeholders in NbS projects has increased under recent GEF policy reforms and the GBFF's 20 percent funding allocation for IPLCs. Inclusion is central to NbS effectiveness, and GEF-funded projects, particularly more recent ones, show increased effort in engaging marginalized groups. The GEF's Policy on Gender Equality (2017) and accompanying guidance (2018) have supported gender-responsive project design and

planning. Despite this progress, projects continue to face difficulties in managing inherently complex stakeholder dynamics, integrating gender considerations meaningfully, ensuring substantive IPLC participation throughout the project cycle, and navigating sensitivities around traditional knowledge.

Policy and institutional coherence is key for NbS effectiveness. Projects that actively align with national and local policy frameworks, foster cross-sector coordination, and respond to shifting policy landscapes tend to secure stronger government ownership and achieve better outcomes. Conversely, gaps in policy alignment, overlapping mandates, legal inconsistencies, and political or administrative instability often weaken coherence, especially in low-capacity settings where environmental institutions have limited sway over broader development agendas. Addressing these challenges requires bridging domestic institutional and sectoral gaps while also aligning international funding mechanisms and conventions to better support national priorities and enable effective, impactful deployment of NbS.

GEF-supported interventions in innovative finance have shown opportunities, though replicability and long-term viability remain difficult to achieve. Pilot initiatives in blended finance, environmental bonds, and nature-focused impact investing have secured higher levels of cofinancing, yet scaling these models across the portfolio remains limited. Common barriers include challenges in building durable private sector partnerships, reconciling conservation goals with financial return timelines, and ensuring the sustainability of funding. While early results from pilots are encouraging, they have not yet established a consistent path to economic sustainability for NbS. The mismatch between investors' expectations for short-term returns and the longer-term benefits of NbS continues to hinder broader capital mobilization and sustained engagement.

The overall effectiveness of the GEF's NbS interventions is often limited by knowledge and capacity gaps among stakeholders, which impede the consistent delivery of robust, resilient, and context-appropriate solutions. Implementing successful NbS projects is frequently challenged by a lack of technical skills and local capacity. Despite the strong interest in NbS, turning this interest into well-designed, site-specific interventions requires solid evidence and understanding. These gaps can result in implementation risks, uncertainty about long-term outcomes, underestimated resource needs, and missed opportunities to incorporate the valuable traditional knowledge of IPLCs. While the GEF's Principles and Guidelines for Engagement with Indigenous Peoples and the Guidelines on GEF's Policy on Social and Environmental Safeguards aim to integrate traditional knowledge, evaluations have highlighted that Western approaches dominate, limiting the integration of diverse knowledge systems.

SUSTAINABILITY

The GEF partnership has supported promising cases of policy change through NbS, yet broader systemic shifts are limited by capacity and financing gaps. Several projects have helped incorporate NbS into national policies, testing innovative solutions, and attracting blended finance. However, many still face difficulties in achieving lasting and widespread impact. Ongoing challenges include insufficient technical and managerial expertise among implementing entities, a lack of clear scaling strategies, and uncertainty about sustained financial support. Where successful scaling has occurred, it has been supported by adaptive implementation, inclusive multistakeholder engagement, and clear financing mechanisms ([box 5.8](#)). Conversely, where adoption has faltered, weak economic viability and institutional silos remain key barriers.

BOX 5.8 India: Scaling up GEF NbS interventions through the Green Climate Fund

Two GEF-funded projects (GEF IDs 3936 and 3941) led by the United Nations Development Programme and aimed at mainstreaming coastal and marine biodiversity conservation into production sectors successfully piloted community-based adaptation in coastal India through mangrove restoration. The Green Climate Fund scaled up these models, expanding climate change adaptation in an area where about 1.7 million are living in proximity and supporting replication across all coastal states. The success of

these efforts is confirmed by a postcompletion project visit and the satellite data analysis showing positive ecological changes at the restoration sites. An increased normalized difference vegetation index indicates improved vegetation health and density, while a reduced modified normalized difference water index variability suggests less flooding. These trends confirm the successful establishment of mangrove ecosystems, which serve as natural buffers against coastal hazards and improve shoreline stability.

FIGURE B5.8.1 Postcompletion satellite image of GEF-funded project area



Source: Map data from Google, Image 2025 Maxar Technologies.

5.8 SUMMARY

An analysis of GEF-supported interventions across focal areas reveals several recurring themes that highlight both areas of strength and ongoing challenges.

Across focal areas, there was good alignment with conventions and agreements. GEF programming has demonstrated strong alignment with global environmental frameworks and national development priorities. Projects have consistently supported the objectives of multilateral environmental agreements, including the Convention on Biological Diversity, the UNFCCC, and the Stockholm and Minamata Conventions. This strategic alignment ensures that GEF-funded

initiatives contribute directly to countries' international commitments while advancing national policy goals.

Evaluations noted a common shift toward integrated programming. The shift to integrated programming replaces sector-specific interventions with holistic, cross-sectoral strategies that address multiple environmental challenges simultaneously. Integrated landscape and seascape initiatives now routinely embed biodiversity restoration, climate resilience, and land degradation neutrality, leading to broader systemic impacts. Biodiversity strategies increasingly support nature-positive development models that engage Indigenous Peoples and the private sector, while climate change mitigation

and adaptation efforts emphasize upstream planning and programmatic solutions.

Overall, GEF-funded projects showed strong outcome ratings. Projects in biodiversity, land degradation, and climate change mitigation have consistently received strong ratings for effectiveness. Community-led conservation, sustainable land management, and early warning systems for disaster preparedness are among the interventions that have delivered robust results.

GEF-funded interventions have generated socio-economic co-benefits, including support for the governance of local organizations and institutions, know-how and technical skills, and opportunities to generate incomes and jobs. In general, there are gaps in tracking the co-benefits, which is further discussed in a dedicated chapter of this report. The specific case of projects promoting pollution prevention and control suggests that beneficial effects on health and employment opportunities are real, but little evidence is available to substantiate these claims.

Despite these strengths, several persistent challenges constrain the long-term impact and scalability of GEF interventions.

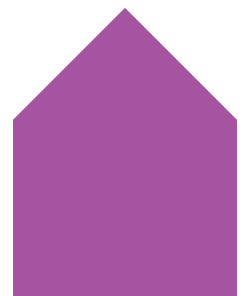
- **Sustaining outcomes beyond project life spans remains challenging.** Many projects struggle to maintain momentum beyond their implementation phase due to weak governance structures, insufficient financial follow-up, and limited integration into national budgets or institutional frameworks. This issue is particularly pronounced in climate change adaptation and chemicals and waste projects, though it also affects other focal areas to varying degrees.

- **Land degradation and biodiversity projects were most sustainable where embedded in policy frameworks and community governance structures.** Climate change adaptation and chemicals and waste projects struggled with financial and institutional sustainability, despite success in embedding upstream prevention and private sector partnerships in chemicals and waste management.
- **Private sector engagement has not yet been fully realized through GEF programming.** This shortcoming is particularly noted in international waters and chemicals and waste projects, where small enterprises face barriers to adopting sustainable practices and broader industry transitions require targeted support.
- **Monitoring and learning systems, while improved, often lack standardized outcome-oriented indicators, limiting the ability to track long-term environmental and socioeconomic effects.** Outcome-oriented indicators are often lacking, especially in chemicals and waste projects, where difficulties in applying consistent M&E frameworks reduce accountability and learning. M&E weaknesses limit the availability of evidence on long-term environmental and socioeconomic effects, such as health improvements or employment outcomes.

These cross-cutting findings underscore the rationale for the GEF's pivot toward integrated programming, which is explored in greater depth in the following chapter.

PART III

Enablers of transformation



Integrated programming

This chapter presents evaluative evidence on GEF-funded integrated programming,¹ highlighting its importance for driving transformational change and generating environmental benefits at scale. Drawing on earlier IEO reviews of integrated programming (GEF IEO 2018c, 2022d), as well as evaluations of the Sustainable Forest Management, Global Wildlife, Food Systems, and Sustainable Cities programs (GEF IEO 2022e, forthcoming-n, forthcoming-h, forthcoming-r), the chapter examines how integrated programming delivers value beyond traditional stand-alone projects. It focuses not only on operational, institutional, and policy-level results, but also on the role of knowledge platforms and coordination mechanisms—a core feature of integrated programming—in catalyzing systemic shifts.

Integrated programming was designed to be additional to previous approaches, supporting system-wide solutions capable of tackling the complex drivers of environmental degradation and enabling transformational change. This chapter discusses the evolution of the portfolio of integrated programming as well as integrated programming

relevance, governance, effectiveness, efficiency, inclusion, knowledge platforms, sustainability, and scaling. In covering these topics, the IEO has adopted a six-domain framework ([box 6.1](#)) derived from the lessons of its Evaluation of GEF Support for Transformational Change (GEF IEO 2018b). Together, these domains—a systems-based vision for transformational change; implementation quality and results; ambition, innovation, and adaptation; stakeholder inclusion; sustainability and scale-up; and knowledge sharing—frame how integrated programming can amplify the GEF’s ability to generate environmental benefits at scale while delivering socioeconomic co-benefits and strengthening institutions for long-term resilience. This chapter, following an overview of the GEF’s integrated programming portfolio’s evolution and governance, is organized roughly along these six domains.

6.1 EVOLUTION OF THE PORTFOLIO

Integrated approaches within the GEF evolved over several replenishment periods. During GEF-2, it was acknowledged that while a siloed, focal area approach was appropriate in specific contexts, it often limited the potential to generate multiple global environmental benefits. From GEF-3 to GEF-5, there was a shift to developing multifocal area projects and programs, fostering greater collaboration and synergies across focal areas to address interconnected environmental challenges more effectively.

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. In this chapter, the term “integrated programming” refers to the GEF-6 integrated approach pilots, the GEF-7 impact programs, and the GEF-8 integrated programs.

BOX 6.1 Six domains for evaluating the additionality of integrated programming

These six domains are key to the success and ultimate impact of integrated programming.

- **Systems-based vision for transformational change.** To what extent do programs and child projects address systems (e.g., a biome or value chain) and the interaction of systemic elements (e.g., policies, land use, markets, producers, buyers) to foster broader results?
- **Quality of implementation and meaningful results.** Are the pace and efficiency of implementation, and problems in implementation, addressed? To what extent results have been generated (e.g., environmental, socioeconomic, institutional and policy level).
- **Ambition, innovation, and the willingness to adapt.** To what extent do programs and child projects aim higher in their scale and scope of change (e.g., covering larger geographic areas or more sectors, proposing new or creative solutions to complex problems) while assessing and managing risks?
- **Inclusion of stakeholders, from governments to communities.** What is the degree of the inclusion of the range of actors and organizations who are responsible for making decisions or who will be directly affected by the outcomes (e.g., central and local governments, regulatory agencies, research institutions, private companies, community groups, and civil society organizations)?
- **Planning for sustainability and scaling up.** To what extent have programs addressed policies, strengthened institutions, and mobilized long-term funding?
- **Building and sharing knowledge for continuous improvement.** What level of attention and resources are devoted to monitoring and learning and to establishing a global platform to generate and share knowledge and apply what works in real-world settings?

In GEF-6, the GEF launched three integrated approach pilots (IAPs) to address the underlying drivers of environmental degradation and create synergies across global environmental commitments, aiming for more sustained and transformational impact. These pilots were Resilient Food Systems (RFS), focused on food security and ecosystem resilience in Sub-Saharan Africa; Sustainable Cities, targeting environmental pressures from rapid urbanization; and the Good Growth Partnership (GGP), aimed at reducing commodity-driven deforestation through sustainable supply chains. These pilots built on the GEF's prior experience with large-scale, cross-cutting programs—such as [areas beyond national jurisdiction](#), the [Great Green Wall](#), and [ridge to reef](#)—as well as incentive-based mechanisms like the Sustainable Forest Management (SFM) and REDD+ programs.²

Building on the experience of the IAPs, GEF-7 launched three impact programs to further scale and deepen integration:³ the Food, Land Use, and Restoration (FOLUR) Impact Program, focused on sustainable food production and land use systems; the Sustainable Cities Impact Program, which expanded the initiative's geographical coverage from municipal to metropolitan boundaries and sought to integrate biodiversity conservation into broader urban sustainability considerations; and the SFM Impact Program, which evolved from earlier periods to focus on transboundary forest ecosystems, including the Amazon and Congo Basin. According to the GEF-7 Programming Directions, the impact programs would support countries in promoting transformational change, consistent with their national development priorities, with better use of resources, through synergy and integration, and with increasing private sector contribution (GEF 2018a).

² REDD+ refers to reducing emissions from deforestation and forest degradation, plus the sustainable management of forests and the conservation and enhancement of forest carbon stocks.

³ In spite of the change in title from “integrated” to “impact,” the approach was similar.

Under GEF-8, the number of integrated programs grew from 3 to 11. While maintaining a focus on food and land use, sustainable cities, and SFM, the GEF added thematic areas such as plastic pollution, ecosystem restoration, and a dedicated program covering five forest biomes, including the Amazon. The expansion was driven by the need for more comprehensive, cross-sectoral responses to multiple environmental crises. The 11 integrated programs are summarized in terms of their intended focal area contributions in [table 6.1](#).

The progression from the GEF-6 IAPs to the GEF-7 impact programs and GEF-8 integrated programs reflects a significant amplification in financing, scope, and scale. Total GEF financing for integrated programming increased more than fivefold—from \$314.1 million in GEF-6 to \$1.657 billion in GEF-8. The number of child projects more than doubled from 30

in GEF-6 to 65 in GEF-7, and then tripled to 199 in GEF-8 ([table 6.2](#)).⁴ Notably, the average number of child projects per program increased from 10 in GEF-6 to 18 in GEF-8, reflecting broader coverage and diversification across themes.

The average financing per child project declined from GEF-6 to GEF-8. In nominal terms, average GEF funding per child project decreased by 20 percent—from \$10.5 million to \$8.3 million ([table 6.3](#))—only slightly above the GEF-8 average of \$7.6 million for all projects, including stand-alone ones. When expected cofinancing is considered, the decline in total notional financing per program and per child project is more pronounced. The most significant drop is in the average expected cofinancing and total funding per child

⁴ Of the 30 child projects approved under GEF-6, 22 had been completed by June 30, 2025.

TABLE 6.1 Intended contributions of GEF-8 integrated programs by focal area

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 Dev.	●	●	●	●	○
Ecosystem Restoration	●	●	●	○	○
Clean and Healthy Ocean	●	○	○	●	○
Circular Solutions to Plastic Pollution	●	●	○	●	●
Blue and Green Islands	●	●	●	●	○
Eliminating Hazardous Chemicals	●	○	○	●	○

Source: GEF Secretariat 2022a.

Note: ● = major contribution to focal area; ○ = moderate contribution; ○ = minor contribution.

TABLE 6.2 Overview of GEF integrated programming

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	7 ^a
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	—

Source: GEF Portal as of June 30, 2025.

Note: IAP = integrated approach pilot. 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.

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.

TABLE 6.3 Average GEF integrated programming funding by program and child project (million \$)

Period/program	GEF funding		Expected cofinancing		Total funding	
	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	−12	−51	−7	−49

Source: GEF Portal as of June 30, 2025.

Note: IAP = integrated approach pilot.

project (−49 percent). It is important to note that cofinancing figures may shift as projects move toward Chief Executive Officer (CEO) endorsement. Factors explaining the decline include a change in minimum the STAR contribution to integrated programs, as well as the increasing participation of least developed countries (LDCs) and small island developing states (SIDS) in the integrated programs, where absorptive capacity, government contribution, and domestic cofinancing are more limited.

Integrated programs have relied more heavily on government financing and less on private sector contributions than have stand-alone projects. Government contributions averaged 51 percent for integrated program child projects across GEF-6

to GEF-8, although this share declined from 65 percent in GEF-6 to 41 percent in GEF-8 (table 6.4). In contrast, stand-alone projects maintained a relatively stable average of 34 percent in government contributions over the same period. Private sector financing, while low overall for integrated programs, increased from 1 percent in GEF-6 to 8 percent in GEF-8, averaging 7 percent across replenishment periods. This remains significantly below the average for stand-alone projects, where private sector contributions averaged 23 percent—although that share has been declining since GEF-6.

GEF-8 integrated programs saw a marked increase in country participation, with a particular emphasis on engaging LDCs and SIDS. The number of participating

TABLE 6.4 Shares of cofinancing committed at approval by source, programmatic approach, and period (%)

Programmatic approach	Period	Cofinancing source						
		Government	GEF Agency	Donor agency	Private sector	CSO	Beneficiaries	Other
Integrated program	GEF-6	65	22	9	1	1	1	1
	GEF-7	59	21	7	8	3	0	2
	GEF-8	41	28	13	8	5	1	4
	GEF-6 to GEF-8	51	25	11	7	4	0	3
Stand-alone project	GEF-6	33	25	7	29	2	1	3
	GEF-7	38	23	13	19	3	1	5
	GEF-8	30	31	10	19	2	1	7
	GEF-6 to GEF-8	34	26	10	23	2	1	4

Source: GEF Portal as of June 30, 2025.

Note: CSO = civil society organization. Considers reported cofinancing when projects enter the work program. In calculating cofinancing ratios, GEF financing excludes Agency fees and project preparation grant funding and fees. The stand-alone project category includes projects from across the overall GEF portfolio.

countries rose from 22 in GEF-6 to 98 in GEF-8. This includes a rise in LDCs from 8 to 31 and the introduction of 26 SIDS, largely due to the launch of the Blue and Green Islands Program. Among the GEF-8 programs, Food Systems had the broadest participation with 32 countries; followed by Amazon, Congo, and Critical Forest Biomes (28), and both Sustainable Cities and Ecosystem Restoration (20 each). On average, the number of countries per program doubled—from 8 under GEF-6 to 16.7 under GEF-8—highlighting the increasing need for effective intercountry coordination and mechanisms for sharing knowledge and experience.

6.2 RELEVANCE OF INTEGRATED PROGRAMMING

Integrated programming is aligned with the objectives of global environmental conventions and GEF focal areas. [Table 6.1](#) presents the expected contribution of each program to these focal areas, and indicating the degree of alignment. Some programs—Food Systems, the Net-Zero Nature-Positive

Accelerator, Greening Transportation Infrastructure, Ecosystem Restoration, and Circular Solutions to Plastic Pollution—are designed to contribute across nearly all focal areas. Others—Sustainable Cities, Wildlife Conservation for Development, and Clean and Healthy Ocean—have a more focused thematic scope.

GEF integrated programming is highly relevant to GEF strategic priorities and global environmental challenges, applying systems thinking to link global drivers of degradation with country-level solutions and stakeholder dynamics. Child projects are increasingly designed to address underlying pressures—such as commodity value chains, urbanization, and illegal wildlife trade—through integrated interventions tailored to local contexts. The Global Wildlife Program (GWP), for example, evolved from an initial focus on illegal wildlife trade to a broader systems approach that also addresses human-wildlife conflict, zoonotic diseases, and community-based wildlife economies. Projects such as South Africa’s Strengthening Institutions, Information Management, and Monitoring to Reduce Illegal Wildlife Trade (GEF ID 9525) and Botswana’s Managing the Human-Wildlife Interface to Sustain Agro-Ecosystem Services (GEF ID 9154)

illustrate cross-sectoral collaboration spanning agriculture, forestry, energy, water, and urban planning.

Similarly, Sustainable Cities has emphasized integrated urban planning, capacity development, and the promotion of environmentally friendly policies and regulatory frameworks. National knowledge platforms, such as those established in Brazil, India, and Malaysia, and city-level planning processes have enabled diagnostic analyses, long-term strategies, and targeted priority actions. These interventions address institutional capacity gaps through training programs while promoting sustainable urban development and generating direct environmental benefits at the local level. Although linkages across child projects remain limited, participation in global platform workshops has facilitated cross-learning and contributed to gradually increasing program coherence.

Under the food systems theme, the GEF's strategic direction has focused on addressing key drivers of food systems transformation and promoting value chain approaches. While these programs target systemic drivers—including environmental, political, economic, sociocultural, individual, and technological factors—and emphasize levers of change such as governance, finance, multistakeholder dialogue, and innovation, most child projects have concentrated primarily on the production segment. Sociocultural drivers, such as dietary preferences, social norms, and food traditions, have received limited attention.

The IAPs in GEF-6, followed by the FOLUR Integrated Program (GEF-7) and the Food Systems Impact Program (GEF-8), progressively adopted a value chain perspective. However, under GEF-7 and GEF-8, 92 percent of child projects focused on production, while other value chain segments received far less emphasis: postproduction and storage (17 percent), processing (37 percent), aggregation (12 percent), distribution (31 percent), and consumption (10 percent). Integration of traditional knowledge was also limited, with only 9 percent of projects explicitly incorporating

it in their design, reducing opportunities to embed local practices into culturally grounded and systemic solutions.

Under GEF-8, integrated program child projects were more likely than stand-alone projects to incorporate design features that enable transformational change. This tendency reflects strong alignment with GEF strategic priorities to address environmental challenges at scale. A review of 58 integrated program child projects and 21 stand-alone projects ([table 6.5](#)) found that, while both modalities included elements such as knowledge exchange, capacity development, and systems-level perspectives, integrated program projects more consistently defined system boundaries; addressed contextual, policy, and capacity gaps; and embedded mechanisms for scaling, mainstreaming, and replication. They also demonstrated stronger multistakeholder engagement and institutional coordination (discussed further in [section 6.7](#)). In terms of innovation (discussed further in [section 6.6](#)), integrated program child projects introduced new or less common approaches and technologies in 71 percent of cases, compared with 38 percent of stand-alone projects. Collectively, these features advance the GEF strategy to tackle the drivers of environmental degradation through integrated, multisector solutions, enhancing the potential to deliver global environmental benefits at transformational scale.

Despite the positive attributes of integrated programming, the expansion to 11 integrated programs in GEF-8 has introduced risks that could undermine long-term relevance if not effectively managed.

Coordination demands both within and across programs have increased significantly, with each program averaging 18 child projects and 17 participating countries, while average financing per child project declined by 20 percent. These factors make it more challenging to maintain program coherence and alignment with strategic objectives. The scale-up from 3 to 11 programs has also heightened the need for

TABLE 6.5 Occurrence in GEF-8 project design documents of transformational change elements, by programmatic approach (%)

Element of transformational change		Integrated program child project (n = 58)	Stand-alone project (n = 21)
System description	Description of relevant system to which program is contributing	98	100
	System boundaries description	91	76
Focus on contextual conditions	Policy, legal, and institutional development	86	67
	Private sector participation	100	100
	Government ownership and support	100	90
	Policy environment	97	76
	Implementation capacity	93	67
	Mainstreaming	95	71
	Replication	83	71
Transformational mechanism	Multistakeholder interactions	93	67
	Upscaling	95	76
Innovation	New approach/technology in the project area	71	38

Source: Project design documents for full-size projects endorsed by Chief Executive Officer as of December 31, 2024.

cross-program coordination—yet links between programming phases remain weak, underscoring the importance of realistic interreplenishment planning. Furthermore, when programs are discontinued, the absence of clear exit strategies risks undermining continuity and long-term impact, potentially diminishing the sustained relevance of integrated programming.

6.3 GOVERNANCE OF INTEGRATED PROGRAMMING

GEF programs involve two types of Agencies—the overall program lead Agency and the individual child project Agencies. Participation from both categories has grown over time. The number of lead Agencies increased from three in GEF-7 to seven in GEF-8, reflecting broader institutional engagement. The distribution of GEF financing among child project Agencies has varied across funding cycles. In GEF-6, the top three Agencies—the World Bank (\$70.7 million, 23 percent), the International Fund for Agricultural

Development (IFAD; \$64.5 million, 21 percent), and the United Nations Development Programme (UNDP; \$59.0 million, 19 percent)—collectively accounted for 62 percent of financing. In GEF-8, while UNDP (\$419.8 million, 25 percent), the Food and Agriculture Organization of the United Nations (FAO; \$362.3 million, 22 percent), and the United Nations Environment Programme (UNEP; \$219.7 million, 13 percent) were top recipients, the overall distribution was slightly more balanced, with these three Agencies accounting for 60 percent of total financing.

Lead Agencies

The process for selecting lead Agencies at the program level has improved since GEF-6. Agency selection has been guided by institutional capacity, thematic expertise, prior performance, and alignment with program objectives. Effective leadership has relied on having a well-defined coordination mandate supported by sufficient resources. In the food systems thematic area, programmatic support roles became

more clearly defined in GEF-7 and GEF-8. For example, the World Bank's leadership in FOLUR provided consistent guidance across partners, while IFAD's role in the RFS program supported knowledge exchange among executing partners. In contrast, the SFM initiative—despite its strong thematic focus across three distinct biomes—faced challenges due to a lack of centralized coordination. With separate program frameworks, theories of change, and lead Agencies, the SFM effort has lacked coherence, limiting integration, visibility, and opportunities for cross-program learning.

A 2025 IEO stakeholder survey conducted as part of the competitive advantage study of the GEF (GEF IEO forthcoming-b) found that about 75 percent of respondents agreed that the selection of lead Agencies was broadly transparent. However, among respondents from GEF Agencies, agreement dropped to 55 percent, reflecting perceptions shaped in part by underlying competition among Agencies.

Changes in lead Agency can be justified, but can introduce transitional challenges. In the Sustainable Cities Program, leadership shifted from the World Bank in GEF-6 to UNEP in GEF-7, and back to the World Bank in GEF-8. The first transition was intended to strengthen civil society engagement, and the subsequent reversal to enhance private sector participation and scaling. As the rationale for these shifts was not clearly communicated, they resulted in overlapping efforts and inefficiencies, including the simultaneous operation of two global platforms. These experiences underscore the need for clearer decision-making and continuity in Agency leadership.

Child project Agencies

At the child project level, Agency selection has been largely influenced by country preferences, existing partnerships, and in-country Agency presence. Strong upstream program coordination is essential to reduce the risk of fragmentation. In the GWP, a wide

range of Agencies—including the Asian Development Bank, Conservation International, FAO, UNDP, UNEP, the World Bank, and the World Wildlife Fund—were commonly selected. This diversity allowed countries to leverage Agency-specific strengths but also led to significant variation in implementation modalities and monitoring systems. Some projects focused on law enforcement and protected area expansion; others emphasized community-based conservation or infrastructure development.

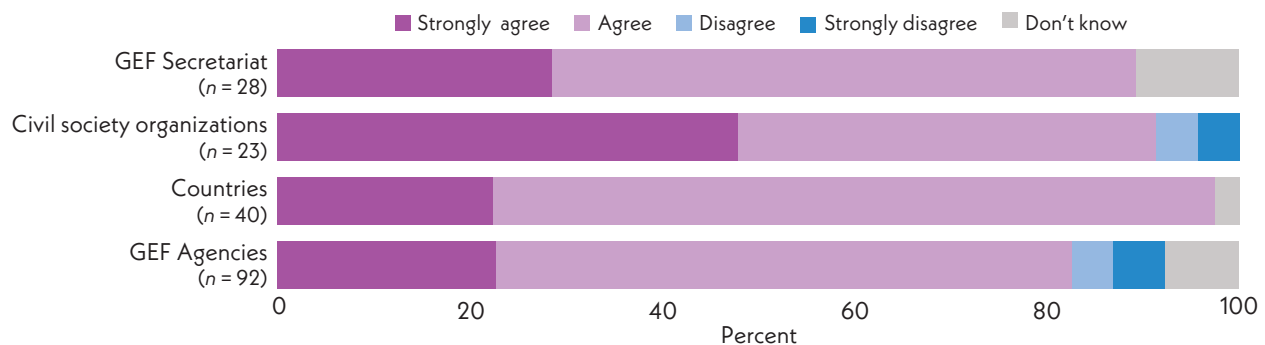
Ensuring close alignment between country preferences and Agency expertise is vital in strengthening project effectiveness. For example, IFAD's leadership of the RFS child project in Kenya—Establishment of the Upper Tana Nairobi Water Fund (GEF ID 9139)—was well matched to its expertise in smallholder agriculture. Similarly, the designation of the United Nations Industrial Development Organization (UNIDO) to lead Malaysia's Sustainable Cities project (GEF ID 9147) drew on its established experience in sustainable urban development, including integrated approaches to energy, transport, and resource efficiency.

Country support

Country-level stakeholders have consistently expressed appreciation for integrated approaches—an early finding highlighted in the 2018 formative review of the IAPs (GEF IEO 2018c). The 2025 IEO stakeholder survey reinforced this view, with a strong majority of respondents indicating that the GEF's integrated programming approach is effective in addressing major environmental challenges. Among country-level stakeholders, more than 95 percent agreed with this assessment ([figure 6.1](#)).

An implicit indicator of country support for integrated programs is their willingness to allocate System for Transparent Allocation of Resources (STAR) resources beyond the minimum required contribution. Countries have tended to provide

FIGURE 6.1 Distribution of stakeholder perceptions on whether GEF integrated programming approach is effective in tackling major environmental challenges



Source: GEF IEO stakeholder survey conducted as part of GEF IEO forthcoming-b.

additional STAR funding when the contribution ratio was more favorable. Under the GEF-6 IAPs, where the required contribution was one STAR dollar for every dollar of IAP matching incentive, 23 countries participated in 24 country child projects. Of these, 12 countries (52 percent—including Brazil, China, Ghana, India, and Mexico) allocated more STAR resources than required, contributing an additional \$44.4 million. In GEF-7, the required contribution increased to two STAR dollars per one integrated matching incentive, and 17 countries (33 percent—notably Brazil, China, Colombia, and Mozambique) still exceeded the minimum, adding \$10 million in STAR funding. However, in GEF-8, with a less favorable ratio of three STAR dollars for every integrated program incentive, no country contributed beyond the required amount.

Country support is critical to effective child project implementation, requiring institutional alignment, sustained cross-sectoral leadership, and continuity across political transitions. Countries with existing interministerial coordination platforms and decentralized governance systems are thus better positioned. For example, under the GWP, national governments formed wildlife crime units and updated protected area strategies. Bhutan integrated conservation into national development planning, while others used regional platforms to harmonize laws and enforcement efforts.

In GEF SFM interventions, 75 percent of projects were well aligned with national priorities, while 11 percent showed only partial alignment. Stronger alignment was evident in Brazil, where projects supported national deforestation prevention plans and the National Plan for Environmental and Territorial Management in Indigenous Lands. In Benin, projects aligned with the Forest Strategy, National Biodiversity Protection Strategy, and National Action Plan against Desertification. In contrast, in countries such as those in the Congo Basin, as well as in Colombia and Peru, weak coordination among key ministries resulted in fragmented implementation and weaker political support.

In the Sustainable Cities Impact Program, a key challenge has been translating national-level commitment into effective local action, as municipal authorities often lack the mandates or resources required for integrated urban planning.

In the case of Food Systems programs, Colombia, Ghana, and Indonesia developed jurisdictional models linking commodity value chains with land use governance, supported by close collaboration among agriculture, planning, and environment ministries. Engagement strategies increasingly included multi-stakeholder participation, as in Tanzania in FOLUR (GEF ID 10262, World Wildlife Fund–US [WWF-US])

as well as in RFS (GEF ID 9132, IFAD), incorporating gender and social inclusion in the design. However, in GEF-8, the short time frame provided to prepare concept notes limited the opportunity for thorough consultations with key ministries, reducing the depth of ownership and alignment during design. In Peru, for example, some government agencies with key responsibilities for food systems were only consulted once the project was nearly fully designed. Cross-case study observations and interviews in Ghana, Indonesia, and Tanzania raised concerns about the time needed to start country projects involving multiple commodities and agencies, each with different food systems priorities. This includes the time needed to meaningfully engage a range of relevant stakeholders, establish platforms, and refine objectives and activities within the broader food systems agenda.

6.4 EFFECTIVENESS

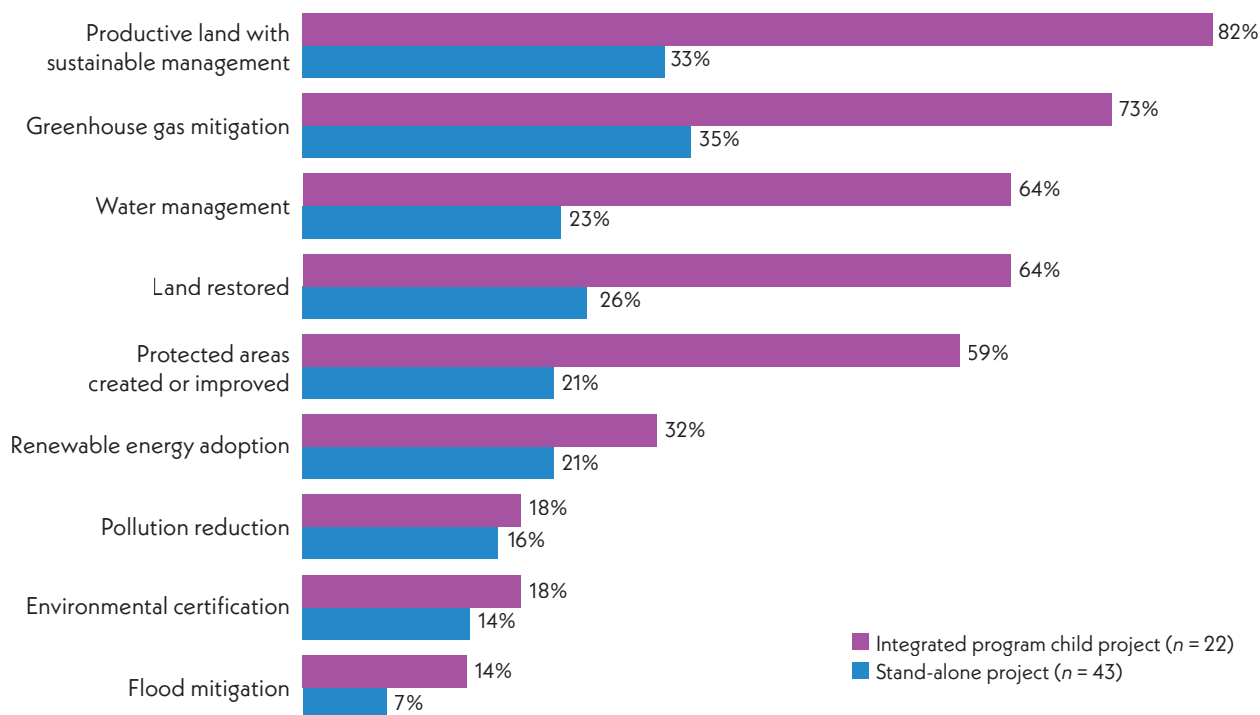
Environmental and socioeconomic outcomes

Evidence on outcomes is still emerging, as relatively few child projects have reached completion. To date, outcome ratings for GEF-6 IAP child projects are comparable to those of stand-alone projects. Only 22 GEF-6 IAP child projects have completed terminal evaluations, with 93 percent of these achieving outcomes in the satisfactory range, compared to 86 percent of stand-alone projects—a difference that is not statistically significant. These findings may evolve as more GEF-6 and GEF-7 integrated programming child projects reach completion.

A large language model analysis of terminal evaluations for the 22 integrated program child projects and 43 stand-alone projects comparable in terms of region and focal area found that certain environmental results were reported more frequently for integrated program child projects across five categories ([figure 6.2](#)). These categories and illustrative child projects are as follows:

- **Sustainable land management:** Kenya's water fund project (GEF ID 9139), which improved soil nutrient retention
- **Greenhouse gas mitigation:** Ethiopia's Integrated Landscape Management to Enhance Food Security and Ecosystem Resilience (GEF ID 9135, UNDP), which decreased greenhouse gas emissions by an estimated 17,500 metric tons of carbon dioxide equivalent through biogas, solar, and fuel-efficient technologies
- **Improved water management, including water harvesting and watershed conservation:** Senegal's Agricultural Value Chains Resilience Support Project (GEF ID 9134, IFAD), which led to more efficient water use
- **Land restoration:** Niger's Family Farming Development Programme (GEF ID 9136, IFAD), which rehabilitated 31,354 hectares of degraded land
- **Protected area creation or enhancement:** Ghana's Sustainable Land and Water Management Project, Second Additional Financing (GEF ID 9340, World Bank), which reduced encroachment and promoted sustainable nontimber forest product harvesting.

IAP child projects have demonstrated stronger performance than stand-alone projects for some GEF-6 corporate core indicators ([table 6.6](#)). A review of GEF-6 corporate core indicators suggests that the environmental and socioeconomic benefits from IAP child projects are broadly comparable to those from stand-alone projects, with some areas of stronger performance by IAP child projects. Integrated program child projects demonstrated higher achievement rates (percentage of targets achieved at completion) within a narrower set of focal areas, particularly biodiversity and climate change mitigation. For example, IAP child projects achieved 189 percent of their target for improved management of landscapes and seascapes for biodiversity conservation, compared to 97 percent for stand-alone projects. Similarly, in greenhouse gas mitigation, IAP child projects reached 173 percent

FIGURE 6.2 Frequency of environmental benefits reported for integrated program child projects and stand-alone projects

Source: Terminal evaluations.

of their target, versus 123 percent for stand-alone projects.

Stand-alone projects addressed a broader range of focal areas, including water resources and chemicals management—areas not targeted by IAP child projects under GEF-6. For instance, stand-alone projects achieved their target for integrated management in three freshwater basins and disposed of 6,941 metric tons of persistent organic pollutants, achieving 66 percent of a 10,563 metric ton target.

Findings on socioeconomic benefits under integrated programming are broadly consistent with those from the overall GEF portfolio. Integrated programming projects show frequent and diverse benefits but also persistent challenges in inclusion, sustainability, and scaling of impact. RFS and

GWP projects, for example, demonstrated tangible community-level benefits by promoting climate-smart agriculture, sustainable supply chains, and wildlife-based enterprises. For example, in Nigeria (GEF ID 9143) and Ethiopia (GEF ID 9135), farmers adopted improved practices that bolstered yields and food security. Brazil's Taking Deforestation Out of the Soy Supply Chain (GEF ID 9617, UNDP) leveraged green finance for zero-deforestation compliance. Wildlife projects, notably in Mozambique, engaged communities through corridor mapping and nature-based livelihoods, enhancing local ownership and income diversification.

Limitations to the achievement of socioeconomic benefits are apparent, however. Many programs struggled to systematically include marginalized groups, and the use of financial incentives for

TABLE 6.6 Achievement of GEF-6 corporate environmental indicators by programmatic approach

GEF-6 corporate indicator	Integrated programs (GEF financing = \$175 mil.)		Stand-alone projects (GEF financing = \$331 mil.)	
	Aggregate target ^a	Achieved at completion	Aggregate target ^a	Achieved at completion
Landscape and seascape area under improved management for biodiversity conservation	15,203 ha	28,713 ha (189% of target)	16,713 ha	16,281 ha (97% of target)
Production landscapes under improved management	1,883. ha	1,459 ha (77% of target)	2,602 ha	1,878 ha (72% of target)
Freshwater basins in which water-food-energy-ecosystem security and conjunctive management of surface and groundwater is taking place	n.a.	n.a.	3 basins	3 basins (100% of target)
Globally overexploited fisheries moved to more sustainable levels	n.a.	n.a.	n.a.	n.a.
CO ₂ e emissions avoided	185,537 MT	321,527 MT (173% of target)	171,462 MT	211,000 MT (123% of target)
POPs (PCBs, obsolete pesticides) disposed	n.a.	n.a.	10,563 MT	6,941 MT (66% of target)
Mercury reduced	n.a.	n.a.	3 MT	31 MT (934% of target)
ODP (HCFC) reduced/phased out	n.a.	n.a.	6 MT	6 MT (100% of target)

Source: Project documentation and GEF Secretariat 2018.

Note: n.a. = not applicable. CO₂e = carbon dioxide equivalent; ha = hectare; HCFC = hydrochlorofluorocarbon; MT = metric ton; ODP = ozone depletion potential; PCB = polychlorinated biphenyl; POP = persistent organic pollutant. Results are aggregated for 147 GEF-6 projects financed through the GEF Trust Fund with validated terminal evaluations available as of June 30, 2025, and 7 closed GEF-6 projects from integrated programs that have submitted terminal evaluations to the GEF Portal but have not yet been validated. Excludes enabling activities, projects with less than \$500,000 in GEF financing, and projects from the Small Grants Programme. Cumulative GEF financing is for 127 projects that provided achievement data (including no achievement) at completion for at least one indicator: 16 child projects of integrated programs, 13 child projects from other programs, and 98 stand-alone projects.

a. Aggregate target for projects that provide achievement data (including no achievement) at completion.

sustainable practices remained more aspirational than realized. The ambition of integrated approaches often outpaced available local capacity, curtailing implementation. Inclusion strategies, while present in some portfolios, lacked consistent application, and behavior change initiatives—such as community boards or demand reduction campaigns—showed limited uptake or measurable impact. Issues related to inclusion are further discussed in [section 6.7](#).

Results at the institutional and policy levels

Integrated programming has sought to shift institutional dynamics and align national policies with global environmental objectives. While substantial progress has been made, institutional transformation is constrained by political, technical, and financial shortfalls and a lack of documentation. Across the Food Systems programs, notable strides were made in establishing institutional coordination mechanisms. Nearly three-quarters of child projects created or reinforced multisector platforms, bringing together ministries of agriculture, environment, and planning. Under FOLUR,

90 percent of projects incorporated explicit cross-sector coordination. In Peru's FOLUR project—Deforestation Free Commodity Supply Chains in the Peruvian Amazon (GEF ID 10307, UNDP)—policy adjustments were introduced to align land tenure instruments with the European Union Deforestation Regulation, helping formalize rights for smallholders and integrate them into sustainable supply chains.

The GWP advanced institutional frameworks in countries facing severe biodiversity threats and illegal wildlife trade. In Thailand, this helped enhance law enforcement capacity through the introduction of DNA/NMR-based forensic tools and the IBM i2 criminal intelligence system. Gabon established a regional ivory traceability laboratory using genetic technologies, providing services across Central Africa. In Mozambique, national authorities implemented a traceable timber regulation system as well as georeferencing of elephant corridors, and projects helped draft national wildlife crime strategies involving the judiciary, police, and customs.

The Sustainable Cities Integrated Program helped create urban platforms involving local governments, infrastructure authorities, and civil society. In Senegal and Malaysia, cities developed integrated urban development plans that mainstreamed biodiversity and climate resilience. The program also helped cities revise zoning regulations to account for ecosystem services and flood risks and enabled cities in Brazil and India to explore circular economy policies and public procurement reforms.

Policy coherence for environmental benefits was often diagnosed but not consistently addressed or documented. In the Food Systems programs, 71 percent of child projects identified policy misalignments—such as subsidies for land conversion or input-intensive farming—yet fewer than half implemented mechanisms to correct them. Many interventions were led by environment ministries, which often lacked the convening authority to align

with agriculture and planning ministries. Some positive examples emerged, as in Ghana's Landscape Restoration and Ecosystem Management for Sustainable Food Systems (GEF ID 10348, World Bank) and Reversing Land Degradation Trends and Increasing Food Security in Degraded Ecosystems of Semi-arid Areas of Central Tanzania (GEF ID 9132, IFAD), which demonstrated cross-ministry collaboration during project design. In contrast, in Peru (GEF ID 10307), agriculture and environment ministries were engaged late, limiting alignment with broader food systems policies. In the Sustainable Cities Program, while urban plans were updated, alignment with national development or finance ministries was often missing, constraining downstream implementation and investment.

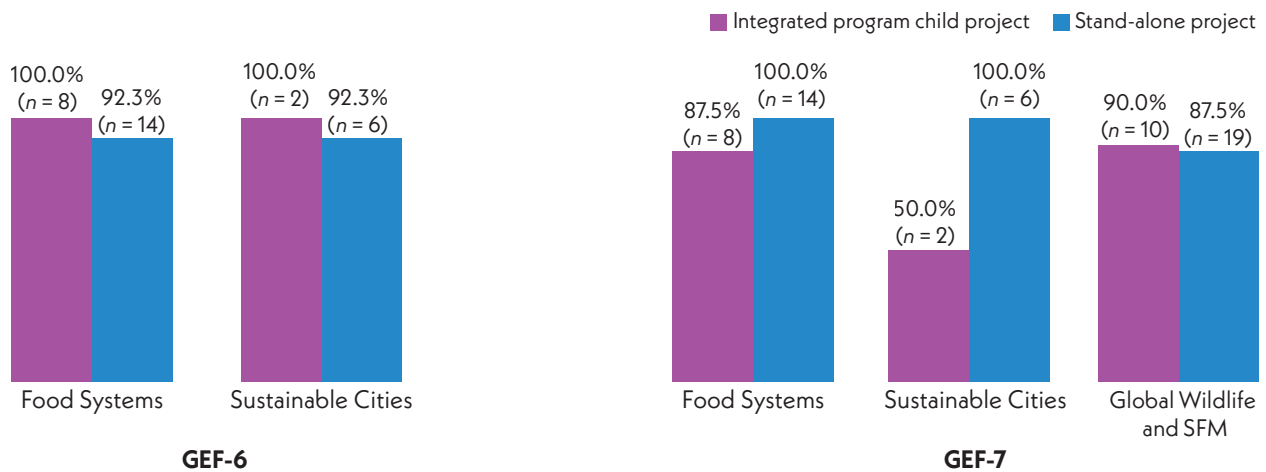
An obstacle to policy coherence noted across programs was insufficient institutional capacity at the subnational level. Local agencies often lacked staff, funding, or legal authority to implement reforms. The turnover of key officials and staff at the municipal and provincial levels disrupted continuity of policy work.

6.5 EFFICIENCY

Implementation timelines for integrated programming have improved across GEF replenishment cycles. As of June 2025, 27 percent of GEF-6 child projects remained under implementation, with particularly high rates under the Sustainable Cities Program (42 percent of child projects still ongoing). By comparison, most GEF-7 impact program child projects are currently under implementation, with only a few pending despite CEO endorsement—one SFM drylands project in Kenya and four FOLUR projects in Guatemala, India, Madagascar, and Malaysia.

Nearly all integrated program child projects and stand-alone projects under GEF-6 experienced implementation delays, largely due to the COVID-19 pandemic (figure 6.3). By GEF-7, child

FIGURE 6.3 Percentages of integrated program child projects and matched stand-alone projects reporting activity delays



Source: Project implementation reports and midterm reviews.

Note: SFM = sustainable forest management.

projects—particularly those under Food Systems and Sustainable Cities—were less likely to report delays than stand-alone projects, with a particularly notable improvement in Sustainable Cities. In contrast, for the GWP and the SFM program, delay rates were comparable between child and stand-alone projects.

The improved implementation trajectory of integrated program child projects from GEF-6 to GEF-7 reflects both the easing of pandemic-related disruptions and proactive efforts by the GEF and its partners to strengthen project design and streamline child project approval. In particular, clearer definition of roles and responsibilities between coordination units and child projects—supported by more detailed terms of reference—helped establish stronger program governance from GEF-7 onward.

In spite of these improvements, integrated programming continues to face implementation challenges.

[Figure 6.4](#) presents the findings from a large language model analysis of implementation issues reported for 20 integrated program child projects

and 39 stand-alone projects comparable in terms of CEO endorsement dates, countries, and focal areas. GEF-7-approved projects, identifying the typology and frequency of different implementation issues. The analysis found that both sets of projects reported facing similar challenges. For instance, under GEF-7, both modalities continued to experience implementation delays related to the COVID-19 pandemic and struggled with stakeholder coordination. However, some issues appeared to be relatively more prevalent in integrated program child projects—and the differences were statistically significant: financial delays, such as difficulties in securing or disbursing committed funds; limited staff capacity, including technical expertise gaps and recruitment delays; and political disruptions, such as shifts in government priorities, leadership changes, or broader instability. These challenges partly reflect the greater complexity, diversity of partners, and higher technical skill requirements inherent to an integrated program setting, all of which place additional pressure on project teams.

FIGURE 6.4 Frequency of various implementation issues reported for GEF-7 integrated program child projects and stand-alone projects

Source: Project implementation reports and midterm reviews.

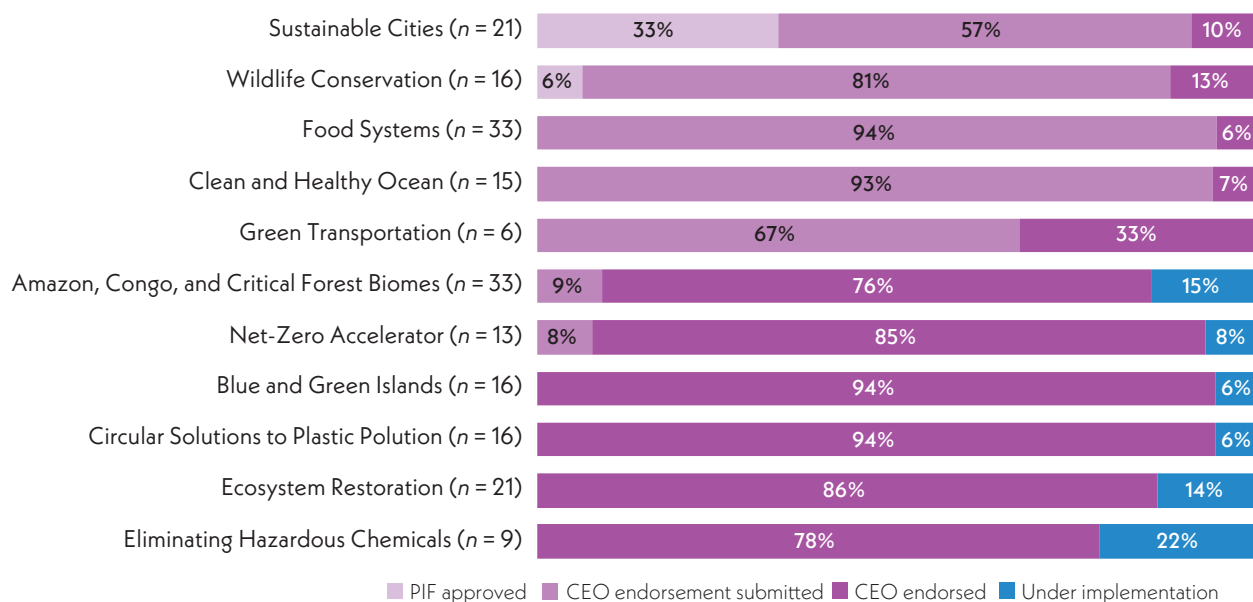
Note: SFM = sustainable forest management.

GEF-8 integrated programs are generally well-positioned for timely implementation, with most child projects having already received CEO endorsement ([figure 6.5](#)). Notably, newer programs—such as Eliminating Hazardous Chemicals from Supply Chains, Circular Solutions to Plastic Pollution (now Plastic Reboot), and Ecosystem Restoration—have advanced more rapidly than stand-alone projects, partly due to their earlier approval by the GEF Council, which gave them a head start in launching implementation activities.

Implementation timelines for integrated program child projects are comparable to, or slightly shorter than, those of stand-alone projects. An analysis of key timeline indicators—such as the time elapsed from project approval to CEO endorsement—shows that integrated program child projects generally

reached critical milestones within similar, or in some cases shorter, time frames than stand-alone projects ([table 6.7](#)), although the difference was modest (around one month).⁵

⁵There 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 project identification form 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 the evaluation of the Sustainable Cities Integrated Program suggests, child project implementation delays also depend on duration of project implementation (GEF IEO forthcoming-r). After adjusting for this, differences in implementation delays between GEF-6 and GEF-7 are lessened.

FIGURE 6.5 GEF-8 integrated program child project activity cycle status

Source: GEF Portal as of June 30, 2025.

TABLE 6.7 Median elapsed time from PIF approval to CEO endorsement

GEF period	Integrated program child projects		Stand-alone projects	
	Months	n	Months	n
GEF-6	20	30	22	314
GEF-7	23	57	24	332
GEF-8	18	83	19	99

Source: GEF Portal as of June 30, 2025.

Note: CEO = Chief Executive Officer; PIF = project identification form. 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.

Performance ratings for project implementation, execution, and monitoring and evaluation (M&E) show minimal differences between closed IAP child projects and stand-alone projects, with one important exception. A review of 22 GEF-6 terminal evaluations found that both project types performed

well in implementation and execution quality, with 100 percent of child projects rated in the satisfactory range for both dimensions, compared to slightly lower percentages of stand-alone projects (95 percent for quality of implementation and 91 percent for quality of execution); these differences are not statistically significant. M&E design ratings were also comparable, with 73 percent of child projects and 88 percent of stand-alone projects rated in the satisfactory range, again without significant difference. However, for M&E implementation, IAP child projects performed significantly better, with 100 percent rated in the satisfactory range, compared with 79 percent for stand-alone projects, indicating more consistent application of M&E systems.

In integrated programming, tight timelines have sometimes conflicted with the goal of designing inclusive and well-coordinated child projects. The Food Systems evaluation highlighted the challenge of reconciling the complex, multisectoral nature of food systems transformation with the limited time allowed

for project preparation (GEF IEO forthcoming-h). Under GEF-8, Agencies reported that the short timeline set by the GEF Secretariat for submitting expressions of interest and concept notes constrained consultation processes. As a result, some proposals lacked clear input from key government ministries, including those responsible for agriculture and trade, limiting cross-sectoral alignment and potentially affecting national ownership. For programs and child projects aiming to promote behavioral change and drive systemic transformation, insufficient time for stakeholder consultation represents a significant risk.

6.6 INNOVATION

Innovation in integrated programming has been seen as a key vehicle for transformational change.

Integrated programming has supported institutional innovations that link policy, finance, and multisectoral actors. Challenges to innovation include limited financial incentives and gaps in integrated program learning mechanisms. GEF-8 integrated program child projects have a medium-level risk profile for innovation: moving forward, this may need to be adjusted to the higher-risk ambitions set in the recent GEF risk appetite statement (GEF 2024b).

Integrated programming has sought to promote system-level innovations—such as institutional arrangements, multistakeholder platforms, and policy integration—that were difficult to achieve through stand-alone projects. The GGP piloted market-based mechanisms to control deforestation in commodity supply chain development, promoting public-private partnerships and developing tools such as the [Soy Toolkit](#) (Brazil, Paraguay) and the [RESPOND](#) online tool, which offers companies standards for assessing environmental and social risks. The Sustainable Cities IAP in China introduced integrated land use and transit-oriented development planning aligned with targets for low-carbon urban mobility. Under the RFS IAP, the Kenya project (GEF ID 9139)

supported the creation of a water fund and a payment for ecosystem services mechanism, which bridged conservation financing and water security. Ethiopia's RFS project (GEF ID 9135) deployed farmer field schools, integrated with climate information services, enabling adaptive management of agro-ecological systems.

However, several limitations are associated with the innovation opportunities of integrated programming:

- Innovations were often underdocumented.
- Integrated programs rarely included dedicated learning mechanisms to incubate, refine, and scale new ideas.
- The pressure to meet tight preparation and project cycle timelines could potentially discourage risk-taking, participatory design, and the incubation of new ideas, which often require time for proof of concept and small-scale piloting.

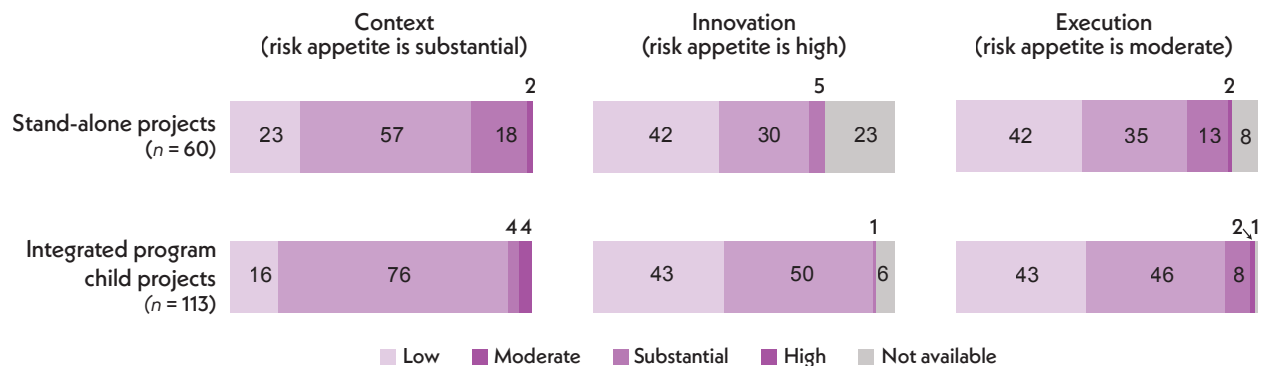
Under GEF-8, integrated program child projects exhibit a medium level of innovation risk.

The GEF risk appetite statement sets higher ambitions for innovation, aiming for a high-risk profile. As shown in [figure 6.6](#), GEF-8 integrated program child projects generally have a higher innovation risk than stand-alone projects. However, the distribution of these ratings confirms that integrated program child projects remain at a medium innovation risk level, below the high-risk threshold targeted in the risk appetite statement. These findings align with broader evaluation evidence indicating a moderate risk-taking approach in integrated programming. Going forward, satisfying the GEF's appetite for higher innovation risk may require a shift toward greater risk tolerance.

6.7 STAKEHOLDER INCLUSION

Transformational change requires collaboration among diverse stakeholders across multiple sectors and segments of society. Integrated programming

FIGURE 6.6 Distribution of median risk ratings for child projects of integrated programs and stand-alone projects in GEF-8



Source: GEF Portal as of June 30, 2025.

Note: The figure shows the median latest stage risk rating for each dimension and project, using a scale of 1 (low) to 4 (high), with 0 indicating no rating.

has pursued inclusive, multiconstituency engagement, showing both progress and gaps.

- Food Systems programs used multisectoral platforms to align national and local government actors, civil society, and occasionally private sector entities, helping to foster changes in agricultural and environmental practices.
- The Sustainable Cities Program featured multi-level stakeholder engagement, with national and municipal participation and contributions from global networks like [ICLEI—Local Governments for Sustainability](#) and [C40 Cities](#), a network of mayors from larger cities around the world. Community involvement was substantial in Latin America, where projects supported inclusive urban infrastructure. It was more limited or late-stage elsewhere.
- The GWP demonstrated a broad approach to stakeholder inclusion, engaging government agencies, civil society, Indigenous Peoples and local communities, the private sector, and academia. It promoted coordination across ministries and government levels, with notable structures

like Thailand's Wildlife Enforcement Network and Mozambique's anti-poaching center. Civil society played a key role, but results varied by country; while partnerships in Kenya and Viet Nam supported national and subregional legal frameworks, such engagement was not uniformly deep. Academic contributions, such as Gabon's ivory lab and research partnerships in South Africa, added technical depth. Consistency in stakeholder influence and sustained engagement across contexts remains a challenge.

Private sector

Across the GEF's integrated programming, private sector engagement has advanced gradually but is still below its potential to drive sustainability and transformational change.

The Sustainable Cities IAP revealed both the opportunities and the limitations of engaging with the private sector at the municipal level. The program sought to engage private actors through targeted public-private partnerships. In some cities, this led to successful

initiatives in waste management, renewable energy, and transportation. For example, cities in India and Mexico partnered with private firms to deploy biodigesters and electric vehicles. However, many cities lacked institutional frameworks, technical capacity, or procurement mechanisms to organize viable public-private partnerships. For example, Johannesburg, South Africa, and Vijayawada, India, encountered delays and diminished uptake due to bureaucratic complexity, inadequate outreach, and unclear incentive systems.

In Dakar, Senegal, the focus was on institutional strengthening rather than infrastructure investment. The project supported integrated urban planning and solid waste management by improving coordination at the metropolitan level, developing a strategic plan, and enhancing planning and budgeting processes. While no new waste facility was built, the project engaged the private sector through consultations and capacity building, particularly around service delivery models, preparing critical groundwork for more effective private sector collaboration in the future.

As part of Food Systems integrated programming, the GGP attempted to promote systemic change in the beef, soy, and palm oil supply chains through coordinated interventions on supply and demand. Engagement spanned global multinationals (e.g., COFCO, Unilever, McDonald's, Nestlé), national firms (e.g., Wilmar, Musim Mas), and financial institutions. The GGP piloted blended finance models—particularly via the International Finance Corporation—which mobilized significant private capital, including a \$288 million prefinancing facility for COFCO and a \$200 million green loan to Louis Dreyfus Company. Tools such as the Soy Toolkit (to support soy traders and retailers in responsible sourcing practices) were adopted, but there is no clear evidence of permanent changes in sourcing behavior or systemic regulatory shifts.

RFS adopted a more localized and inclusive model, engaging the private sector through support to producer organizations; micro, small, and medium

enterprises; and women's cooperatives. In Nigeria and Uganda, contract farming and value chain agreements were brokered. In Eswatini and Niger, market-oriented partnerships with processors and financial actors were forged. Nonetheless, much of the private sector contribution remained in-kind and narrowly earmarked. Without stronger incentives and financial innovation, scaling and systemic influence were constrained.

The FOLUR program broadened the GGP's private sector engagement by supporting diverse initiatives, such as partnerships with cocoa processors in Papua New Guinea and green finance in Thailand. However, outcomes remain uneven and at an early stage. Structural barriers—including weak demand-side reforms, limited business incentives, and underdeveloped financial systems—hamper progress. Looking ahead, the GEF-8 Food Systems Integrated Program aims to promote blended finance and support small and medium enterprises and producer groups, which requires addressing regulatory and financing gaps and aligning sustainability with market competitiveness.

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 enterprises, including community-based ventures in sustainable timber and nontimber products. Although 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, reined in by unclear regulatory frameworks and insufficient incentives.

Social inclusion

The approach to inclusion in GEF integrated programming has evolved from GEF-6 to GEF-8, with increasing attention to gender and Indigenous

Peoples and a growing recognition of youth.

GEF-7 introduced stronger requirements for gender mainstreaming and engagement with Indigenous communities, while GEF-8 linked inclusion more explicitly to transformational change goals. However, evidence of efforts to include persons with disabilities continues to be scanty.

Gender inclusion has advanced significantly.

GEF-6 programs, notably the RFS and the GGP, incorporated gender mainly through participatory approaches. GEF-7's FOLUR program went further by embedding gender in landscape planning and policy processes, and GEF-8's Food Systems integrated gender into its theory of change. Progress included women's increased access to technical training, income-generating activities, and influence in decision-making. Nigeria's RFS project (GEF ID 9143) partnered with the Women Farmers' Advancement Network to strengthen women's roles in rice and groundnut value chains. FOLUR's Inclusive Sustainable Rice Landscapes in Thailand (GEF ID 10268, UNEP) project applied gender-sensitive policies and included gender indicators in its monitoring systems. Both projects reported improvements in women's participation in rural organizations and access to services.

Nonetheless, limitations remain. Many projects focused on participation quotas or awareness raising without addressing control over resources. Gender expertise within project teams was often weak, and monitoring systems prioritized activity counts over transformational outcomes, such as access to land or credit. In Ghana, the RFS Sustainable Land and Water Management Project (GEF ID 9340, World Bank) increased women's incomes but failed to address intra-household power dynamics, generating tensions over income management. Intersectional dimensions, such as those affecting young or Indigenous women—while not a policy requirement—were rarely considered.

The inclusion of Indigenous Peoples has improved over time, especially in GEF-7 and GEF-8, although institutional and cultural barriers persist.

Early efforts under SFM programs prior to GEF-7 were inconsistent, particularly in areas with land tenure disputes. Where clear equity frameworks were applied, projects enhanced Indigenous participation in governance and management. However, support for Indigenous organizations and enterprises often lacked continuity. In Latin America, Food Systems projects in Ecuador and Peru promoted intercultural dialogue and stewardship. The FOLUR child project in Peru (GEF ID 10307) worked with Shawi and Awajun communities to align sustainable land management with Indigenous Peoples' development priorities.

Youth inclusion remains limited across the GEF portfolio, though promising examples are emerging.

Food Systems projects offered training to young farmers on sustainable practices and value chains. Nigeria's RFS project (GEF ID 9143) targeted youth through information and communications technologies-based community monitoring and nutrition awareness. In Burkina Faso and Kenya, projects have supported thousands of young people through training, entrepreneurship, and nature-based enterprises, while GEF-8 has engaged [YPARD](#) to promote co-creation and youth-friendly policies. More frequently, youth have been grouped generically under "vulnerable groups" without targeted strategies, funding, or decision-making roles. Dedicated youth components and monitoring systems have largely been absent across programs.

6.8 SUSTAINABILITY AND SCALABILITY

Sustainability and scalability are critical for achieving transformational change, ensuring that environmental and socioeconomic gains endure and expand beyond project timelines. Integrated programs have sought to embed these dimensions through institutional

anchoring and multilevel planning. Limited investment in postproduction value chains, underdeveloped financial and exit strategies, and weak regional linkages have constrained their potential to deliver broader and lasting results.

Sustainability

Sustainability outcomes of 22 GEF-6 IAP child projects are broadly comparable to those of stand-alone projects, with 73 percent rated as likely sustainable.

Although this is slightly lower than the 80 percent seen in stand-alone child projects, the difference is not statistically significant. However, the analysis is based on a limited number of terminal evaluations, and findings may change as more projects are completed.

Program and project designs increasingly reflect sustainability goals, particularly environmental ones, but place less emphasis on economic and financial sustainability. From GEF-7 onward, program theories of change included sustainability considerations. For example, the RFS IAP promoted agro-ecosystem resilience, integrated landscape management, and community ownership. The Sustainable Cities IAP applied tools such as land use planning and transit-oriented development to embed sustainability in urban systems. Yet, many Food Systems child projects underemphasized exit strategies and postproject financing. In FOLUR, few projects operationalized sustainability through institutional pathways or budgetary commitments—particularly in relation to public-private platforms. A notable exception in this regard is the Amazon Sustainable Landscapes Program, which has supported innovative sustainable finance mechanisms for forest conservation—representing a significant achievement in mobilizing resources and ensuring long-term impact.

Achieving sustainability remains a significant challenge, particularly in institutionalizing gains, ensuring financial viability, and sustaining

stakeholder engagement beyond project closure.

Strong institutional anchoring has proven the most consistent enabler. For example, in the Amazon Sustainable Landscapes Program (GEF ID 9272, World Bank, UNDP, and WWF-US), community-based conservation was integrated with national protected area systems, linking local stewardship to national policy. Under the GWP, Gabon's project on Wildlife and Human-Elephant Conflicts Management (GEF ID 9212, World Bank) established regional genetic analysis facilities for enforcement continuity. The project Strengthening Institutions, Information Management and Monitoring to Reduce the Rate of Illegal Wildlife Trade in South Africa (GEF ID 9525, UNEP) used long-range radio frequency technology for cost-effective poaching surveillance. Still, sustainability was often constrained by weak integration between conservation governance and community livelihood options. GEF-8's Wildlife Conservation for Development integrated program recognizes this and emphasizes livelihood diversification and governance strengthening.

Food Systems programs have promoted environmental sustainability gains through efforts to curb deforestation and conserve biodiversity. For instance, Ethiopia's FOLUR project (GEF ID 10243, UNDP) integrates coffee supply chain sustainability with forest protection through cooperative and state-led efforts. The family farming project in Niger (GEF ID 9136) trained over 13,000 farmers in natural resource management via farmer field schools, while a project in Burkina Faso—Participatory Natural Resource Management and Rural Development Project in the North, Centre-North and East Regions (GEF ID 9141, IFAD)—combined land tenure security with technical and financial support, enabling sustained land use practices by clarifying rights and reducing risk for smallholders. However, many projects continued to focus on primary production, with weaker attention to value chain integration, food waste, or dietary shifts, key components of sustainable food systems transformation.

Scalability

Scalability in integrated programs has progressed through localized and institutional pathways, but the challenge lies in strengthening cross-project integration and regional linkages. For example, the GEF's Food Systems programs have promoted scalability by embedding interventions across multiple levels, notably landscape and national levels. Child projects under FOLUR, Food Systems, and the RFS engaged a wide base of actors (83 percent with civil society organizations, 79 percent with communities). Food Systems also increasingly bridges local action with national policy and financial systems. For instance, IAP projects in Burundi and Côte d'Ivoire—Support for Sustainable Food Production and Enhancement of Food Security and Climate Resilience in Burundi's Highlands (GEF ID 9178, FAO) and Scaling up Cocoa-based Food Systems, Land Use and Restoration/Transformative Innovations in Côte d'Ivoire (GEF ID 10247, FAO, UNIDO, and UNDP)—illustrate efforts to address horizontal and vertical policy coherence. Coordination projects have improved internal alignment, helping translate program intentions into child-level design. Cross-border linkages, such as Indonesia's outreach to buyer networks, is far less frequent.

Under Sustainable Cities, measures to support the scaling of results feature national knowledge platforms to share knowledge on key sectors and implementation efficiency. These include the Swachh Bharat Mission Digital Platform to manage data regarding waste management in Indian states and cities, and the transit-oriented development strategy prepared in China—both efforts undertaken under respective Sustainable Cities IAP projects. The platforms can be used by local and national-level governments for planning and replication.

The GWP presents a useful model for scaling by combining regional cooperation, innovation, and policy reform. The program spans most of Africa, Asia, and Latin America, while expanding thematically to

address [One Health](#) concerns. Other successes in scaling include Indonesia's women-led ranger groups, inspired by earlier implementation in Zimbabwe, and Gabon's ivory traceability lab, now serving regional needs. In Mozambique, drawing on project experience, national authorities implemented a traceable timber regulation system as well as georeferencing of elephant corridors and drafted national wildlife crime strategies involving the judiciary, police, and customs. In Ethiopia, also based on project experience, legislation amendments were introduced to address penalties for wildlife crime and establishment of the Ethiopian Wildlife Development and Conservation Authority—thus scaling from project to policy. Constraining factors in scaling efforts included country-focused project management and fragmented funding, which challenged regional efforts and exchanges. Inconsistent reporting also undermined systematized learning.

6.9 KNOWLEDGE MANAGEMENT

Coordination and knowledge management have been central priorities of GEF integrated programming, supported by dedicated funding to promote system-level learning and the replication of effective practices across countries and regions. Compared to stand-alone projects, integrated programming has pursued more ambitious goals for coordination and knowledge exchange, with the share of funding allocated to global coordination platforms increasing from 8 percent in GEF-6 to 11 percent in GEF-8.

Within the Food Systems programs, however, the proportion of budgets devoted to coordination and knowledge management declined—from 10 percent in GEF-6 (RFS) to 9 percent in GEF-7 (FOLUR) and 7 percent in GEF-8 (Food Systems)—even as the number of

child projects grew.⁶ To address emerging funding constraints, coordination responsibilities have increasingly shifted to child projects. Thus, under Food Systems, child projects are encouraged to allocate up to 10 percent of their budgets to programmatic functions such as capacity building, lesson sharing, and participation in knowledge platforms. However, many countries have been reluctant to commit these resources, raising concerns about the effectiveness and sustainability of shared learning and collaboration efforts.

M&E is a critical source of knowledge for integrated programming, and its design has gradually evolved from GEF-6 to GEF-8 toward more coherent arrangements. While progress has been made, M&E has largely remained focused on traditional operational indicators, with limited attention to capturing systemic changes such as shifts in value chain governance, policy coherence, or behavioral transformation. Gaps also persist in aligning M&E systems across child projects and at the program level, limiting the ability to track collective progress toward transformational change.

At the overall program level, global coordination projects in GEF-6 programs established common indicators, knowledge platforms, and learning systems. The GGP developed guidance and technical products to support M&E consistency across child projects, particularly in deforestation-free supply chains. The RFS IAP established a program-level results framework and coordinated use of geospatial monitoring tools to aggregate biophysical outcomes across landscapes. These efforts enabled some alignment of metrics, such as land productivity and restoration, especially in countries with robust institutional support.

Child project-level M&E systems focused on traditional indicators such as environmental benefits, but dedicated limited attention to salient characteristics of

integrated programs, such as effects on policy coherence and systemic changes such as behavioral changes or changes in the governance of a value chain. This complicates capturing pathways and progress to transformational change.

Integrated programming has made advances in knowledge management but continues to face significant challenges. Notably, there is weak synchronization between global coordination projects and child project timelines. This misalignment has hindered the effective “docking” of knowledge—tailoring and delivering knowledge products to meet specific audience needs.

In the SFM portfolio, knowledge-sharing efforts successfully disseminated technical tools, community-based practices, and forest monitoring systems. For instance, the Amazon Sustainable Landscapes Program (GEF ID 9272) used data-sharing platforms and peer learning exchanges to build the capacity of protected area managers and community organizations. However, in the absence of a unified knowledge strategy across the portfolio, learning remained fragmented, and cross-regional insights were limited.

In Food Systems programs, knowledge generation has been evident, but its application to influence policy or practice has been only sparsely documented. The RFS coordination project—Cross Cutting Capacity Building, Knowledge Services and Coordination Project for the Food Security Integrated Approach Pilot Program (GEF ID 9140, IFAD)—developed dashboards, bulletins, and technical reports across 12 African countries, supported by workshops to strengthen regional coherence. The [Trase](#) platform, supported by the Generating Responsible Demand for Reduced-Deforestation Commodities (GEF ID 9182, WWF-US) project, advanced supply chain transparency; the FOLUR global platform (GEF ID 10306) focused on technical guidance and country dialogue. Yet only 24 percent of child project terminal evaluations for GEF-6 referenced engagement with hub projects, and less than 10 percent

⁶ The analysis underlying these figures compares coordination project budgets as a percentage of total program costs across GEF replenishment periods.

explicitly linked adaptive management or policy changes to learning from the global program.

Timing mismatches, one-way outreach, and limited resourcing have further constrained the customization and uptake of knowledge offerings. In the RFS, pre-agreed work plans limited flexibility to address emerging country learning needs; in FOLUR, knowledge services were predetermined despite intentions to adopt a demand-driven approach. Additionally, many FOLUR partner agreements ended while child projects were still in early implementation. Although the Food Systems program plans to align coordination project timelines with child projects, resource constraints raise the risk of early closure unless bridged by GEF-9 funding.

Currently, there is no centralized repository for knowledge generated across the integrated and impact programs. Knowledge products remain under the custody of the Agencies leading each program, and no single portal exists to provide consolidated access to information and experiences. Some integrated programs have developed their own knowledge platforms, often hosted by a global child project focused on knowledge management and communications. These combine institutional content (e.g., program structures and partner information) with knowledge resources such as publications, thematic briefs, event information, and news; examples include the [Global Platform for Sustainable Cities](#) and [UrbanShift](#), [FOLUR](#), and [Plastic Reboot](#). However, knowledge about integrated program approaches, structures, strategies, and benefits remains dispersed across multiple websites, making it difficult to locate and synthesize information.

As earlier cycles of integrated programs (GEF-6 and GEF-7) conclude, the need to preserve and transfer knowledge between cycles has become increasingly pressing. A standardized, program-wide system for collecting, curating, and disseminating lessons across all replenishment periods could strengthen

institutional memory, support program continuity, and maximize the value of collective learning.

Within the GEF Strategy for Knowledge Management and Learning (GEF Secretariat 2024b), there are two planned actions relevant to creating a centralized information repository on integrated programs:

- Action Area 1.2 foresees facilitation of the interoperability of the integrated program platforms to ensure they are interlinked and developed based on common principles.
- Action Area 1.3 anticipates the creation of a knowledge and collaboration platform, which could centralize knowledge on integrated programs.

As of June 2025, the GEF Secretariat was developing an inventory of platforms and platform interoperability principles and organizing expert workshops to strengthen knowledge synthesis and sharing on substantive aspects of integrated programming.

6.10 SUMMARY

GEF integrated programming shows clear additionality in systemic framing, ambition, innovation, and stakeholder inclusion, reflecting a strategic shift toward addressing complex environmental and societal challenges. However, achieving its transformational potential requires greater selectivity in program scope, deeper investment in national and local capacities, stronger appetite for innovation-related risk, and more robust systems for knowledge sharing and evidence generation.

- **Systemic framing.** Integrated programming has advanced a systemic approach to environmental and societal challenges. Child projects more consistently define system boundaries, analyze policy contexts, and incorporate scaling strategies than do stand-alone projects. However, some programs

still focus narrowly on production or single sectors rather than fully integrated systems approaches.

- **Implementation quality and results.** Despite their greater complexity, integrated program child projects achieve implementation timelines at a rate comparable to stand-alone projects. Early evidence points to institutional and policy-level benefits, including cross-sectoral coordination and stakeholder platform development, but comprehensive evidence on environmental, socioeconomic, and institutional outcomes is lacking, as few integrated program projects have reached completion. Institutional transformation has been uneven, often weighed down by political and coordination challenges, weak subnational capacity, and gaps in documentation.
- **Ambition, innovation, and adaptability.** Integrated programs have introduced more ambitious objectives and institutional innovations than have comparable stand-alone projects. They have incorporated new tools and frameworks to address complex, cross-sectoral issues. Nevertheless, risk-taking has remained moderate, held back by tight preparation timelines and limited mechanisms for innovation incubation, adaptive learning, and higher-risk approaches. The rapid expansion of programs, themes, and participating countries under GEF-8 increased complexity and heightened the need for integration both within and across programs.
- **Stakeholder and institutional inclusion.** Integrated programs have engaged a broader range of actors—government agencies, civil society, Indigenous Peoples, local communities, the private sector, and value chain stakeholders—than have comparable stand-alone projects. This inclusivity occasionally led to more participatory governance and local empowerment. However, private sector engagement has often fallen short because of weak regulatory frameworks, insufficient incentives, and inadequate financing mechanisms.
- **Sustainability and scaling.** Many integrated program designs have incorporated sustainability objectives—particularly environmental ones—but these have not been consistently backed by financial, institutional, or policy frameworks. Post-project sustainability has often depended on external support. Scaling efforts have advanced through localized action and institutional coordination, yet regional linkages and horizontal collaboration have been less common, constraining broader systemic influence.
- **Knowledge systems.** Integrated programs have invested more in knowledge generation and coordination platforms than have comparable stand-alone projects, but these investments have not consistently translated into stronger learning or adaptive management. M&E systems have rarely captured transformational dynamics such as behavior change or policy alignment, and the absence of a centralized knowledge repository has curtailed knowledge sharing across programs.

Operationalizing social inclusion

The GEF has increasingly placed inclusion at the center of its programming, recognizing that environmental results are more effective and sustainable when all voices—especially those of women, Indigenous Peoples, youth, persons with disabilities, and other historically marginalized groups—are meaningfully engaged. Inclusion is not only a matter of equity, but also a catalyst for transformational change, as it enhances local ownership, brings diverse knowledge systems into decision-making, and strengthens the sustainability of environmental interventions.

As part of this approach, the GEF Secretariat has, in recent years, prioritized strengthening its engagement with groups that have historically faced marginalization or vulnerability, among them women, Indigenous Peoples and local communities (IPLCs), youth, and persons with disabilities. This commitment is advanced through multiple channels, including GEF policies and safeguards on gender equality and stakeholder engagement, which set minimum standards across the portfolio. Inclusion is also operationalized through delivery mechanisms such as the Small Grants Programme (SGP) and community-based approaches (CBAs), which directly support civil society and locally led action. The SGP enables grassroots participation through tailored grantmaking, while CBAs work to integrate local knowledge and priorities into larger-scale GEF initiatives. Together, these instruments reflect the evolving orientation of the GEF

toward more inclusive, equitable, and locally responsive environmental programming.

This chapter examines how the GEF is advancing inclusion through its policies, safeguards, and delivery mechanisms. It draws on a portfolio analysis of 300 GEF-supported projects—representing \$1.2 billion in GEF funding and \$6.7 billion in cofinancing—to assess the inclusion of marginalized groups, with particular attention to fragile and conflict-affected situations, where these groups face heightened vulnerability and disproportionate impacts from environmental and socioeconomic shocks.¹ It also incorporates findings from evaluations of CBAs and the SGP (GEF IEO 2024a, forthcoming-d), which are important delivery mechanisms for reaching and empowering marginalized populations at the local level.

The GEF has a series of measures to ensure inclusion in GEF-funded projects: GEF policies on environmental and social safeguards, gender equality, and stakeholder engagement; review and feedback from the GEF Secretariat during the design stage on issues related to inclusion; and a self-tagging system for projects to identify their early consideration of marginalized groups.

¹The sample includes 200 completed projects from GEF-5 and GEF-6 with validated terminal evaluations, and 100 ongoing projects from GEF-7 and GEF-8.

7.1 INCLUSION IN 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.

The current suite of GEF policies that guide inclusion are the GEF Policy on Stakeholder Engagement (GEF 2017b), the Policy on Gender Equality (GEF 2017a), the Policy on Environmental and Social Safeguards (GEF 2018b), as well as the Principles and Guidelines for Engagement with Indigenous Peoples (GEF 2012b). The first two policies seek to proactively include diverse stakeholders while the latter centers on risk mitigation. That said, there are many synergies among the three policies. 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 2022c).

In GEF-8, the GEF adopted a “whole-of-society” approach as part of its healthy planet, healthy people framework, which recognizes the crucial need to broadly engage societies to ensure sustainable development and the delivery of conservation outcomes (GEF 2024c). As part of this approach, the GEF Secretariat has focused in recent years on strengthening its engagement with historically marginalized groups including women, IPLCs, youth, and persons with disabilities.

Agency/project compliance

As part of its accreditation process, the GEF ensures that its Agencies comply with minimum standards across four key areas: fiduciary responsibilities, environmental and social safeguards, gender equality, and stakeholder engagement. Compliance is monitored through annual progress reports.

In line with the GEF Policy on Environmental and Social Safeguards (ESS), ongoing projects consistently consider risks to vulnerable groups, particularly women and IPLCs. Notably, increases in inclusion rates align with the adoption of key GEF policies. Nearly all reviewed projects (93 percent) included the required ESS documentation. All projects considered potential risks to women and identified specific risks. Similarly, 98 percent considered risks to IPLCs, though only 34 percent identified specific risks—indicating that projects are conducting due diligence, even though most did not present risks to IPLCs. Consideration of youth was less common: 23 percent of projects assessed potential risks, and 20 percent identified specific risks. While most risk assessments appeared in ESS documentation, around one-quarter of projects that addressed risks to women did so in other project documents. All projects that did not consider or identify risks to marginalized groups in their ESS documentation were enabling activities. Many of these justified the omission by claiming they do not involve direct, on-the-ground action. However, this narrow interpretation overlooks the fact that high-level activities—such as laws, policies, and strategies—can still lead to social and environmental impacts by shaping future on-the-ground actions.

As required by the GEF Policy on Stakeholder Engagement, recently designed projects consistently provide information on stakeholders in proposed project activities, though quality may vary. Specifically, the evaluation team assessed project compliance with the requirement that projects include stakeholder engagement plans or equivalent documentation. This assessment focused on whether there was information on stakeholders and means of stakeholder engagement; it did not consider the extent to which projects complied with the requirement that the stakeholder engagement plan or equivalent also include “dissemination of information, roles and responsibilities in ensuring effective Stakeholder Engagement, resource requirements, and timing of engagement throughout

the project/program cycle.” An initial review of the project documentation indicates that many projects did not provide such information on many of these elements, so the compliance rate would be considerably lower if those elements were considered.

Recently designed projects largely comply with the requirements of the 2017 GEF Policy on Gender Equality. Among sampled ongoing projects, 89 percent met most policy requirements, including conducting a gender analysis or equivalent; developing a gender action plan (GAP) or equivalent; and incorporating gender-responsive actions, indicators, and sex-disaggregated targets. Gender-sensitive indicators were predominantly limited to sex-disaggregated measures, with only 16 percent of projects including gender-sensitive indicators that went beyond demographic counts, such as the United Nations Development Programme’s (UNDP’s) Community-based Climate-responsive Livelihoods and Forestry (GEF ID 10312) project, which includes gender-responsive climate hazard and vulnerability metrics. Compliance with specific GAP-related requirements was somewhat lower: 78 percent of projects included a GAP or equivalent at CEO endorsement/approval, 78 percent addressed gender-related differences, impacts, and risks, and 69 percent addressed opportunities to empower women. From GEF-7 to GEF-8, the review sheet template for enabling activities was revised so it no longer consistently included standard questions on gender analysis. Nevertheless, the majority of sampled enabling activities (84 percent) had a review sheet documenting the GEF Secretariat’s consideration of gender issues, underscoring the value of its review in ensuring compliance with the GEF Policy on Gender Equality.

Improvements in inclusion through quality review

The GEF Secretariat plays a critical role in strengthening the inclusion of marginalized groups—particularly women, IPLCs, youth, and

persons with disabilities—through its project review process. A review of documentation from 100 ongoing projects showed that in 30 percent of sampled cases, there were no substantive comments on inclusion—in most instances, because the projects complied with policy requirements. In 70 percent of sampled cases, the Secretariat provided substantive comments to strengthen inclusion; these were mostly focused on integrating gender into outputs, indicators, and sex-disaggregated data. In 95 percent of these projects, gender was addressed in the Secretariat’s feedback, with about three-quarters of comments deemed substantive, while others were either clerical or confirmed adequate gender planning. Among the remaining projects, most had review sheets without a gender prompt; in one case—First and Second Biennial Transparency Report and Fifth Communication National (GEF ID 11302, UNDP)—the Secretariat did not provide comments. These reviews frequently (90 percent of the time) led Agencies to revise project documentation to improve inclusion. From GEF-7 to GEF-8, the proportion of projects receiving substantive feedback on marginalized groups rose from 62 percent to 78 percent, showing an increasing emphasis on inclusive design. Despite the growth in providing feedback on marginalized groups, some Agency staff expressed concern over the length of time it took the GEF Secretariat to conduct reviews related to gender compliance.

To improve data quality and strengthen implementation of inclusion-related policies, GEF-7 introduced enhanced project reporting systems, although the reliability of self-reported inclusion data varies across different marginalized groups. The IPLC self-tag, which asks whether IPLCs were consulted during the project identification phase, appears to be accurate in capturing that specific action. Nevertheless, it is a poor proxy for overall IPLC inclusion, as it does not reflect involvement beyond the identification stage or account for other forms of engagement. As a result, the tag both overestimates and underrepresents true IPLC inclusion, making it an unreliable indicator.

In contrast, gender-related tags offer somewhat more useful—though still imperfect—insights. The GEF Portal includes five gender tags: gender sensitive, gender responsive, economic benefits, participation in decision-making, and resource access. Over half of the projects that self-tagged as gender sensitive or responsive also included corresponding measures in project plans, indicating moderate alignment between tagging and actual design. The “economic benefits” tag was used less frequently (45 percent) but proved relatively accurate, with 37 percent of tagged projects showing clear documentation of economic co-benefits, while 45 percent of projects that omitted the tag also lacked such measures in project documentation—highlighting alignment between tagging and documentation in 82 percent of sampled projects. However, inconsistencies remain; for example, 24 percent of projects self-tagged for improving women’s participation in decision-making did not report plans related to that specific goal in their gender action plan or other design stage documentation. These findings suggest that while the tagging system can offer useful signals, it is not a fully reliable tool for tracking inclusion and should be interpreted with caution.

7.2 INCLUSION TRENDS IN GEF-SUPPORTED PROJECTS

“Inclusion” in this context refers to projects that identify a marginalized group as a stakeholder, analyze their needs or vulnerabilities, or plan participation activities (e.g., to inform, consult, or collaborate).

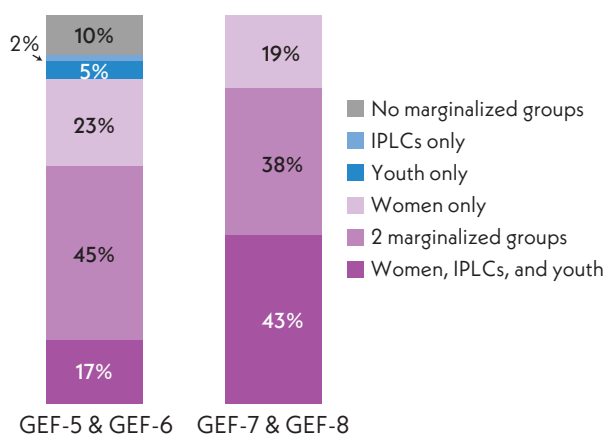
There has been a clear growth in the frequency, scope, and depth of inclusion of marginalized groups in GEF-supported projects across regions, modalities, project types, and focal areas. This growth is especially notable for the inclusion of women, with more modest gains for IPLCs and youth. Among the sampled projects, inclusion of at least one marginalized group rose from 90 percent of

completed projects to 100 percent of ongoing ones. Projects including all three groups—women, IPLCs, and youth—increased from 17 percent to 43 percent, while those including none or only one or two groups declined ([figure 7.1](#)). Inclusion of persons with disabilities remains limited, though more projects are beginning to consider them as stakeholders.

Inclusion of specific marginalized groups varies considerably across regions. Only 6 percent of projects in Europe and Central Asia include IPLCs, which is much lower than other regions (34 percent, Africa; 38 percent, Asia; 58 percent, Latin America and the Caribbean). This is roughly consistent with countries’ recognition of Indigenous Peoples in various regions (Garnett et al. 2018). Projects in Africa, which make up 36 percent of the GEF portfolio, have the highest rate of inclusion of youth at 71 percent, also reflecting the region’s demographics.

Inclusion of marginalized groups in GEF-supported projects is also high (>90 percent) across focal areas, except for chemicals and waste projects, which had a slightly lower rate (79 percent). A very small share

FIGURE 7.1 Inclusion of marginalized groups, change over time



Source: Project documents for a sample of 200 completed projects from GEF-5 and GEF-6 with validated terminal evaluations, and 100 ongoing projects from GEF-7 and GEF-8, as of June 30, 2024.

of chemicals and waste projects in the random sample included IPLCs (4 percent), compared to all other focal areas where at least a third of projects included IPLCs. Although consistent data regarding persons with disabilities in SGP programming are lacking, some SGP climate change adaptation projects did address the disproportionate effects of climate change on persons with disabilities in small island developing states (SIDS).

Gender

GEF-supported projects show strong and growing inclusion of women. In the 300 projects analyzed, inclusion of women increased from 83 percent of closed projects to 100 percent of ongoing ones, aligning with GEF-8 Scorecard data indicating that all GEF-8 projects considered gender issues at the design stage. The share of projects that both analyzed women as stakeholders and planned at least one participation activity rose significantly—from 44 percent to 95 percent.

Despite these improvements, concerns remain about the quality of gender inclusion. GEF Secretariat and Agency stakeholders reported that gender analysis and planning are sometimes treated as a box-ticking exercise, with some gender analyses being superficial. Several terminal evaluations observed that projects could have had greater impact with stronger gender analysis from the outset. Although the situation has improved in GEF-7 and GEF-8, some gender analyses (especially for enabling activities) are still only a couple of sentences long in their entirety.

Gender considerations primarily focus on women and girls, with limited attention to men and boys—though stakeholders emphasized their inclusion is essential to prevent backlash and undermine gains in gender equity. Inclusion of people marginalized based on sexual orientation and gender identity, while important to some GEF Agencies, was not found in the documentation of the sampled projects. This lack may

be due to the sensitivities of project teams and executing partners to the political and cultural context during implementation and reporting.

Indigenous peoples and local communities

Inclusion of IPLCs in GEF-supported projects has expanded significantly, rising from 28 percent of completed projects to 51 percent of ongoing ones. This trend parallels a growing overlap between GEF project areas and land held or used by IPLCs—from 17 percent in GEF-4 to 25 percent in GEF-8. These projects are most commonly located in Africa and tend to address multifocal issues, climate change, or biodiversity.

The GEF is working to improve programming for IPLCs, increasingly emphasizing direct financing and support for self-determined priorities. The Inclusive Conservation Initiative (ICI), launched in GEF-7 by Conservation International and the International Union for Conservation of Nature, allocated \$14.5 million across 10 subprojects in 12 countries and directed roughly 80 percent of funds to IPLCs to lead implementation (CI and IUCN 2025). Its projects integrate cultural preservation alongside environmental goals and place strong emphasis on gender mainstreaming. Building on the GEF-7 ICI work, the [Heart of Conservation Initiative](#) launched in GEF-8 by the World Wildlife Fund-US also directs 80 percent of the project grant (GEF-8 Inclusive Conservation Initiative [GEF ID 11761]) to IPLCs and organizations, with the aim of increasing resources, organizational strength, and recognition for IPLCs to support their implementation of self-determined conservation priorities. In a recent report, the STAP highlighted successful examples of Indigenous involvement in GEF projects and identified recommendations, such as ways the GEF can scale up support for Indigenous Peoples and their conservation efforts in GEF-9 and the Global Biodiversity Framework Fund (Andelman and Bierbaum 2025).

One of the challenges of including IPLCs in GEF-supported projects is their identification in different contexts. As inclusion of IPLCs has increased between completed and ongoing projects, project documentation has more clearly documented whether IPLCs might be in the project area, whether they might be affected, and how they will be included in the project. Among sampled closed projects, the evaluation team counted 13 (6.5 percent) that likely had Indigenous Peoples present without clear documentation; these projects included groups that self-identified as Indigenous but were not recognized as such by either the countries or the projects. By GEF-7 and GEF-8, the share of sampled projects that included communities that were likely Indigenous but did not identify them as IPLCs dropped to just 0.5 percent, while the overall share of projects including IPLCs rose (as noted above), highlighting a growing trend of GEF-supported projects to identify the need for additional procedures related to IPLC.

There has been a notable uptick in GEF-supported projects planning to conduct free, prior, and informed consent (FPIC), with the share rising from 7 percent of completed projects to 19 percent of ongoing projects. Additionally, some projects stated they would undertake FPIC if it became necessary during implementation. In some cases, projects chose to conduct processes similar to FPIC with communities not formally recognized as Indigenous.

However, concerns remain about the quality and consistency of FPIC implementation. Sixteen percent of civil society organization (CSO) survey respondents viewed FPIC efforts as inadequate. Some GEF Secretariat and Agency stakeholders also reported that FPIC is sometimes perceived as burdensome, and mentioned instances where projects were intentionally designed to avoid areas with IPLCs. The evaluation team found no evidence of this practice in project documents, which is unsurprising given that such decisions are unlikely to be explicitly documented.

Youth

Youth inclusion in GEF-supported projects has increased from 56 percent in completed projects to 73 percent in ongoing ones. Projects show varied approaches to youth engagement, though there is inconsistency in how youth are defined by age. Unlike other marginalized groups, youth are typically framed not as vulnerable, but as agents of change and key stakeholders in long-term sustainability.

The GEF Secretariat has recently advanced youth engagement, including support for the Gustavo Fonseca Youth Conservation Leadership Program—approved in 2022—which trains young conservation professionals in GEF-recipient countries. The GEF also sponsored youth leaders and delegates to participate in a range of international meetings, including Conferences of the Parties.

In spite of recent gains, sustaining youth involvement remains problematic due to high mobility and limited economic opportunities.

Persons with disabilities

Inclusion of persons with disabilities in GEF-supported projects remains limited but has expanded from 8 percent in completed projects to 18 percent in ongoing ones. There is a growing interest in improving their integration, as illustrated by a UNDP project Community Based Flood and Glacial Lake Outburst Risk Reduction in Nepal (GEF ID 4551), which outlined plans to ensure the participation of persons with disabilities in local workshops and mock drills. The project constructed and installed 35 elevated tube wells, two of which were “disabled friendly,” to increase access to safe drinking water supply during floods.

Key barriers continue to pose challenges for inclusion of persons with disabilities. These include the diverse needs within the disability community, which require varied accommodations, and gaps in knowledge and

resources among project staff to address these different needs.

Civil society organizations

The involvement of CSOs—increasingly recognized as key agents of inclusion—has grown in GEF-supported projects. According to the GEF-7 and GEF-8 Corporate Scorecards, the majority of projects consulted CSOs during the design phase. In the sampled portfolio, the number of projects identifying CSOs representing marginalized groups as stakeholders increased across all groups, with the most significant rise seen in those representing IPLCs—from 5 percent in completed projects to 16 percent in ongoing ones. A large majority of CSO survey respondents (84 percent) affirmed the importance of CSO engagement for advancing inclusion. Interview and focus group participants emphasized the valuable role of CSOs as implementers and technical experts, noting their deep community knowledge.

7.3 MODALITIES FOR INCLUSION

GEF-supported projects include marginalized groups through two main approaches: participation activities and systemic inclusion measures, reinforced by CBAs and the SGP. Participation activities involve direct engagement at three levels: Inform (one-way communication to raise awareness), Consult (two-way dialogue to gather input, including interviews, workshops, and FPIC for IPLCs), and Collaborate (active partnership in decision-making through co-design, co-management, or governance roles). In the sampled projects, 52 percent informed, 82 percent consulted, and 41 percent collaborated with at least one marginalized group, most often women ([figure 7.2](#)).

CBAs and the SGP (discussed in detail in subsequent sections of this chapter) contribute to deeper inclusion

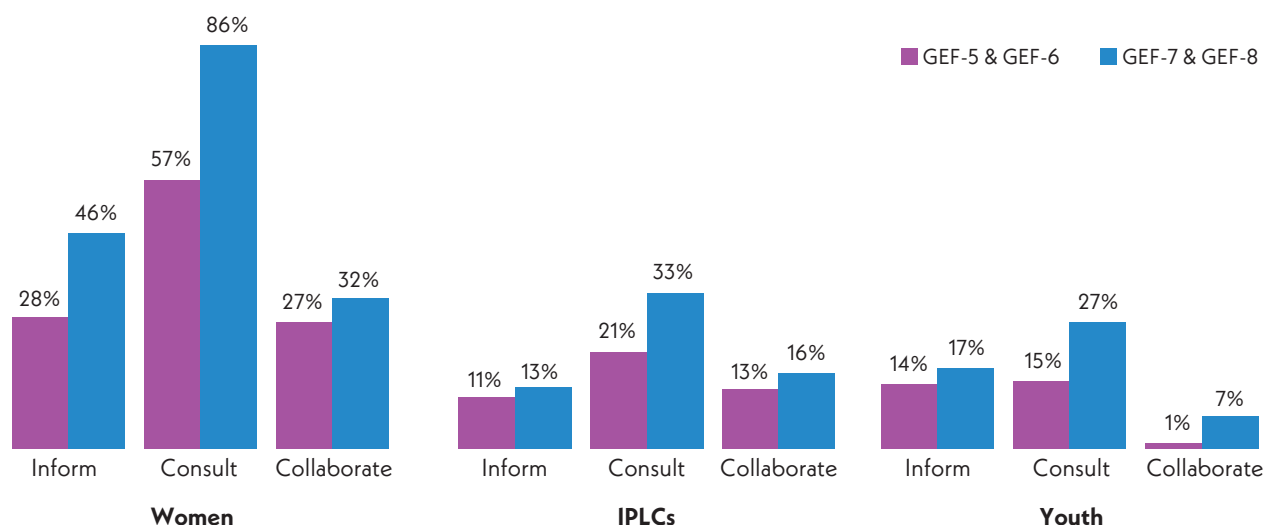
by placing communities—particularly marginalized and vulnerable groups—at the center of project planning and implementation. These approaches enable communities to lead or co-implement initiatives based on their own knowledge, needs, and priorities, shifting the dynamic from passive participation to active involvement in decision-making. This can influence governance processes, promote local ownership, and support the sustainability of GEF-supported interventions.

However, discrepancies exist between planned and reported participation. Projects were more likely to plan activities for women and IPLCs that were not later reported as implemented, while youth-related activities were sometimes implemented without being initially planned. The most commonly implemented unplanned activity was interviews, while surveys were the most frequently planned and completed. These gaps may reflect either implementation challenges or reporting inconsistencies. Some changes resulted from practical constraints, such as limited budgets or unrealistic plans, while others reflected adaptive responses to local needs and evolving stakeholder landscapes.

Impact was strongest when participation activities were both well-planned and effectively implemented.

At the portfolio level, there is a statistically significant correlation between the use of structured participation approaches and higher project outcome ratings. Projects that combined multiple forms of participation and engaged diverse marginalized groups were more likely to achieve stronger results. However, planning alone was insufficient; meaningful implementation was essential to realizing these benefits.

Importantly, projects that engaged marginalized groups more actively through participation activities were more likely to deliver socioeconomic co-benefits. Analysis of documentation from completed GEF projects reveals statistically significant correlations between co-design and co-benefit delivery, between broader Collaborate activities and co-benefits, and between overall participation and co-benefits.

FIGURE 7.2 Planned participation activities over time for each marginalized group

Source: Project documents for a sample of 200 completed projects from GEF-5 and GEF-6 with validated terminal evaluations, and 100 ongoing projects from GEF-7 and GEF-8, as of June 30, 2024.

While the academic literature has primarily emphasized co-design as a driver of such outcomes, GEF experience suggests that a wide range of participation activities—beyond co-design alone—are linked to enhanced socioeconomic benefits for marginalized groups.

Capacity building, civic empowerment, and economic empowerment are the most commonly planned or reported socioeconomic co-benefits in GEF-supported projects. Among these, capacity building for women is the most frequently included, reported in 70 percent of completed projects and 79 percent of ongoing ones. In contrast, relatively few projects reported socioeconomic co-benefits for IPLCs or youth, with the exception of youth-focused capacity building (38 percent in completed projects, 32 percent in ongoing) and youth economic empowerment (14 percent and 26 percent, respectively). Across marginalized groups, the proportion of projects that planned and later reported each co-benefit remained largely consistent. Other co-benefits—such as improved access to basic services, public health, safety, resilience, and governance—were included in fewer than one-quarter of projects.

Systemic inclusion measures are essential tools that help design and implement more inclusive GEF projects. Unlike participation activities, which involve direct engagement with marginalized groups, systemic inclusion measures—such as stakeholder analysis, inclusive theories of change, and indicators—create the structural foundation for inclusion without necessarily involving direct interaction.

Use of systemic measures has grown across GEF projects, though with wide variation in their frequency, quality, and application across different groups. Stakeholder identification and analysis is the most commonly applied measure, with women identified as stakeholders in 100 percent of sampled ongoing projects. Recognizing that the specific context shapes whether a project affects or otherwise involves IPLCs (e.g., chemicals and waste projects rarely include IPLCs), approximately half of sampled ongoing projects (49 percent) identified and analyzed IPLCs. However, the quality of these analyses varies significantly—from detailed gender analyses to minimal, one-paragraph references.

Inclusion of marginalized groups in theories of change has also grown, largely driven by greater focus on women; representation of IPLCs and youth remains limited. Similarly, while budgeting for gender experts has become more common, staffing for IPLCs and youth is still rare. The vast majority of projects include indicators for women, and fewer than one-fifth of projects do so for IPLCs and youth. Interviews confirm the importance of such indicators—what gets measured tends to drive implementation.

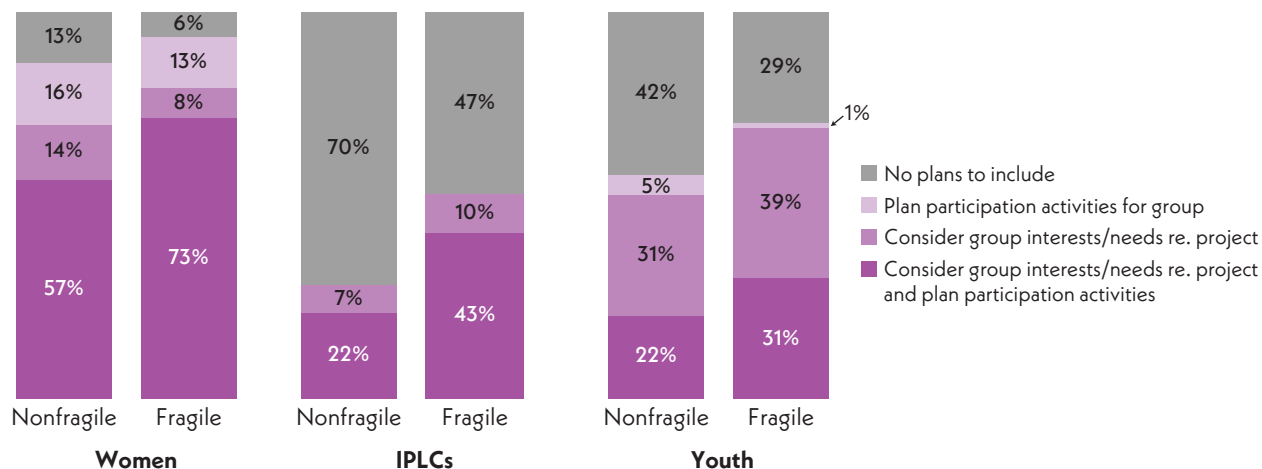
Inclusion of marginalized groups strengthens project design, implementation, outcomes, and long-term sustainability. Their participation contributes valuable local knowledge, experiences, and skills, often leading to more responsive and effective implementation. For example, several projects reported that including women led to better engagement and more efficient execution of activities compared to male-only participation.

Project designs have also evolved due to the participation of marginalized groups. In Nepal, the project Integrating Traditional Crop Genetic Diversity into Technology Using a BD [Biodiversity] Portfolio Approach (GEF ID 4464, United Nations Environment Programme) modified its activities based on input from local communities, including Dalits, to better support farmer livelihoods—demonstrating how inclusion can lead to direct improvements in project relevance. Inclusion also improves sustainability. A case study undertaken in Zimbabwe as part of the IEO's inclusion evaluation (GEF IEO forthcoming-b) found that when marginalized groups were integrated in a project and empowered in decision-making from the outset, communities were better able to sustain project activities after external support ended. Stakeholders consistently linked the long-term success of conservation efforts to the degree of engagement across all segments of the community, underscoring that inclusive design directly contributes to lasting impact.

7.4 FACTORS AFFECTING SOCIAL INCLUSION

The portfolio analysis clearly indicates that inclusion of marginalized groups in GEF-supported projects is both more critical and more challenging in fragile and conflict-affected situations. While fragility tends to negatively affect project outcomes—weakening the link between inclusion and effectiveness—projects in fragile and conflict-affected situations were actually more inclusive than those in nonfragile contexts. They were significantly more likely to include women, IPLCs, and youth, with 65 percent of projects in fragile and conflict-affected situations including all three groups compared to 33 percent elsewhere. These 77 projects in fragile contexts also more frequently analyzed marginalized groups' interests and needs in relation to the project and planned participation activities engaging them ([figure 7.3](#)). Risks related to fragility and conflict can lead to delays, additional costs, resignation of participants, and stolen equipment. Projects, such as those undertaken by the GEF-7 SGP, have demonstrated an ability to adapt their participation activities to the negative effects of violence and conflict. For example, the evaluation team interviewed project staff who allocated a small portion of the budget for protection measures, maintaining a database of violent incidents against environmental defenders, investing in communication with stakeholders, and—in some cases—moving activities to virtual modalities.

National policies play a dual role. Over half of projects cited supportive policies that aligned with inclusion goals, while others pointed to policy gaps—such as lack of recognition for Indigenous Peoples or absence of FPIC requirements—as significant barriers. Some projects worked to address these gaps by supporting policy reforms, like UNDP's project in Cambodia (GEF ID 9741), which aimed to develop a gender-inclusive national access and benefit sharing framework for implementation of the Nagoya Protocol

FIGURE 7.3 Inclusion of different marginalized groups in projects in fragile and nonfragile contexts

Source: Project documents for a sample of 200 completed projects from GEF-5 and GEF-6 with validated terminal evaluations, and 100 ongoing projects from GEF-7 and GEF-8, as of June 30, 2024.

under the Convention on Biological Diversity (CBD). In contrast, projects in Iraq and Afghanistan struggled with restrictive national policies, particularly around gender inclusion.

Additional barriers to inclusion include entrenched societal norms (cited in 18 percent of completed projects), limited or delayed resources (12 percent), and lack of staff expertise (5 percent). Other challenges, such as political instability and language barriers, further complicate inclusive implementation.

7.5 COMMUNITY-BASED APPROACHES

CBAs have been a critical pathway through which the GEF has promoted inclusion across its portfolio, enabling greater participation of women, youth, and other marginalized groups in environmental decision-making and benefit sharing. The IEO evaluation of CBAs highlights how these approaches, when well-designed and supported, can strengthen social cohesion, empower underrepresented populations,

and improve both environmental and socioeconomic outcomes.

In CBA projects designed during GEF-6 and GEF-7, 62 percent identified women as stakeholders, up from 43 percent in GEF-4 and GEF-5. References to IPLCs increased from 14 percent to 46 percent, and youth from 11 percent to 33 percent. While these figures indicate progress, meaningful participation—particularly for women in leadership and decision-making roles—remains limited. In Madagascar, implementers made practical efforts to boost women’s involvement, such as adapting meeting times and using informal settings to encourage participation. In Peru, civil society and IPLC stakeholders highlighted the importance of incorporating women’s perspectives early in project design. Although quotas were seen as a helpful entry point, they were not sufficient to address deeper systemic inequalities.

One of the key successes of CBAs has been their ability to create space for women’s leadership and participation in natural resource governance. For example, in Nepal, the project Integrating Traditional

Crop Genetic Diversity into Technology Using a BD [Biodiversity] Portfolio Approach to Buffer Against Unpredictable Environmental Change in the Nepal Himalayas (GEF ID 4464, United Nations Environment Programme) involved women farmers from remote mountain communities in on-farm conservation of traditional crop varieties. Their participation was not limited to planting and harvesting, but extended to decision-making about seed selection and biodiversity conservation methods. This not only contributed to agrobiodiversity but also enhanced women's roles in household and community-level planning processes.

In Bhutan, the project Enhancing Sustainability and Climate Resilience of Forest and Agriculture Landscape and Community Livelihoods (GEF ID 9199, UNDP) illustrates how CBAs can strengthen inclusive decision-making and climate-resilient development. Farmers established Telegram groups in collaboration with municipal agriculture extension officers to exchange information, discuss challenges, and jointly identify solutions. These digital platforms created space for farmers—especially women and youth—to actively participate in shaping decisions that affect their livelihoods. The project further embedded local ownership by involving community members, cooperatives, and government representatives in planning and implementation processes, ensuring that interventions responded to specific needs and opportunities. Women were intentionally engaged in capacity building and user group formation, and supported through gender-responsive technologies that eased labor demands in postharvest processing. This inclusive and collaborative approach contributed to improved agricultural productivity, sustainable land use, and income generation, while enhancing community resilience and cohesion.

CBAs have also proven effective in fragile contexts.

The ongoing LDCF Strengthening Adaptation through Institutional Building and Resilient Livelihoods in South Sudanese Agro-pastoral Landscapes project

(GEF ID 11418, International Fund for Agricultural Development) demonstrates how community engagement could help navigate political and social instability. The project works through local adaptation committees, which include youth and women, to plan and implement rainwater harvesting and sustainable rangeland management practices. These structures give marginalized groups a platform to voice their needs and priorities, building legitimacy and strengthening local conflict-resolution mechanisms.

The ongoing Enhancing Biodiversity Considerations and Effective Protected Area Management to Safeguard the Cook Islands Integrated Ecosystems and Species project in the Cook Islands (GEF ID 10780, UNDP) uses CBAs to integrate local knowledge into ecosystem restoration and marine resource management. Youth will be involved in coastal planting and environmental monitoring activities, fostering environmental awareness and technical skill-building that extend beyond the life of the project. Through a low-value grant modality, investment assistance will be provided to local community groups and landowners for implementing innovative practices, such as soil conservation, climate-resilient crops, water conservation, erosion control, organic fertilizers, community nurseries, invasive plant control with youth volunteers and/or women's groups, and ecotourism experiences.

The GEF's CBA projects have become more inclusive of women, IPLCs, and youth over time, although systemic inequalities have not yet been addressed.

Women, youth, and IPLCs are included more frequently in more recently designed projects. However, the extent to which projects explicitly address systemic inequalities that prevent their participation, particularly of women, was unclear. The GEF policies that focus on inclusion also contain language supportive of CBAs, although without mandating the approach. Monitoring of CBA processes in medium- and full-size projects is weak. There is limited evidence of CBA projects tracking indicators that reflect

activities central to processes associated with CBAs—such as the ability of groups to govern, the number of resources under the control of communities, the inclusion of vulnerable groups, community scorecards, actions taken to address any complaints, and participation in leadership roles and decision-making. The lack of data and indicators limits the GEF’s ability to adaptively manage CBA projects. Another recurring issue was the short time frames of many CBA initiatives, which constrained deep, trust-based engagement with marginalized groups. Inclusion requires time for capacity building, dialogue, and adaptation of interventions to diverse social realities—elements that are often at odds with rigid project timelines and funding cycles.

Nevertheless, CBAs have made a meaningful contribution to inclusion within GEF-supported projects.

Where community institutions were inclusive, and where projects actively worked to build the capacity of marginalized actors, CBAs contributed to more equitable governance, stronger local ownership, and greater resilience of environmental outcomes. These findings underscore the importance of embedding inclusive CBAs more systematically across the GEF portfolio, with adequate support, longer timelines, and clear pathways to institutional scaling.

7.6 THE SMALL GRANTS PROGRAMME

Ensuring inclusive participation of traditionally marginalized groups—particularly women, youth, and Indigenous Peoples—has long been a core strategy of the SGP. Project data from Operational Phase 7 (OP7, 2020–24) indicate that SGP country programs have made significant efforts to involve these groups in project leadership and decision-making, and to achieve empowerment outcomes for them. [Table 7.1](#) summarizes key participation metrics for women, youth, and Indigenous Peoples in SGP-funded projects during this period.

Efforts to promote gender inclusion within the SGP have shown measurable progress in project leadership and design. By the end of OP7, 43 percent of SGP projects were led by women—either as project coordinators or as heads of women’s cooperatives—an increase from roughly one-third at the start of the period. Over 78 percent of projects were classified as gender-responsive, incorporating gender-specific activities, outcomes, and indicators. Country programs supported this progress through practical measures such as requiring gender checklists during project appraisal by national

TABLE 7.1 Gender and social inclusion in SGP OP7 (2020–24)

Group	Participation in SGP projects	Notable indicators of inclusion and empowerment
Women	34% of projects led by women (2020) 43% (2023)	<ul style="list-style-type: none"> Approximately 78–81% of projects were gender responsive Gender focal points established in 86–90% of country programs, ensuring women’s needs are addressed in project design and approval
Youth	38% of projects with youth participation/leadership (2020) 41% (2023)	<ul style="list-style-type: none"> 209–253 youth organizations engaged in SGP About 73% of country programs have a youth focal point on their national steering committees, facilitating youth engagement in decision-making
Indigenous peoples	22% of projects involved Indigenous Peoples (2020)	<ul style="list-style-type: none"> 889 Indigenous leaders directly participated in project activities About 40% of country programs have Indigenous focal points in steering committees Culturally appropriate grant procedures adopted to improve Indigenous access and participation

Sources: SGP 2021, 2022, 2023, 2024a.

steering committees and including sex-disaggregated indicators and women-focused components in project design (box 7.1). By 2023, 90 percent of SGP country programs had designated a gender focal point on their steering committees, reflecting strong institutional commitment. Despite these positive developments, it remains unclear at this time to what extent SGP interventions produced socially transformational outcomes for women or led to broader shifts in gender equality.

Youth have also become an increasingly important stakeholder group in SGP projects, recognized as both future leaders and active change agents in addressing environmental challenges. From 2020 to 2024, approximately 40 percent of SGP projects included youth in key roles or as primary beneficiaries,

with hundreds of youth-led or youth-serving organizations participating. Many country programs (approximately 71 percent) appointed youth focal points on their national steering committees to ensure that youth perspectives are integrated into grant-making. SGP projects targeting youth have yielded significant empowerment outcomes, often combining environmental action with education, entrepreneurship, and leadership development.

In addition to on-the-ground initiatives, SGP facilitated youth engagement at global forums, organizing a Youth Climate Action video competition in partnership with multilateral environmental agreements—including the United Nations Framework Convention on Climate Change, the Convention on Biological Diversity, and the United Nations Convention to Combat Desertification—to amplify youth voices internationally. Overall, the SGP experience demonstrates that when provided with adequate resources and training, youth can drive innovative solutions and influence communal practices for environmental sustainability.

BOX 7.1 SGP supports women-led nature-based enterprise in Lesotho

In Lesotho, an SGP grant to the nongovernmental organization Technologies for Economic Development supported women-led nature-based enterprises in honey production. The project—operational from September 2020 to June 2023—trained 44 people, including 37 women, in beekeeping skills through a national workshop (Let There Be Honey in Lesotho). It facilitated the production of 200 modern beehives and 50 trap boxes, which were distributed to trainees to jump-start their businesses. The introduction of affordable top bar beehive technology helped overcome challenges with traditional hives and yielded insights for future beekeeping policy development. Importantly, the project catalyzed broader organizational empowerment: it convened district-level beekeeping networks and committees, laying the groundwork for establishing a National Beekeepers Association. This multisectoral process has ignited strong interest in beekeeping especially among women, but also among youth and even members of the national security services—positioning them to lead a growing sustainable honey-enterprise sector in Lesotho.

Indigenous peoples have remained a priority constituency for the SGP over the course of OP7, and their participation has led to tangible empowerment outcomes (box 7.2). In OP7, the SGP made notable efforts to strengthen the inclusion of Indigenous Peoples across its portfolio. From 2020 to 2024, 22 percent of SGP projects were reported as involving Indigenous Peoples as implementers, partners, or target communities. This percentage for inclusion in OP7 projects represents modest progress over OP6's roughly 20 percent share (SGP 2020). Given the persistent language, capacity, and remoteness barriers, many Indigenous communities face, maintaining and slightly increasing that level of engagement signals real effort: in OP7, 32 country programs established Indigenous Peoples' focal points on their steering committees and 36 undertook enhanced outreach to Indigenous Peoples' groups (UNDP 2024).

BOX 7.2 SGP encourages leadership by Indigenous people in Vanuatu

An Indigenous-led community association on Tanna Island addressed forest degradation and water scarcity with SGP support. The community established a forest nursery that improved water access and planted native trees to restore deforested areas while preventing soil erosion on garden slopes. The association cultivated culturally important plants, including medicinal herbs, and conducted training sessions in land and forest management in the local language with Indigenous participants.

In a significant move toward environmental stewardship, the community designated a 5-hectare tract of traditionally owned forest as a no-take, no-entry conservation zone to rehabilitate the watershed. The project's outreach extended to neighboring villages. During World Environment Day, the group distributed 4,000 tree seedlings from the nursery to 10 Indigenous tribes for reforestation on their lands.

Through this project, Indigenous leaders not only restored critical ecosystems but also exercised leadership in natural resource governance, strengthening customary land management practices. This example illustrates how SGP projects can respect and leverage Indigenous knowledge while empowering communities to secure rights to land and resources and participate in local and national environmental governance.

To enhance Indigenous Peoples' inclusion, the SGP adapted its processes. For example, 18 country programs accepted grant proposals in local Indigenous languages, and 14 countries piloted the use of participatory video for proposal submissions. In 28 countries, Indigenous representatives were included in national steering committees or technical advisory groups, ensuring they had a voice in project selection and guidance. By 2020, 39 percent of country programs had appointed an Indigenous Peoples' focal person within

their SGP governance structure to champion Indigenous issues. The effectiveness with which the SGP has reached or included Indigenous Peoples is evaluated at a moderately high level (84 out of 100) by survey respondents.

Finally, there are limited data on the participation of persons living with disabilities or their leadership in projects funded by the SGP. Data are beginning to emerge on SGP projects involving the participation of persons with disabilities. Although targets were set, reports do not mention this group in particular, nor has there been an explicit effort to remove barriers to their participation in national steering committees, or as grantees.

SGP 2.0 was endorsed by the GEF Council in December 2022. It aims to align more closely with GEF-8 strategies, expand implementation to the Food and Agriculture Organization of the United Nations and Conservation International alongside UNDP, and increase private sector and multistakeholder engagement. The upgrading policy has been replaced with equal-share core allocations for 140 eligible countries, complemented by optional System for Transparent Allocation of Resources (STAR) top-ups. Two special initiatives—the SGP Civil Society Organization Challenge Program (GEF ID 11757) led by the International Union for Conservation of Nature and the Global Microfinance Initiative for Locally Led Action led by the World Bank (GEF ID 11903)—aim to further strengthen the global program.

The shift to SGP 2.0 created new opportunities for innovation and inclusion but also introduced complexity and inconsistencies. OP8 has continued the SGP's innovation legacy by providing technical support, incubation services, and piloting a microfinance initiative. Avenues for inclusion and leadership of and by vulnerable groups have also improved. While the OP8 remains in its infancy, expansion to three implementing GEF Agencies has created inconsistencies in templates, reporting cycles, and guidance,

leaving some national stakeholders unclear regarding procedures. The transition was perceived as rushed and insufficiently consultative, with concerns raised about the Agency selection process and sustainability of the required grant ratio. Nearly all GEF Agencies participating in SGP 2.0 have indicated that sustaining the grant ratio is feasible only by “subsidizing” the SGP with additional internal or external resources. These issues may pose risks of duplication and inequitable access in future phases. Unresolved questions related to the SGP’s sustainability, adaptability, and stability under 2.0 modalities remain.

OP8 continues to advance the inclusion agenda by embedding gender equality throughout its programming—from governance to grantmaking. Each participating country must conduct a gender analysis to inform a dedicated gender action plan aligned with its national strategy. National steering committees are required to appoint gender focal points and ensure that women’s perspectives are integrated into project appraisal and oversight. Applicants must include gender-responsive activities in their proposals, with technical mentors helping to address any identified gaps. OP8 also sets a quantitative target of 22,500 direct female beneficiaries and mandates grievance mechanisms through female representatives.

Inclusion of Indigenous Peoples is similarly reinforced, with cultural sensitivity guiding the localization of country program strategies through village-level consultations. Indigenous and local community representatives are required on steering committees to ensure participation in funding and policy decisions. The programming of the Food and Agriculture Organization of the United Nations and Conservation International continues to prioritize Indigenous leadership.

However, a critical gap remains in that granular data on the nature of, and impact from, inclusion of persons with disabilities in SGP programming are lacking. OP8 does not yet provide clarity on how their

participation will be supported or barriers removed, highlighting an area requiring greater attention in future phases.

7.7 SUMMARY

The GEF has made steady progress in integrating inclusion into its policies, programs, and delivery mechanisms. Engagement of women, IPLCs, and youth has expanded across project types and regions, supported by participation activities—particularly consultations—and systemic measures such as stakeholder analysis and gender action plans. The GEF Secretariat review process has improved inclusion, especially on gender, through substantive feedback. Through initiatives like the SGP, the GEF has enabled more equitable participation by women, youth, and Indigenous Peoples—especially at the grassroots level. Community-based approaches under the SGP have improved project ownership and responsiveness by adapting to local knowledge and social realities. Work in fragile and conflict-affected contexts has further highlighted the importance of inclusive design, as marginalized groups often face heightened vulnerabilities in these settings.

While institutional measures—such as gender action plans and Indigenous focal points—have supported progress, implementation gaps and limited attention to persons with disabilities remain challenges, along with ongoing gaps in monitoring, staff capacity, and follow-up support. National policy environments and entrenched social norms can also constrain inclusive implementation. Sustained engagement, improved tracking, and stronger alignment with national systems are critical for scaling inclusion across the GEF portfolio. Continued attention to these areas, accompanied by more consistent application of good practices, will be important to further strengthen inclusion across the GEF portfolio.

Engagement with the private sector

Private sector engagement has become increasingly relevant to the GEF, stemming from the recognition that global environmental challenges and the advancement of transformational change cannot be addressed by public sector efforts alone. Drivers motivating the private sector to engage with the GEF include corporate strategies, the alignment of business targets with multilateral environmental agreements, regulatory frameworks, investor requirements, and evolving disclosure and reporting standards. Additional momentum is provided by private sector roadmaps and global initiatives for net-zero and nature-positive outcomes. Innovation—often led by private actors—remains a central motivator, alongside the opportunity to mobilize additional capital through blended finance.

The GEF has used nongrant instruments (NGIs) since its inception.¹ A dedicated NGI set-aside was first introduced in GEF-4 and later evolved into a dedicated NGI funding window, known in GEF-8 as the Blended Finance Program. In addition, NGIs can be used under System of Transparent Allocation of Resources (STAR) allocations, in the chemicals and waste or international waters focal areas, and under the Global Biodiversity Framework Fund. While NGIs are designed to stimulate private finance, their portfolio remains small.

¹In the context of the GEF, NGIs are instruments that provide financing in a form that can potentially generate financial returns from the original investment or for principal repayment, irrespective of whether such financial flows are returned to the GEF Trust Fund. The information in this paragraph is drawn from GEF (2022a, 2024a).

Meanwhile, grant-based support—which can help create enabling environments, support early stage innovations, and strengthen institutional capacity—remains the GEF’s dominant modality in engaging the private sector.

The GEF’s Private Sector Engagement Strategy (PSES) identifies two pillars for the private sector to engage with the GEF (GEF 2020): (1) through the use of blended finance, or NGIs; and (2) as an agent for market transformation to shift business practices through reforms, value chain improvements, and sector-wide collaboration. However, the PSES lacks measurable targets, limiting ability to assess progress or evaluate the effectiveness of its intent.

In practice, the GEF implements both approaches, engaging the private sector by de-risking and catalyzing investments that would otherwise be constrained by market failures, regulatory weaknesses, or unfavorable risk return profiles. It provides concessional, risk-bearing capital through blended finance to support ventures unable to access commercial funding, thereby unlocking innovation and enabling the scaling of solutions with global environmental benefits. Through market transformation efforts such as policy reform, awareness raising, and capacity building, the GEF helps establish conditions for businesses to adopt more sustainable practices.

The GEF has fully implemented the private sector engagement recommendations from the Sixth Comprehensive Evaluation of the GEF (OPS6) and made partial progress on those from OPS7. In response to

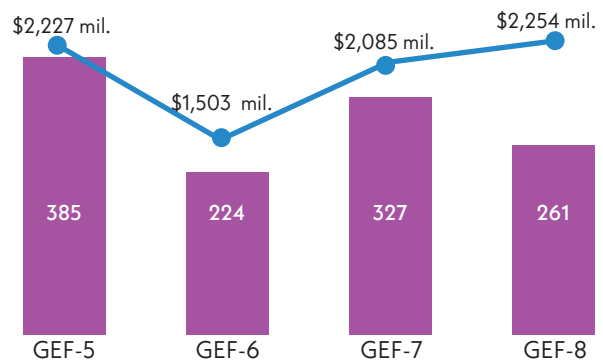
OPS6, it adopted systems approaches by partnering with financial institutions to de-risk investments, structure innovative finance, and influence industry practices through certification, research, and sustainable supply chains. Progress on OPS7 recommendations—narrowing the focus of engagement, clarifying the value proposition, and better integrating financial and nonfinancial support, including for micro, small, and medium enterprises—remains ongoing.

This chapter reviews the portfolio of GEF projects featuring private sector involvement (here referred to as private sector projects), looks at the effectiveness of such projects, describes the GEF's strengths in engaging the private sector, and outlines some constraints to further private sector integration in GEF projects and operations. It draws on the recent IEO evaluation of private sector engagement (GEF IEO forthcoming-i).

8.1 PRIVATE SECTOR ENGAGEMENT IN THE GEF PORTFOLIO

Over time, the GEF has expanded its use of both grant and nongrant instruments to catalyze private investment, with the percentage of private sector projects increasing from 34 percent in GEF-5 to about 40 percent in GEF-7 and GEF-8.² As of GEF-8, a total of 1,197 private sector projects had been approved since GEF-5, representing \$8.1 billion in GEF funding and mobilizing approximately \$60.2 billion in cofinancing, including \$14.5 billion from the private sector (figure 8.1). Early private sector initiatives often focused on technology pilots and demonstration projects in renewable energy, sustainable agriculture, and energy efficiency. From GEF-6 on, more sophisticated, systemic models have

FIGURE 8.1 Number and funding of approved GEF private sector engagement projects over time



Sources: Project documents and GEF Portal data.

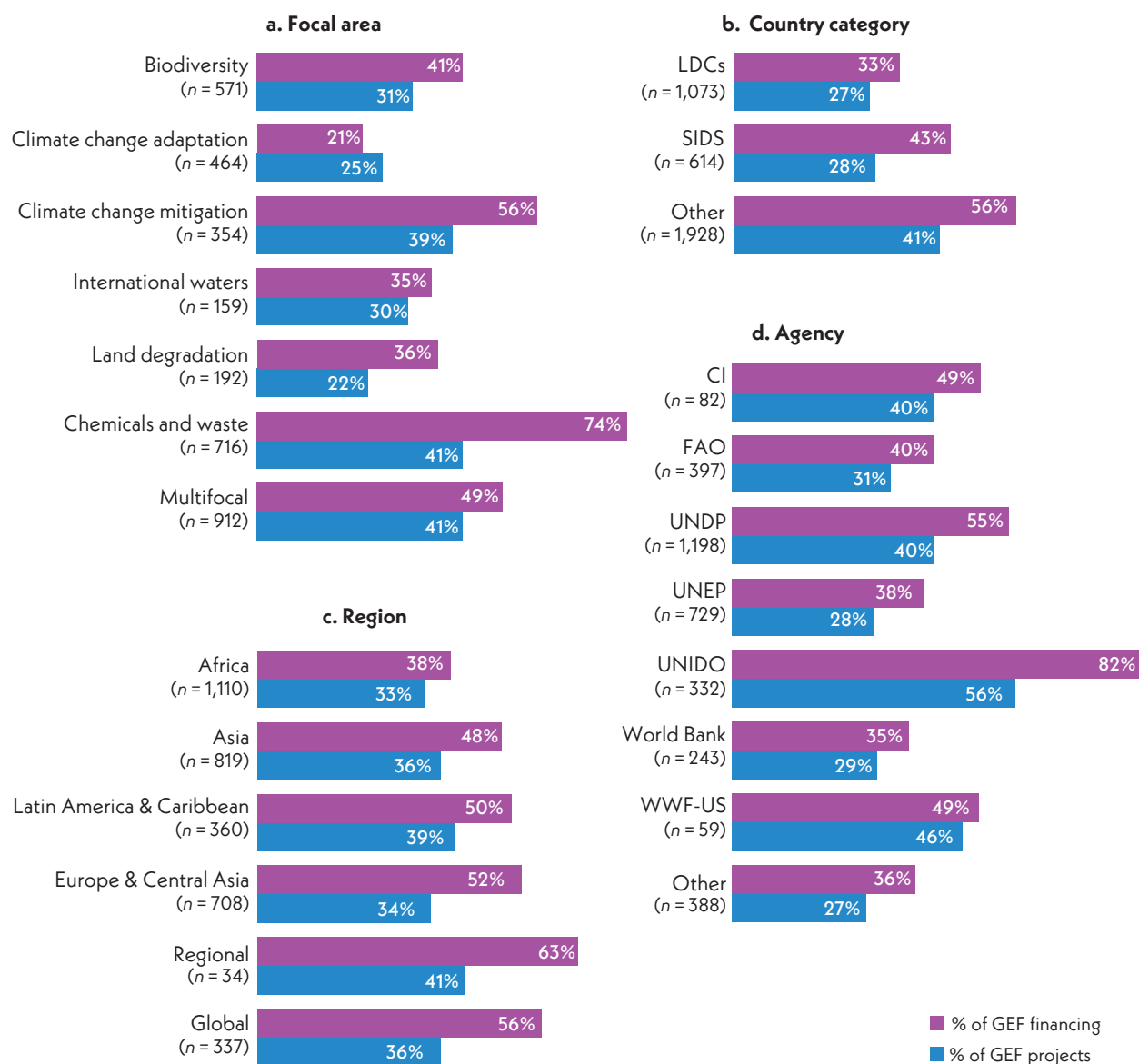
Note: Private sector projects include those supported by any or a combination of GEF-managed funds and exclude dropped, canceled, and suspended projects. Project financing includes Agency fees and project preparation grant funding and fees.

emerged, emphasizing financial intermediaries and multistakeholder platforms to scale impact.

The cofinancing ratio for private sector projects has averaged approximately 8.3:1 between GEF-5 and GEF-8. This is slightly higher than the overall GEF portfolio average of 7.5:1; projects without a private sector component had a cofinancing ratio of 6.8:1. As noted in [chapter 6](#), the proportion of financing directed to projects with private sector engagement within integrated programs has also grown—from 32 percent in GEF-6 to nearly 50 percent in GEF-8.

The extent of private sector engagement varies across focal areas, country groups, regions, and Agencies. The highest levels of private sector engagement are seen in the chemicals and waste and multifocal area portfolios ([figure 8.2a](#)), accounting for 41 percent of the number of projects in both areas and 74 percent and 49 percent, respectively, of their GEF financing. In contrast, private sector engagement is notably lower in least developed countries (LDCs) and small island developing states (SIDS), where fewer than 30 percent of projects include private sector

² This figure is based on an IEO review of project descriptions and cofinancing, executing entity, and NGI information; it is lower than self-tagged reporting on the GEF Portal.

FIGURE 8.2 Prevalence of private sector projects across GEF focal areas, country categories, regions, and Agencies

Source: GEF Portal as of June 30, 2025.

Note: LDC = least developed country; SIDS = small island developing states; CI = Conservation International; FAO = Food and Agriculture Organization of the United Nations; UNDP = United Nations Development Programme; UNEP = United Nations Environment Programme; UNIDO = United Nations Industrial Development Organization; WWF-US = World Wildlife Federation–US. Percentages are the share of private sector projects within each focal area, region, Agency, and country classification. Climate change adaptation projects are those that received any funding from the Least Developed Countries Fund/Special Climate Change Fund.

partners, compared to 41 percent in other countries (figure 8.2b). Regionally, Africa shows slightly reduced participation, with private sector collaboration in 33 percent of projects, accounting for 38 percent of

financing (figure 8.2c). Among GEF Agencies, the United Nations Industrial Development Organization (UNIDO) stands out, with 56 percent of its projects—and 82 percent of its GEF financing—featuring private

sector engagement, the highest share across the partnership ([figure 8.2d](#)).

GEF projects engage a wide range of private sector actors, reflecting the broad definition outlined in the PSES. An analysis of 445 projects shows that most involve small and medium enterprises and individual entrepreneurs. For instance, the project Strengthening Adaptive Capacities to Climate Change through Capacity Building for Small Scale Enterprises and Communities Dependent on Coastal Fisheries in The Gambia (GEF ID 9194, UNIDO) supports small-scale fishery and aquaculture businesses by promoting climate-resilient business models.

Approximately half of the 445 reviewed projects report engagement with large corporations, financial intermediaries, or market facilitators. A notable example of a project that engages market facilitators is the Food Securities Fund (GEF ID 10322, Conservation International), which finances enterprises that aggregate produce and deliver services to farmers, helping strengthen supply chains and market access.

Direct engagement with capital providers such as investors or venture capital firms is less common, occurring in only 43 percent of projects. One such initiative is Establishing the Taskforce on Nature-related Financial Disclosures (GEF ID 10755, World Wildlife Fund-US). This project is launching a coalition to help shape nature finance for the private sector and engage investor networks to develop frameworks for disclosing nature-related financial risks, thus enabling better-informed capital allocation.

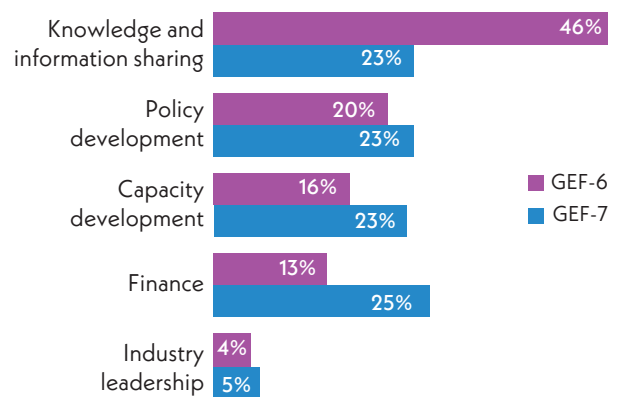
Many projects engage with multiple types of private sector actors, highlighting the diversity of private sector participation across the GEF portfolio. A review of 224 ongoing and completed projects—excluding NGL projects, which are discussed at the end of this section—from GEF-6 and GEF-7 shows a shift in the depth and type of private sector engagement. Using modalities identified in the PSES, projects were classified into

one of five groups based on their primary engagement modality: knowledge and information sharing, capacity development, policy development, finance, and industry leadership.³ During GEF-6, nearly half of the projects collaborated with private entities primarily through knowledge sharing and information exchange ([figure 8.3](#)). For example, a project financed by the Least Developed Countries Fund—the Senegal National Adaptation Plan (GEF ID 6991, United Nations Development Program [UNDP])—engaged the private sector by informing businesses on progress in preparing the country’s national adaptation plan for climate change.

In GEF-7, which also saw the adoption of the PSES, there was a shift toward deeper forms of engagement. Increasingly, projects involved the private sector in cofinancing arrangements and public-private partnerships (PPPs), signaling a move from peripheral participation to more integrated roles in project design and implementation. For example, the Global

³Technical assistance is also a category in the PSES, but is not included due to its focus on providing technical assistance to Agencies to engage the private sector.

FIGURE 8.3 Sampled private sector engagement projects by primary engagement modality



Source: Project documents.

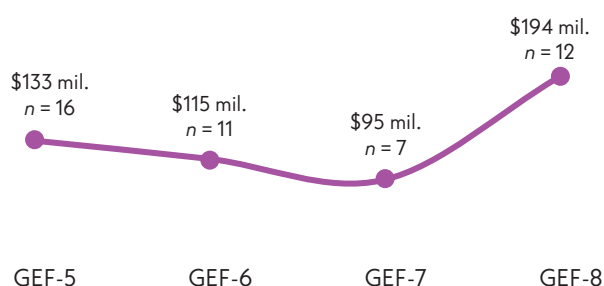
Note: Figures represent the shares of projects in each replenishment period. GEF-6: $n = 113$; GEF-7: $n = 111$.

Sustainable Supply Chains for Marine Commodities (GEF ID 5271, UNDP) project addressed funding gaps in sustainable fisheries through PPPs in Costa Rica, Ecuador, Indonesia, and the Philippines, contributing to the reduction of illegal, unreported, and unregulated fishing.

Focusing on the portion of the private sector portfolio that uses NGIs reveals the following:

- **The portfolio of NGI projects has fluctuated since GEF-5.** Between GEF-5 and GEF-8, a total of \$537 million (6 percent of the overall portfolio of private sector projects) has been allocated to 46 NGI projects to support catalytic financing tools, such as loans, guarantees, and equity investments (figure 8.4). GEF-8 saw an increase to \$194 million in financing allocated to NGI projects. NGI projects were especially catalytic, mobilizing \$16.1 in cofinancing per GEF dollar⁴—including \$5.5 from private sources.
- **The use of financial instruments in NGI projects has also evolved across GEF periods.** Earlier replenishment periods focused mainly on debt and risk mitigation instruments as the primary tools for engagement. More recent projects have featured greater use of equity alongside these instruments, reflecting the increasing flexibility of NGIs and their ability to support more diverse and complex blended finance structures.
- **The NGI portfolio has diversified its focal area coverage over time.** In GEF-5, nearly all NGI projects focused on climate change mitigation, accounting for 88 percent of the projects and 87 percent of the financing. By GEF-8, however, the portfolio had expanded to include an equal distribution across biodiversity, climate change

FIGURE 8.4 GEF financing for NGI projects, GEF-5 to GEF-8



Source: GEF Portal as of June 30, 2025.

Note: Includes project financing, Agency fees, and project preparation grant funding and fees for approved projects. Includes financing from all GEF-managed sources (not exclusively from nongrant instrument/blended finance set-asides). Excludes dropped, canceled, and suspended projects.

mitigation, and multifocal area projects. Notably, the biodiversity focal area commands the largest share of NGI financing in GEF-8, including support for projects such as the Indonesia Coral Reef Bond (GEF ID 11323, World Bank) and the Rwanda Wildlife Conservation Bond Operation (GEF ID 11514, World Bank), both of which build on the GEF-7 Wildlife Conservation Bond (GEF ID 10330) implemented by the World Bank in South Africa.

- **In terms of geographic scope, NGI projects show a strong global and regional presence.** Global and regional projects comprise 54 percent of all NGI projects and 61 percent of total NGI financing—higher than the broader private sector engagement portfolio, where only 20 percent of projects and 32 percent of financing are global. Coverage of LDCs and SIDS, while still limited, has grown. There was only one NGI project covering an LDC in GEF-5—Geothermal Power Generation Program in Djibouti (GEF ID 4626, World Bank)—and no projects covering SIDS. In contrast, GEF-8 has two projects covering two LDCs (Madagascar and Rwanda) and one SIDS (Dominica).
- **Implementation of NGI projects remains largely driven by multilateral development banks**

⁴ This considers reported cofinancing at the project identification form/Chief Executive Officer endorsement/approval stage. GEF financing excludes Agency fees and project preparation grant funding and fees.

(MDBs). The World Bank, the Inter-American Development Bank (IDB), the European Bank for Reconstruction and Development (EBRD), and the African Development Bank (AfDB)—in that order—lead in terms of financing.

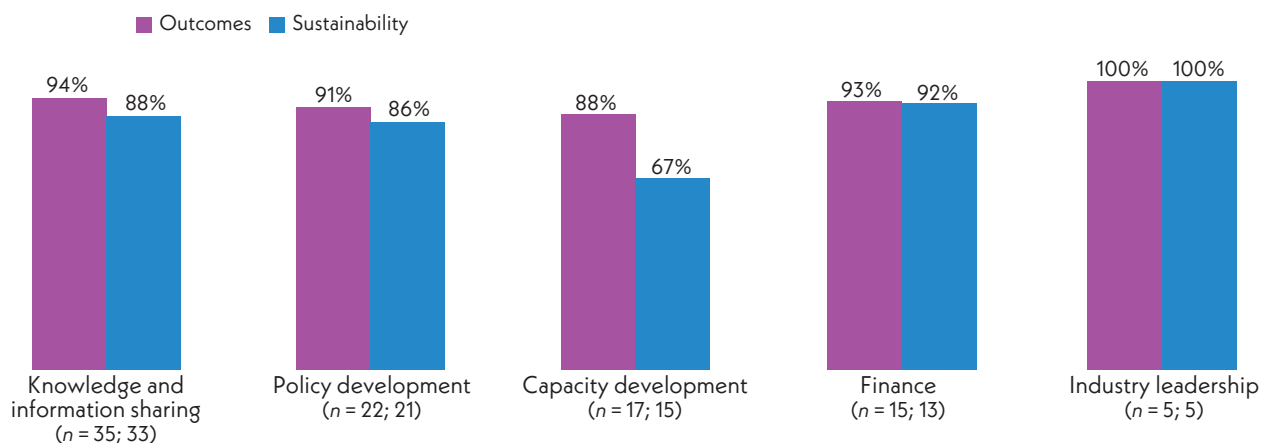
8.2 EFFECTIVENESS

A review of 89 completed projects from GEF-6 and GEF-7 involving the private sector—and not including NGI projects—revealed variation in performance across different engagement modalities. Projects that focused on industry leadership, finance, and knowledge and information sharing tended to show stronger performance, as reflected in their outcome and sustainability ratings (figure 8.5). For example, the Climate Smart Urban Development Challenge (GEF ID 9342, UNDP) project actively engaged business communities and other stakeholders in developing, financing, and implementing climate-smart innovations related to energy, transport, construction, planning, water, and waste management in cities. This project led to the implementation of five private sector-driven initiatives, some of which have already secured outside financing for scaling up at closure.

In Conserving Biodiversity through Sustainable Management in Production Landscapes in Costa Rica (GEF ID 9416, UNDP), strong private sector engagement through knowledge and information sharing on a monitoring system for land use change helped foster greater ownership and adoption of the system. In the engagement through finance category, the Promoting Climate-smart Livestock Management in the Dominican Republic (GEF ID 10054, Food and Agriculture Organization of the United Nations) project helped develop a green funding mechanism to finance climate-smart livestock farming practices in partnership with banks.

On average, projects featuring private sector engagement received higher outcome ratings in Latin America and the Caribbean (90 percent, compared to 79 percent for nonprivate sector projects), and slightly higher ratings in Europe and Central Asia (90 percent, compared to 89 percent for nonprivate sector projects). By focal area, private sector engagement projects in the chemicals and waste, international waters, land degradation, and multifocal area portfolios—in that order—are more likely to receive outcome ratings in the satisfactory range compared to other projects.

FIGURE 8.5 Sampled GEF projects rated in the satisfactory/likely range for outcomes/sustainability by primary private sector engagement modality



Sources: Project documents and the GEF IEO Annual Performance Report 2026 data set, which includes completed projects for which performance ratings were independently validated through June 2025.

In terms of sustainability, private sector projects in the international waters focal area, on average, received higher sustainability ratings. For example, the project Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas (GEF ID 5393, UNDP) engaged tuna fishing industry associations by sharing knowledge and demonstrating the benefits of data collection and monitoring, including for certification purposes; this contributed to more fishery enterprises adopting these practices to access a wider market.

Across all focal areas ([box 8.1](#)), the GEF supports tailored interventions to foster early stage innovation, mobilize investment, and create enabling environments for private sector engagement. [Chapter 9](#) further highlights the contributions of private sector involvement in technological innovations in the GEF.

Private sector engagement in the GEF’s integrated programs has increased, but effectiveness has been uneven, shaped by differing strategic objectives, capacity constraints, and variable enabling conditions. The Good Growth Partnership and Sustainable Cities illustrate contrasting approaches to working with private actors. The former, focused on commodity supply chains, successfully fostered multistakeholder dialogue, but struggled to catalyze downstream private investment or systemic change. Such multi-stakeholder forums require significant resources, yet in practice they are often underresourced and minimally staffed; for example, in Liberia, the forum operated with only a part-time communications officer. The Sustainable Cities Program achieved public-private collaboration in renewable energy and waste management in select cities, yet broader implementation challenges underscored the need for stronger municipal capacity and clearer PPP frameworks. Other integrated programs, such as the Sustainable Forest Management Impact Program and the Global Wildlife Program, showed more fragmented engagement, often limited to small enterprises or pilots with limited scalability. While initiatives such as traceability

tools and performance-based finance show promise, overall private sector involvement has been modest, pointing to the need for more strategic, scalable, and investment-ready models.

Experience across these programs highlights critical design elements for private sector engagement.

Too often, interventions were designed as discrete activities—such as farmer training, financial awareness raising, or firm-level investments—rather than looking to leverage the private sector for broader system transformation. In food systems, design gaps included insufficient enabling conditions, lack of long-term commitments, and weak business cases for sustainability. For example, in Brazil and Paraguay, sustainability pilots could not compete with the profitability of land clearing, and engagement with global buyers produced few sourcing reforms. Similarly, environmental, social, and governance (ESG)–linked finance was undercut by continued access to conventional credit without environmental requirements, demonstrating the need to embed financial structuring and disclosure requirements into design from the outset.

Systemic issues also affect design. The most promising innovations emerged when GEF Agencies engaged new types of partners early in project development; such collaboration has been inconsistent. Country-level capacity gaps further constrain effective design, with many operational focal points lacking the tools and training to assess financial and partnership dynamics. Further, the typical GEF four-year project cycle is too short to deliver the systemic change needed in complex sectors and industries. In such settings, progress depends on a sequence of interlinked steps—policy reform, shifts in demand, changes in production practices, enhanced transparency and certification, and the development of financing mechanisms—all of which are difficult to achieve within a limited time frame.

Taken together, these experiences suggest that stronger design elements are essential to achieve transformational impact. Future private sector

BOX 8.1 Private sector engagement across the GEF focal areas

Biodiversity. GEF efforts in biodiversity have focused on enhancing the bankability of small producers. Through the project Reducing Deforestation from Commodity Production (GEF ID 9180, United Nations Development Programme), the GEF strengthened early stage businesses in Indonesia, Liberia, and Paraguay, increasing their access to finance and markets while promoting more sustainable commodity supply chains.

Climate change adaptation. The Adaptation Accelerator Program (GEF ID 10435, Conservation International) financed by the Least Developed Countries Fund (LDCF) in Liberia and Madagascar targets adaptation-focused small and medium enterprises (SMEs) through a structured three-month accelerator. With sector-specific diagnostics and early stage investor engagement, the initiative de-risks climate-resilient business ventures in agriculture, fisheries, and water management. Complementing this, the GEF Challenge Program for Adaptation Innovation under the LDCF and the Special Climate Change Fund offers valuable early lessons in deploying blended finance and digital tools to support micro, small, and medium enterprises, although it still faces challenges in scaling and institutional resource demands.

Climate change mitigation. The Global Cleantech Innovation Program (GEF ID 10461, United Nations Industrial Development Organization) exemplifies how the GEF fosters innovation through an incubator-style model. The program supports early stage clean technology SMEs using a competition-based accelerator framework, effectively acting as an innovation funnel. By catalyzing entrepreneurial ecosystems in countries with limited capacity—such as Cambodia, Lesotho, Nigeria, and South Africa—the program contributes to low-carbon development and green job creation.

International waters. Integrated Transboundary Ridges-to-Reef Management of the Mesoamerican Reef (GEF ID 5765, World Wildlife Fund-US) illustrates the feasibility of collaboration with private sector entities in the management of coastal and marine resources. The project established partnerships with industry associations across the agriculture, aquaculture, fisheries, and tourism sectors in multiple Central American countries. These partnerships facilitated more efficient dissemination of information to private sector entities and promoted the adoption of sustainable practices aimed at protecting aquifers and critical freshwater habitats.

Land degradation. The Climate-smart Livestock Production and Land Restoration in the Uruguayan Rangelands (GEF ID 9153, Food and Agriculture Organization of the United Nations) project demonstrates GEF engagement of the private sector through capacity building. The multifocal area project supported a training program for family farmers, delivered by extension agents, to promote sustainable livestock practices and restore degraded lands. The majority of farmers trained chose to continue paying for the extension agents' services after the project ended, a positive development in the project's long-term sustainability.

Chemicals and waste. GEF projects lay the foundational groundwork for private investment through regulatory and pricing reforms. A project in the Arab Republic of Egypt (GEF ID 4392, United Nations Development Programme) introduced a pricing scheme and legislative reforms for health care and e-waste incineration, helping pave the way for future private sector participation in environmentally sound waste management systems.

interventions will need to better align financial mechanisms with regulatory and governance reforms, integrate supply chain incentives and accountability, and strengthen institutional capacity to co-create

solutions that are scalable, investment ready, and sustainable.

8.3 GEF STRENGTHS IN ENGAGING THE PRIVATE SECTOR

A key competitive advantage of the GEF in private sector engagement is its convening power.

The GEF is able to bring together multiple stakeholders—businesses, industry associations, national governments, and communities—across sectors and countries to drive systemic, multicommodity transformation of global value chains ([box 8.2](#)). Further, the GEF can combine grants, policy reform, and blended finance in ways few other institutions can. Grant-based market transformation projects are particularly effective in facilitating multistakeholder collaboration through platforms that address both global supply and demand, as well as sector-wide and landscape-level challenges. Examples of the GEF’s convening power are the [Roundtable on Sustainable Soy](#) in Paraguay and the [Roundtable on Sustainable Palm Oil](#) in Indonesia, which have large local memberships. Roundtables have been an important private sector entry point as they build awareness among government and business leaders of how private sector engagement can complement national development priorities and support climate change and biodiversity objectives. In Africa, the Circular and POPs-free Plastics Project (GEF ID 11049, United Nations Environment Programme [UNEP]) unites regional and global actors—such as the Global Plastic Action Partnership, the Platform for Accelerating the Circular Economy, and the Ellen MacArthur Foundation—to promote circular economy solutions. The Sustainable Rice Landscapes Initiative, active across Asia, includes more than 80 private partners and is developing a \$1 billion investment facility with the Green Climate Fund and the International Finance Corporation (IFC). The program’s consortium model simplifies private sector engagement by consolidating efforts under a single coordinated platform.

Strategic use of GEF grants supports the co-design and piloting of regulatory frameworks, standards,

BOX 8.2 Effectiveness of global and regional programs in engaging private actors

Regional and global programs—notably the GEF’s integrated programs, as highlighted in [chapter 6](#)—have proven to be effective entry points for private sector engagement. These targeted interventions can influence industry practices, strengthen business models, and create pathways for scaling sustainability across sectors and geographies. Illustrative examples follow:

- The GEF-7 Food, Land Use, and Restoration Impact Program (GEF ID 10201), implemented by a consortium of GEF Agencies, demonstrates how multistakeholder platforms can align public policies with market incentives, enabling private actors across value chains to adopt more sustainable practices.
- The GEF-6 Global Opportunities for Long-term Development of ASGM [Artisanal and Small-scale Gold Mining] Sector (GEF GOLD; GEF ID 9602) program engaged artisanal and small-scale gold miners in Ecuador, Peru, the Philippines, and Senegal. By treating miners as entrepreneurs and microenterprises, the program reframed ASGM not as an informal challenge but as a sector with potential for safer business practices and sustainable livelihoods. The initiative was scaled up in GEF-7 through GEF GOLD+ (GEF ID 10569) and expanded to eight additional countries: Bolivia, Republic of the Congo, Ghana, Honduras, Madagascar, Nigeria, Suriname, and Uganda. According to the 2023–24 planetGOLD progress report, 17,221 miners have already benefited from interventions that reduce mercury use while improving economic resilience (UNEP 2025).

and extended producer responsibility (EPR) systems with direct input from private actors. For example, the Circular Economy Approaches for the Electronics Sector in Nigeria (GEF ID 10141, UNEP) project helped enact the country’s first EPR legislation and engaged

electronics firms such as Hinckley and E-Terra in pilot e-waste programs—demonstrating how policy innovation can trigger investment and operational shifts in the private sector. This kind of support is especially critical in the chemicals and waste, biodiversity, and sustainable land management sectors, where regulatory clarity is essential to drive private action. As some evaluation interviewees emphasized, in Colombia, GEF-funded collaboration enabled companies to adopt safer PCB disposal technologies, underpinned by regulatory commitments. Countries that establish clear, enforceable rules—such as EPR systems or restrictions on harmful chemicals—consistently attract more investment and innovation.

Through its NGIs and Innovation Window, the GEF has consistently demonstrated its ability to support early stage, high-impact environmental solutions. Stakeholders widely acknowledge the GEF's unique capacity to engage in markets and sectors deemed too risky by other financiers. This enables the testing and de-risking of ventures that might otherwise struggle to attract capital. Leveraging its risk tolerance, flexibility, and broad environmental mandate, the GEF plays a catalytic role in crowding in private investment and paving the way for replication and scale. The Partial Risk Sharing Facility for Energy Efficiency in India (GEF ID 4918, World Bank) demonstrates how NGIs can catalyze private investment and de-risk markets. With \$19.8 million in GEF grants, the project mobilized \$119.9 million in private capital, supported energy efficiency through partial guarantees, institutionalized performance contracting, and strengthened stakeholder capacity. Another successful NGI is the above-mentioned Wildlife Conservation Bond in South Africa. The \$43 million Innovative Use of Financial Instruments for Biodiversity Conservation and Restoration in Latin America and the Caribbean (GEF ID 11324, IDB) exemplifies GEF support for sovereign debt conversions aimed at enhancing biodiversity and conservation financing, providing support for debt for nature swaps with convertible guarantees. These and

other examples underscore how nongrant resources can be strategically deployed to incentivize conservation outcomes and mobilize private capital.

Stakeholders cautioned that, under current practice, it can be difficult to structure and gain approval for projects that combine grant and nongrant elements; nevertheless, there are successful examples.

One such example is the GEF-6 Green Logistics Program (GEF ID 9047, EBRD), which blended NGI and technical assistance to support energy efficient logistics. Piloting Innovative Investments for Sustainable Landscapes (GEF ID 9719, UNEP) also represents this approach and proves the GEF's aptitude for early stage risk-taking; this initiative was later scaled up by the Green Climate Fund in the [Climate Investor One](#) blended finance facility. The IDB-PPP MIF [Multilateral Investment Fund] Program (GEF ID 4959) has successfully invested in several equity funds in Latin America and has managed to reach environmental and financial goals. This combination of grant and nongrant elements attracted private capital to nature-based solutions, enabling scalable agroforestry models that deliver both financial returns and global environmental benefits. Another example of a project combining both grant (capacity building) and nongrant (concessional finance) elements is the South Eastern Mediterranean EE/ESCO Markets Platform (GEF ID 5143, EBRD). Spanning five countries, this program successfully blended concessional finance with capacity-building efforts. By working closely with operational focal points, EBRD was able to deploy innovative financing mechanisms—such as private-to-private renewable energy contracts and carbon credit-based financing—across high-risk markets. The initiative mobilized over \$198 million in cofinancing and demonstrated how technical and financial collaboration can produce replicable, investment-ready models.

GEF Agencies engage the private sector in distinct yet complementary ways, reflecting their

institutional strengths and mandates. MDBs—such as the World Bank Group (including IFC and the International Bank for Reconstruction and Development), IDB, AfDB, the Asian Development Bank, and EBRD—have the legal, financial, and institutional frameworks to structure and deploy NGIs at scale. They are equipped to cofinance GEF projects with their own investment capital, leveraging GEF financing into catalytic instruments such as loans, guarantees, and equity. In some cases, this has resulted in high cofinancing ratios, as seen in the Promotion of Non-fired Brick Production and Utilization (GEF ID 4801, UNDP) project, where a ratio exceeding 32:1 was achieved. IFC and IDB have dedicated blended finance units with specialized expertise in structuring layered capital to share risk. This has permitted these private sector-facing divisions to manage pipelines of smaller, high-impact projects in accord with GEF objectives under a shared set of environmental, fiduciary, and reporting standards. A precedent for this model was the GEF Earth Fund Platform (GEF ID 4257; World Bank, IFC).

United Nations agencies and international nongovernmental organizations typically focus on creating enabling environments, delivering technical assistance and fostering community engagement—critical foundations for long-term investment readiness, especially in sectors or regions where private finance is nascent. Recognizing and coordinating these complementary roles

is essential to scale private sector engagement across diverse geographies and focal areas.

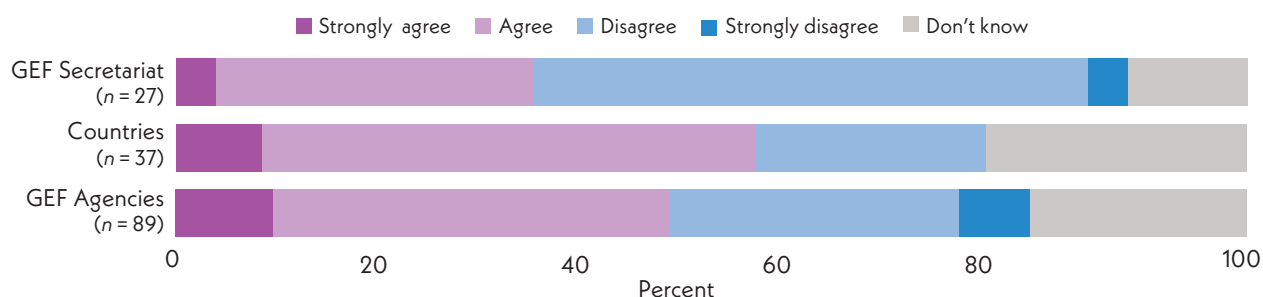
8.4 CONSTRAINTS TO GEF PRIVATE SECTOR ENGAGEMENT

Despite the GEF's strategic ambition to mobilize private capital for environmental impact, systemic and operational restrictions continue to limit effective private sector engagement. In fact, a substantial share of surveyed stakeholders disagreed or strongly disagreed that the GEF has a comparative advantage in engaging the private sector ([figure 8.6](#)).

As determined through interviews, constraints to the GEF's engagement with the private sector fall into several interrelated categories:

- **Bureaucratic processes and misaligned incentives.** The GEF's complex procedures, lengthy project cycles, and delayed visibility of results are poorly matched with the private sector's need for speed, flexibility, and timely returns. Interviewees noted that prolonged project preparation and implementation timelines undermine the business case for private participation—particularly for small and medium enterprises in developing countries. GEF

FIGURE 8.6 Distribution of stakeholder perceptions on whether the GEF has a comparative advantage in engaging with the private sector



Source: GEF IEO stakeholder survey conducted as part of GEF IEO forthcoming-b.

funding modalities are often viewed as overly rigid, complex, and mismatched with private sector risk return profiles, further discouraging investment.

- **Underutilization of NGIs.** Although NGIs are central to crowding in private capital investment, their use within the GEF is still held in check. NGIs under the Blended Finance Program are confined to a capped window, with a \$15 million ceiling per project, constraining scale and cost-effectiveness. This siloed treatment, despite strong backing from the GEF Scientific and Technical Advisory Panel and consistency with MDB practices, depresses their application across focal areas—especially those lacking predictable revenue streams, such as biodiversity and land degradation. Without broader integration of NGIs into core programming, the GEF’s potential to mobilize private finance remains constrained.
- **Institutional bias and design shortcomings.** Many GEF Agencies lack the incentives, expertise, or willingness to engage the private sector strategically. Ideological biases persist, with private actors often treated as peripheral stakeholders or cofinanciers rather than core implementation partners. In practice, project locations and themes are frequently predetermined without private sector input, resulting in misaligned priorities and missed opportunities. The mismatch between the GEF’s relatively short funding cycles (three to six years) and the longer investment horizons of private actors further exacerbates this disconnect.
- **Limited country-level capacity and readiness.** Operational focal points, who are responsible for guiding GEF programming at the national level, often lack the tools, training, and incentives to assess or design private sector interventions. The GEF PSES noted “little knowledge within the private sector of where to start when working with the GEF Partnership, especially through operational focal points” (GEF 2020, 10). Interviews confirmed that country-level capacity constraints—including among local businesses—continue to be a major barrier to effective engagement. While the GEF’s upstream

technical dialogues, organized as part of the Country Engagement Strategy (see [chapter 10](#)), aim to integrate private sector engagement into country planning, technical expertise, institutional coordination, and access to de-risking tools are often meager.

- **Burdensome project preparation and due diligence.** Evaluating the financial and operational credibility of private sector partners—particularly in frontier markets⁵—is resource intensive and often exceeds standard project preparation budgets. Agencies noted that this bottleneck can delay timelines and deter private actor inclusion. Private firms in turn may be discouraged by burdensome compliance requirements. Although some Agencies have experience with private sector due diligence, restrictions in accreditation flexibility—such as requiring private sector initiatives to be routed through public sector divisions—further impede efficient engagement.
- **Weak monitoring, evaluation, and communication.** A lack of robust tracking and evaluation systems for innovative, revenue-generating projects restricts the ability to learn from and scale successful models. Key outcome metrics—such as jobs created or private capital mobilized—are not consistently monitored or communicated. Stakeholders have also stressed the need for stronger information management systems to enhance transparency and help private actors identify investment opportunities. Without improvements in monitoring and

⁵ Frontier markets are economies that are less developed and often smaller, more volatile, and less liquid than emerging markets, but still more advanced than LDCs. They include countries that have some access to capital markets and basic economic infrastructure but are often considered higher risk due to political instability, limited financial transparency, or fragile institutions. Examples include several Sub-Saharan African countries, SIDS, parts of Central Asia, and some post-conflict or fragile economies. Frontier markets matter to the GEF because they overlap areas of high global environmental importance, such as biodiversity hotspots, tropical forests, and fragile marine ecosystems.

communication, successful initiatives risk remaining isolated and underleveraged.

- Limited governance representation.** While the GEF has established a Private Sector Advisory Group of financial experts to guide its Blended Finance Program, the GEF Council itself does not include private sector representatives—in contrast with peer institutions such as the Green Climate Fund and the GEF's own Global Biodiversity Framework Fund. Including private sector voices in Council deliberations could strengthen the alignment between GEF strategies and investor realities, while helping public and private stakeholders better understand each other's priorities and constraints. It also must be recognized that many companies are reluctant to participate directly in governance structures, as they do not wish to be perceived as formal representatives or proxies for the private sector as a whole, but instead prefer targeted, issue-specific engagement through consultations and advisory panels—an approach reflected in the GEF's NGL policy. Greater participation by the private sector arms of MDBs in GEF Council discussions could further enhance private sector engagement by bringing investment perspectives and practical experience with blended finance more directly into strategic decision-making.
- Underutilization of the STAR for private sector projects.** Although countries are permitted to allocate STAR funding toward private sector engagement or NGL projects, only slight uptake persists. In GEF-8, only 3 of 12 NGL-programmed projects received STAR financing, accounting for less than 15 percent of total NGL project funding. Mainstreaming private sector engagement as a core theme within STAR programming—particularly through blended structures combining grants and NGLs—is an underexploited opportunity, despite its emphasis in the GEF's NGL policy.

8.5 SUMMARY

The GEF has made steady progress in private sector engagement, particularly through the 2020 PSES, which established a dual approach of market transformation and NGLs. Market transformation has been pursued through policies, standards, capacity building, and value chain initiatives that influence production, demand, and finance; NGLs have been used to mobilize capital, de-risk innovation, and test new financial mechanisms. Grants remain central for enabling conditions and early stage innovation, but NGLs have demonstrated strong catalytic potential, with high leverage ratios and expanding use beyond climate change into biodiversity, chemicals and waste, and integrated programs.

The effectiveness of private sector engagement has been uneven. Many interventions were designed as discrete activities—such as farmer training, awareness raising for financial institutions, or firm-level investments—rather than as part of a broader strategy for systemic transformation. Barriers include insufficient enabling conditions, weak or unclear business cases for sustainability, short project cycles, continued access to conventional finance without ESG requirements, and limited regulatory enforcement in key sectors and geographies. Engagement in LDCs and SIDS has been especially constrained by fragile financial systems and capacity gaps.

Achieving transformational change requires moving beyond pilots and embedding private sector engagement systematically across programming. This means strengthening the balance between market transformation and NGLs, aligning project design with private sector risk return expectations, and generating pipelines of investment-ready projects. By tailoring approaches to different country market contexts and combining policy reform, standards, and capacity building with concessional, risk-bearing finance, the GEF can maximize its catalytic role and better position itself as a platform for innovation, risk-taking, and transformational change.

Risk and innovation

As global environmental challenges intensify, the ability to manage risk while fostering innovation is increasingly essential for achieving meaningful and lasting impact. For the GEF, the rationale for supporting innovation—particularly through the use of advanced technologies—has never been more compelling. These tools offer the potential to address complex and systemic threats, such as climate change, biodiversity loss, and pollution at scale, where conventional solutions might be insufficient.

To address this need, the GEF has made notable institutional shifts. The GEF-8 Strategic Positioning Framework emphasized innovation as a key driver for transformational change (GEF Secretariat 2022b), supported by the establishment of an Innovation Window and reinforced by the adoption of the 2024 risk appetite statement, which assigns the GEF a high appetite for innovation risk (GEF 2024b; STAP 2022). These developments signal a clear commitment to enabling calculated risk-taking and forward-looking solutions designed to accelerate systemic change.

Risk management in the GEF, however, extends well beyond innovation. Projects must also navigate contextual risks, including climate variability, environmental and social safeguards, and shifting political or governance conditions, as well as execution risks, such as fiduciary oversight, institutional capacity, and challenges to stakeholder engagement. Recognizing these diverse challenges, the GEF Council adopted a risk appetite framework to guide Agencies in taking calculated risks. This framework differentiates risk appetite

across three dimensions: innovation risk (high), contextual risk (substantial), and execution risk (moderate). By applying differentiated appetite levels, the framework supports adaptive risk management and learning, enabling projects to pursue systemic and scalable outcomes while maintaining robust mitigation measures ([table 9.1](#)).

The GEF places particular emphasis on innovation risk, recognizing that transformational change often requires testing unproven solutions. This risk encompasses three areas: institutional and policy risks, arising from political or regulatory shifts; technological risks, linked to the uncertain performance of new or unproven technologies; and financial and business model risks, reflecting the challenges of attracting private investment to novel instruments such as biodiversity credits or blended finance.

While many successful approaches combine different types of innovation, this chapter focuses on technological innovation and its associated risks, reflecting both its high rating in the GEF risk appetite statement and its potential to deliver quick, tangible outputs and attract private sector engagement. Recent years have seen an exponential pace of technological advancement, offering unprecedented opportunities to address environmental challenges at scale. Scientific and policy assessments (e.g., Bierbaum et al. 2024; Lenton et al. 2023; STAP 2018; World Economic Forum 2017, 2020, 2021) highlight technological innovation as a key enabler of transformational environmental management, from reducing greenhouse gas emissions and

TABLE 9.1 Dimensions and categories of the risk appetite framework

Risk category	Description
Innovation risk appetite: high	
Institutional and policy	Supporting institutional and policy innovation to enable transformational and resilient environmental outcomes
Technological	Promoting technological innovation to accelerate and scale environmental impact
Financial and business model	Mobilizing innovative blended finance investments and investments in private sector entities that may unlock new financial resources or solutions
Context risk appetite: substantial	
Climate	Responding to climate challenges to achieve more effective and lasting results
Environmental and social	Addressing environmental and social inclusion to enhance impact and sustainability
Political and governance	Adapting to political, fragility, and governance contexts to safeguard development outcomes
Execution risk appetite: moderate	
Capacity for implementation	Strengthening institutional capacity to enhance effective project implementation and results
Fiduciary	Upholding fiduciary standards to ensure transparent and accountable use of resources
Stakeholder	Inclusive stakeholder engagement to foster ownership and sustain long-term outcomes

Source: GEF 2024b.

improving natural resource efficiency to curbing pollution and boosting agricultural productivity.

Against this backdrop, this chapter examines risk in the GEF portfolio broadly, with a focus on technological innovation. It draws on two recent evaluations—Assessing Portfolio-Level Risk in the GEF and Evaluation of Innovation and Application of Technologies in the GEF (GEF IEO forthcoming-c, forthcoming-p)—to explore how risk and innovation ambitions are being translated into practice, what enabling conditions are needed, and which barriers remain.

9.1 RISK 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 frameworks are intended to help optimize resources and

achieve impact, even when these actions involve 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 2024b). It also signals a shift in the GEF's approach to managing risk and fostering innovation. For this shift to take hold, 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.

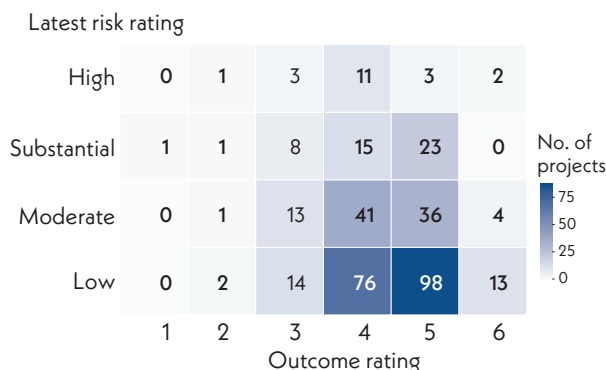
Risk profile of the GEF portfolio

The GEF portfolio is currently characterized by a low to moderate risk profile. The evaluation considered

multiple dimensions of risk, including political and governance conditions in the context of fragility, capacity for implementation and adaptive management, and fiduciary risk. Innovation risk was a prominent factor, looking at risks associated with institutional and policy changes, new financial and business models, and the adoption of advanced technology. Most projects are rated as low risk and have delivered outcomes rated in the satisfactory range (figure 9.1). Data from 366 closed projects show that the largest share is clustered around low-risk projects with satisfactory range results. Projects rated as high risk with at least marginally satisfactory outcomes represent a smaller portion. No clear transition 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 adjustment required to support this aspiration has yet to occur. GEF Agencies display different attitudes toward risk and use varying criteria for risk measurement and management.

FIGURE 9.1 Heatmap of risk and outcome ratings



Source: 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. $n = 366$.

In many cases, 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 2024b).

Risk ratings for child projects under integrated programs show a moderate overall risk profile, generally below the GEF's stated risk appetite. In both the contextual and innovation dimensions, GEF-8 projects were within the moderate risk category. For contextual risks, GEF-8 projects were rated as substantial; for innovation, no project was rated as high despite the GEF's high-risk appetite for innovation. For execution risks, 49 percent of projects were rated as low and 42 percent as moderate: in this domain, the GEF risk appetite is moderate.

A few projects exhibit higher risk profiles. In GEF-8, the Enabling Large-Scale Ecosystem Restoration in Haiti through the Piloting and Implementation of Payments for Environmental Services Schemes (GEF ID 11130, United Nations Environment Programme) project and the Northern Mozambique Rural Resilience Project (GEF ID 11133, World Bank) are rated high risk across all context categories due to severe environmental degradation, insecurity, and social tensions. In innovation, no projects are rated high overall, but the Resilient Urban Sierra Leone Project (GEF ID 10768, World Bank) is rated substantial across institutional, technological, and financial risk categories, while Haiti's ecosystem restoration project has a high institutional and policy risk rating. For execution risks, Haiti again stands out, along with the Chad ecological corridors project (GEF ID 11138, International Union for Conservation of Nature), which faces fiduciary and procurement challenges.

Projects in fragile and conflict-affected situations carry higher risk ratings across all dimensions compared to those in more stable contexts. Compared to stand-alone, full-size projects, integrated program

child projects tend to have lower contextual and execution risk ratings, yet both groups show no high innovation risk ratings despite the GEF's appetite for risk-taking in this area.

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 9.2). 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 willingness and capacity for higher-risk engagement.

Outcomes of high-risk projects

High-risk projects typically exhibit greater variance in outcomes. Although a higher level of risk may sometimes be associated with lower outcomes, there are clear cases where high-risk projects have yielded significant benefits.

FIGURE 9.2 Risk profiles and outcomes

Mean risk rating at entry



Source: 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 that focused on solar energy and policies to reduce fossil fuel subsidies achieved the highest possible outcome ratings. These projects—all led by the United Nations Development Programme (UNDP) and conducted in Nepal, St. Vincent and the Grenadines, and the Marrakesh (GEF IDs 4345, 5297, and 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 (GEF ID 4841, UNDP) shows the benefits of long-term GEF engagement. In that project, 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.

Most GEF projects continue to operate within a low to moderate risk profile, and there is increasing recognition of the need for greater 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

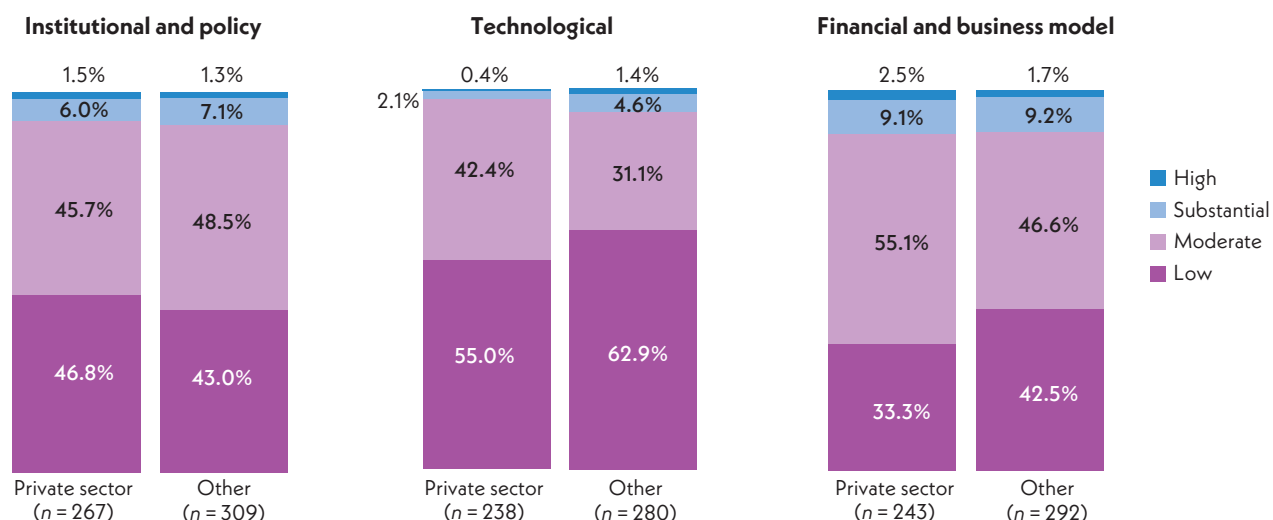
require clearer internal guidance, enhanced coordination with Agencies, and a shared understanding of risk within the GEF partnership.

Risk and technological innovation

After examining the overall risk profile of the GEF portfolio, this section focuses specifically on the risks associated with technological innovation.

The overall risk profile of technological innovation within the GEF portfolio is low to moderate, with no evidence that projects involving technological components systematically carry higher risks. Among 2,016 projects reviewed, only 4 (0.2 percent) were classified as having substantial or high technological risks, mostly due to low adoption rates or continued reliance on outdated technologies. Risk assessment of emerging technologies is often incomplete; for example, concerns about the energy demands of artificial intelligence (AI) or the data security implications of blockchain—well-documented risks identified by the STAP and the broader literature—are rarely addressed explicitly in project design, even if the eventuality of these risks could be limited.

An exception to the portfolio's overall low-to-moderate profile is private sector engagement projects, which tend to have higher innovation risk ratings than the rest of the portfolio. Since the adoption of the GEF risk appetite statement in 2024, private sector engagement projects have shown slightly lower contextual and execution risks but higher innovation risks, driven mainly by technological and financial model innovation ([figure 9.3](#)). Examples include the EarthRanger project (GEF ID 10551, Conservation International), which introduces private sector wildlife-monitoring software; and the low-emission vehicles project in Uzbekistan (GEF ID 10282, UNDP), which develops business models to attract private investment into a traditionally public transport sector.

FIGURE 9.3 Distribution of risk ratings for private sector engagement and other projects, by innovation risk category

Source: GEF Portal as of July 24, 2025.

Note: The risk rating for each category is based on the latest risk rating available for each project. No averaging was applied.

Despite the GEF's stated high appetite for innovation risk, most projects remain low risk by design, because countries and agencies often prioritize proposals perceived as more likely to secure approval.

These procedural and institutional constraints limit the number of projects that embrace higher-risk technological innovation, even where such approaches could deliver transformational impact.

9.2 TECHNOLOGICAL INNOVATION IN THE GEF PORTFOLIO

Building on this focus on technological innovation, the evaluation conducted a comprehensive analysis of technological innovations across the GEF portfolio. For the GEF-6, GEF-7, and GEF-8 portfolios, about 120 technologies were identified and organized into three categories: (1) emerging (or narrow) innovative technologies such as AI and green hydrogen; (2) broader innovative technologies such as digital platforms and

remote sensing; and (3) other technologies, representing broad and long-standing technologies. This taxonomy was applied to a portfolio of 2,016 projects.

Technological innovation profile of the GEF portfolio

Only 10 percent of GEF projects incorporate emerging or advanced technologies. In this regard, it is acknowledged that not all projects require cutting-edge technology to achieve their intended global environmental benefits. While 63 percent of projects across GEF-6 to GEF-8 include some form of technology, only 31 percent involve broader technological innovations, and just 10 percent feature emerging or advanced tools. The most common technological innovations are digital platforms (172 projects), remote sensing and geospatial tools (161), and nature-based solutions (97); more advanced applications such as data modeling (79 projects),

mobile apps (21), and sensor-based systems (20) are far less frequent.

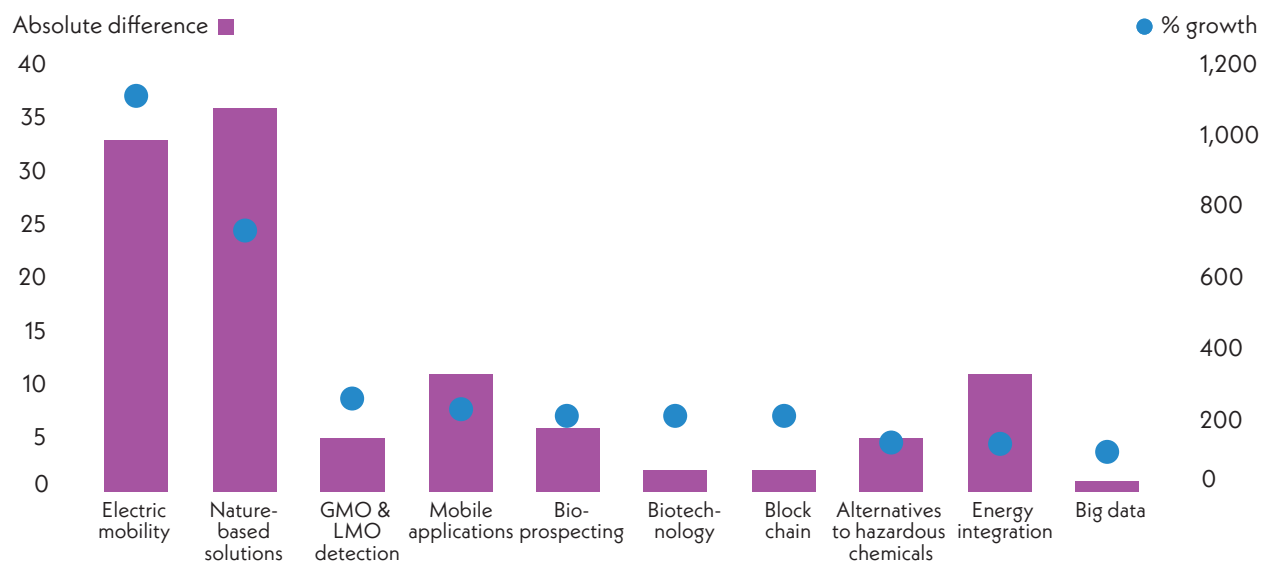
Disruptive technologies with high environmental potential remain rare. AI and machine learning are present in just 12 projects (0.6 percent) and typically play a supportive role, such as in drone-based risk mapping in Colombia (GEF ID 10438, Development Bank of Latin America and the Caribbean). Blockchain is found in only six projects (0.3 percent), and technologies like cellular agriculture and nanotechnology are largely absent. (The role of disruptive technologies is further discussed later in this section.)

Stakeholder interviews indicate that the overall recent focus on innovation in GEF strategies and approaches has supported the growth of technological innovations in GEF projects. From GEF-6 to GEF-7, the number of projects with innovations grew by 55 percent, with notable growth in areas such as electric mobility (from 3 to 36 projects) and nature-based solutions (from 5 to 41; [figure 9.4](#)). This expansion is

attributed to initiatives led by the GEF Secretariat, the Scientific and Technical Advisory Panel (STAP), and Agencies that have promoted innovation through programs like the Challenge Program for Adaptation Innovation under the LDCF/SCCF and the Innovation Window. While innovation is intended to be mainstreamed across the portfolio, these targeted funding windows have explicitly encouraged innovative approaches and helped attract nontraditional partners, including startups, investment and microfinance institutions, and technology-oriented academic institutions. For example, several Challenge Program projects incorporate AI/ML, blockchain, drones, and LiDAR. Similarly, three out of seven projects selected through the GEF-8 Innovation Window explicitly focus on technological innovation, including blockchain-satellite integration, AI/ML for wildlife monitoring, and machine learning for conservation planning.

Technological innovation is unevenly distributed across GEF focal areas, Agencies, and programming modalities, with the strongest presence in

FIGURE 9.4 Growth in top 10 broad and narrow technological innovations from GEF-6 to GEF-7



Source: GEF Portal as of June 30, 2024.

Note: GMO = genetically modified organism; LMO = living modified organism.

the international waters focal area and regional initiatives. Among the GEF focal areas, international waters stands out with the highest share of both broad (42 percent) and emerging/cutting-edge (21 percent) technologies—well above the portfolio average of 31 percent and 10 percent, respectively. This achievement is attributed to the focal area’s flexibility in piloting tools and its long-standing International Waters Learning Exchange and Resource Network ([IW:LEARN](#)) platform. Other focal areas—such as biodiversity, climate change, and land degradation—also show moderate engagement with technology, while chemicals and waste lags behind.

Some GEF Agencies—particularly UNDP, the International Fund for Agricultural Development, and multilateral development banks like the Asian Development Bank, Inter-American Development Bank, Development Bank of Latin America and the Caribbean, and African Development Bank—stand out for their higher adoption of emerging and cutting-edge technologies, with between 11 percent and 30 percent of their projects incorporating such innovations. Their relative success is attributed to a supportive institutional culture, greater experience with innovation, and access to technical and financial resources.

Geographically, technological innovations appear widely distributed, although they are more common in regional and global projects than in national ones. This distribution reflects the flexibility and broader partnership networks at the regional and global levels, which facilitate the inclusion of advanced technologies and collaboration with specialized global partners.

Integrated programming has supported the adoption of technological innovation, but its full potential remains untapped. As programming evolved from pilots to a more structured modality between GEF-6 and GEF-8, some programs made specific efforts to scale up transformational technologies. For example, the Food Systems Integrated Program (GEF ID 11214, FAO) provides guidance to child

projects on adopting and disseminating agri-tech solutions. In the Sustainable Cities Program, 30 percent of projects incorporated broader technological innovations—such as digital platforms, remote sensing, data modeling, nature-based solutions, and smart grids—indicating progress but not yet at a level exceeding that of the broader GEF portfolio.

Despite the GEF’s stated appetite for high-risk innovation, technological innovation risk ratings remain low to moderate, including within integrated programs. This conservative risk profile points to structural limitations: interviewees noted the absence of frameworks to guide technology selection, such as technology readiness indices, and the underuse of integrated programming knowledge platforms due to limited funding and staffing.

Several disruptive technologies with the potential to generate positive environmental and socioeconomic benefits at a large scale remain largely absent from the GEF portfolio. For example, blockchain is present in only six projects, while nanotechnology and cellular agriculture were not identified in any project. These technologies offer considerable opportunities for environmental impact: blockchain can improve supply chain transparency and enhance the integrity of carbon credit verification, nanotechnology holds promise for water purification and pollution remediation, and cellular agriculture could substantially reduce the environmental footprint of food production. The limited uptake of such technologies is not aligned with the pace of global technological development or the expertise already available within several GEF Agencies and multilateral organizations. For instance, UNDP has established a Blockchain Academy to support UN personnel across more than 170 countries (UNDP 2024), and the Food and Agriculture Organization (FAO) of the United Nations has developed specialized knowledge in cell-based protein and other emerging technologies. The global market for nanotechnology alone is projected to grow from \$68.0 billion in 2023

to \$183.7 billion by 2028, with applications already being commercialized in sectors relevant to GEF focal areas, including in African countries. Limited support for disruptive technologies with potentially high pay-offs constitutes a strategic risk, particularly considering the urgency and scale of environmental challenges that require transformational change.

Effectiveness in projects with technological innovation

Technological innovations are associated with transformational change (Donaldson and Ratner 2023; GEF IEO 2018b). In Uruguay, for example, the GEF supported wind energy development at an early stage through technical assistance and policy support (GEF ID 2826, UNDP). This project helped reduce perceived investment risks and paved the way for Uruguay's large-scale transition to renewable energy. By 2016, wind power accounted for more than 30 percent of the country's electricity generation, demonstrating how GEF interventions with a strong technological component can lead to sector-wide transformation. Similarly, in China, a persistent organic pollutants (POPs) management and disposal project (GEF ID 2926, United Nations Industrial Development Organization [UNIDO]) contributed to transformational change by introducing technologies such as cement kiln co-processing to safely destroy POPs at scale. Supported by enabling policies and private sector engagement, the project significantly exceeded its original targets, eliminating 5 times more pesticides, 3 times more fly ash dioxins, and 80 times more fly ash than initially planned. As a result, the project reduced health risks for over 15 million people (Zazueta and Liu 2018). These examples 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.

Technological innovations have contributed to improved environmental monitoring and decision-making and environmental benefits across the GEF portfolio. Improved monitoring has been achieved through the use of remote sensing, drones, and AI and machine learning technologies. For example, the [Trends.Earth](#) platform, supported through a series of Conservation International projects (GEF IDs 9163, 10230, 11834), provides free global data sets for tracking changes in land degradation, supporting countries in their reporting commitments under the UN Convention to Combat Desertification.

Furthermore, technological innovations have contributed to multiple environmental benefits. These benefits include protection of endangered species and ecosystems and efforts to combat illegal wildlife trade through tools such as Global Positioning System (GPS) tracking, forensic technologies, and digital platforms that enable traceability and rapid decision-making (GEF IEO forthcoming-n). Other examples include reductions in greenhouse gas emissions through electric vehicle deployment, renewable energy integration, and grid modernization (e.g., GEF ID 9147, UNIDO; GEF ID 9223, World Bank); reduced water pollution via the use of constructed wetlands (e.g., GEF ID 6962, UNDP); and improved chemicals management through the adoption of noncombustion hazardous waste disposal technologies (e.g., GEF ID 1692, UNDP; GEF ID 2329, UNIDO; GEF ID 4386, UNIDO).

Socioeconomic benefits linked to technological innovations have also been reported. These benefits include job creation through nature-based solutions (GEF ID 10768, World Bank); increases in local revenue through improved property tax systems using remote sensing (GEF ID 10768, World Bank); and market expansion driven by electric vehicle supply chains (GEF ID 9147, UNIDO; GEF ID 9223, World Bank). In agricultural systems, the application of advanced watershed treatment technologies

has contributed to higher farm incomes (GEF IEO 2018b). The Global Cleantech Innovation Programme, a GEF-UNIDO initiative, has helped strengthen innovation and entrepreneurship ecosystems, supporting small and medium enterprises in transforming cleantech innovations into viable, investment-ready businesses. Project activities such as national investor forums proved effective in securing capital. Following a GEF IEO (2020) evaluation, the program sharpened its objective to more explicitly foster private sector engagement and investment at scale, prioritizing innovations in areas such as electric mobility, decentralized renewable energy and energy storage, energy efficiency, and cleantech related to sustainable cities and sustainable food systems. Additionally, the AgTech Agventures II Fund, a nongrant instrument (GEF ID 10336, Inter-American Development Bank), is working to establish a venture capital model for novel agricultural technologies in Latin America. To date, the fund has secured \$58 million in investment for 17 technology startups offering digital, biotech, and automation solutions aimed at reducing greenhouse gas emissions, preventing land degradation, improving chemical management, and enhancing the livelihoods of small and medium-size farms.

Enablers and barriers to technological innovation

Based on the analysis of technological innovation across the GEF portfolio, several key factors emerge that either facilitate or hinder the effective support of technological innovation. Understanding these enablers and barriers is crucial for strengthening the GEF's capacity to support technological innovation in future programming.

Several key enablers support technological innovation within the GEF partnership. These include institutional capacity and culture, financial and organizational mechanisms, strategic partnerships, supportive national policy frameworks, and technological readiness. Institutional capacity and culture

that promote innovation are reflected in the willingness of the GEF Secretariat and Agencies to encourage risk-taking, strengthen knowledge management, and leverage integrated programming and advisory support from the STAP, alongside drawing on technical expertise within Agencies and countries. Financial and organizational mechanisms that facilitate innovation include flexible funding windows (such as the Innovation Window and Challenge Programs), nongrant instruments, and blended finance approaches designed to share and manage risk.

Effective partnerships—particularly with private sector actors, global institutions, research organizations, and knowledge-sharing initiatives—further enhance innovation by enabling access to technical resources, infrastructure, and financing. National policies and strategic frameworks, including those related to electric mobility, green hydrogen, and enabling regulatory environments, create favorable conditions for technology adoption. Lastly, the presence of technological readiness and infrastructure—such as advances in AI/ML, blockchain, digital integration, and access to enabling platforms—forms the foundation for deploying and scaling technological solutions.

However, some barriers continue to limit the GEF's ability to effectively support technological innovation. Key barriers include the absence of a system-wide strategy or approach for technological innovation and horizon scanning—that is, systematic monitoring and analysis of emerging technological trends and their potential applications—a project cycle that is misaligned with the rapid pace of technological change, limited strategic partnerships with the private sector, and weak country-level capacity and infrastructure to adopt and sustain new technologies.

The most significant barrier is strategic. The GEF currently lacks comprehensive, system-wide approaches and tools to support countries and Agencies in identifying, testing, deploying, and scaling technological innovations across its portfolio. Operating under

a demand-driven model, the GEF Secretariat primarily responds to proposals developed by countries and Agencies. While this model ensures country ownership, it limits the Secretariat's ability to proactively guide innovation or systematically identify opportunities for high-impact technologies. As a result, some promising opportunities with significant environmental potential may have been missed, partly due to limited horizon scanning and trend monitoring on emerging technologies. Although the STAP provides guidance on technological innovation, its recommendations have seen limited uptake in project design and implementation.

In addition, the GEF project cycle is not well aligned with the fast pace of technological advancement. Integrating innovative technologies often requires flexibility in project design, the ability to fund research and piloting components, and mechanisms to adapt partnerships or technologies during implementation—needs that are not fully accommodated by current GEF processes. The IEO has previously highlighted the need for greater encouragement of adaptive management, especially for projects involving innovative interventions (GEF IEO 2021).

Country-level capacity constraints also pose a significant barrier. Many countries face shortages of qualified professionals in environmental technology fields, limited access to technology infrastructure, low technological literacy, and institutional resource gaps. Gender disparities, outdated data systems, fragmented stakeholder coordination, and overreliance on external technical services further complicate efforts to scale innovation. These factors make it difficult to replicate successful innovations and limit the potential for transformational outcomes across regions and sectors.

These include the demand-driven nature of the GEF business model, the absence of a strategic approach to emerging technologies, and ongoing funding and capacity constraints among both implementing and recipient partners.

9.3 SUMMARY

Innovation and risk are inseparable drivers of the GEF's mission—particularly against a backdrop of mounting global environmental challenges. By embracing higher-risk, higher-reward approaches and strategically scaling successful innovations, the GEF can amplify its catalytic role in addressing urgent environmental challenges and achieving lasting global impact. Calculated risk-taking and the adoption of innovative technologies, policies, and financing models are thus critical to unlock systemic change. The GEF has taken steps to align its risk appetite with transformational goals, designating a high tolerance for innovation risk. Yet most projects remain low to moderate risk by design, limiting the uptake of disruptive technologies such as AI, blockchain, and nanotechnology that hold the potential to reshape sectors, open new markets, and scale environmental and socioeconomic benefits.

Evidence shows that when innovation is combined with enabling policies, institutional capacity, and financial mechanisms, the GEF can achieve transformational change. Examples include the early stage wind energy investments that helped transform Uruguay's power sector, and the POPs project in China that exceeded targets and reduced health risks for millions. Similarly, digital monitoring platforms, remote sensing, and electric mobility initiatives illustrate how innovations, once piloted, can be scaled and replicated to multiply global environmental benefits.

To fully realize its catalytic role, the GEF must bridge the gap between its high stated appetite for innovation risk and its conservative portfolio practice. This requires horizon scanning for emerging technologies, stronger adaptive management, and deeper country and agency capacity building. Scaling technological, institutional, and financial innovations together will be essential to move beyond project-level success and enable transformational change across systems.

PART IV

GEF
institutional
framework



Partners and financing

The GEF operates through a unique partnership model that brings together recipient countries, 18 GEF Agencies, the Scientific and Technical Advisory Panel (STAP), civil society organizations (CSOs) and the GEF-CSO Network, the private sector, and a diverse network of donors. Strengthening the effectiveness of the GEF partnership and its financing is increasingly critical as environmental challenges grow in scale and complexity. As the financial mechanism for multiple environmental conventions, the GEF relies not only on the performance of its broad partnership, but also on strong and sustained donor support. Donor financing is essential to maintaining the scale, flexibility, and ambition of GEF programming, while the ability to mobilize and raise cofinancing from other partners amplifies the reach and impact of GEF investments.

[Chapter 8](#) focused on the role of one GEF partner—the private sector—in fostering innovation and scale; this chapter focuses on the broader GEF partnership that, supported by contributions from donor countries and cofinancing, drives delivery and enables the GEF to deliver integrated solutions for biodiversity, climate change, land degradation, international waters, and chemicals and waste, while advancing sustainable development at local, national, and global scales. This chapter examines how these components interact, where progress has been made, and what improvements to the partnership model are needed to strengthen cooperation, responsiveness, and overall effectiveness of GEF programming.

10.1 THE GEF PARTNERSHIP

This section focuses on the main components of the GEF partnership—specifically, the countries in which GEF initiatives are undertaken, the GEF Agencies that undertake these initiatives, the STAP, and civil society.

Guided by its Country Engagement Strategy (CES), the GEF supports countries in aligning global environmental commitments with national priorities through country-driven programming and multistakeholder dialogue. The GEF Agencies—including United Nations (UN) entities, multilateral development banks, and international nongovernmental organizations (INGOs)—translate these priorities into actionable projects and programs. The STAP ensures that scientific rigor and innovative approaches inform GEF investments; while civil society completes the partnership circle by fostering community participation, inclusion, accountability, and local legitimacy.

Country partners and the Country Engagement Strategy

The GEF brings together both donor and recipient countries through a council structure that reflects a broad and inclusive set of constituencies, ensuring diverse perspectives in decision-making. Each country appoints a GEF operational focal point (OFP) to

coordinate national engagement, identify priorities, and align GEF support with national strategies.

The diversity of partners and partnerships supports country priorities through both project-based operations and dedicated mechanisms that strengthen country ownership and alignment with global environmental priorities. A key mechanism is the CES, launched in October 2022 as an evolution of the earlier Country Support Program (CSP). The CES is an important mechanism aimed at helping recipient countries make informed, impactful decisions on the use of GEF resources while enhancing sustainability, coherence with national policies, and visibility of GEF support. By consolidating various country engagement activities into 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 for environmental benefits, and promote coordination with other environmental funding sources. This section focuses on recent adjustments under the CES, including its expanded scope, structure, and budget, and highlights how these changes aim to provide deeper, more integrated support to countries.

HOW THE CES WORKS

In the absence of a theory of change for the CES, [figure 10.1](#) provides a visual summary of the CES intervention logic developed by the IEO and seeks to identify the underlying drivers and assumptions that must hold for CES components to influence expected outcomes and impacts.¹

¹ Intervention logic focuses on a clear, linear results chain—linking inputs, activities, outputs, outcomes, and impacts—primarily for planning, monitoring, and accountability. In contrast, a theory of change explores the broader context, assumptions, and causal pathways behind how and why change is expected to occur, supporting learning and adaptive management.

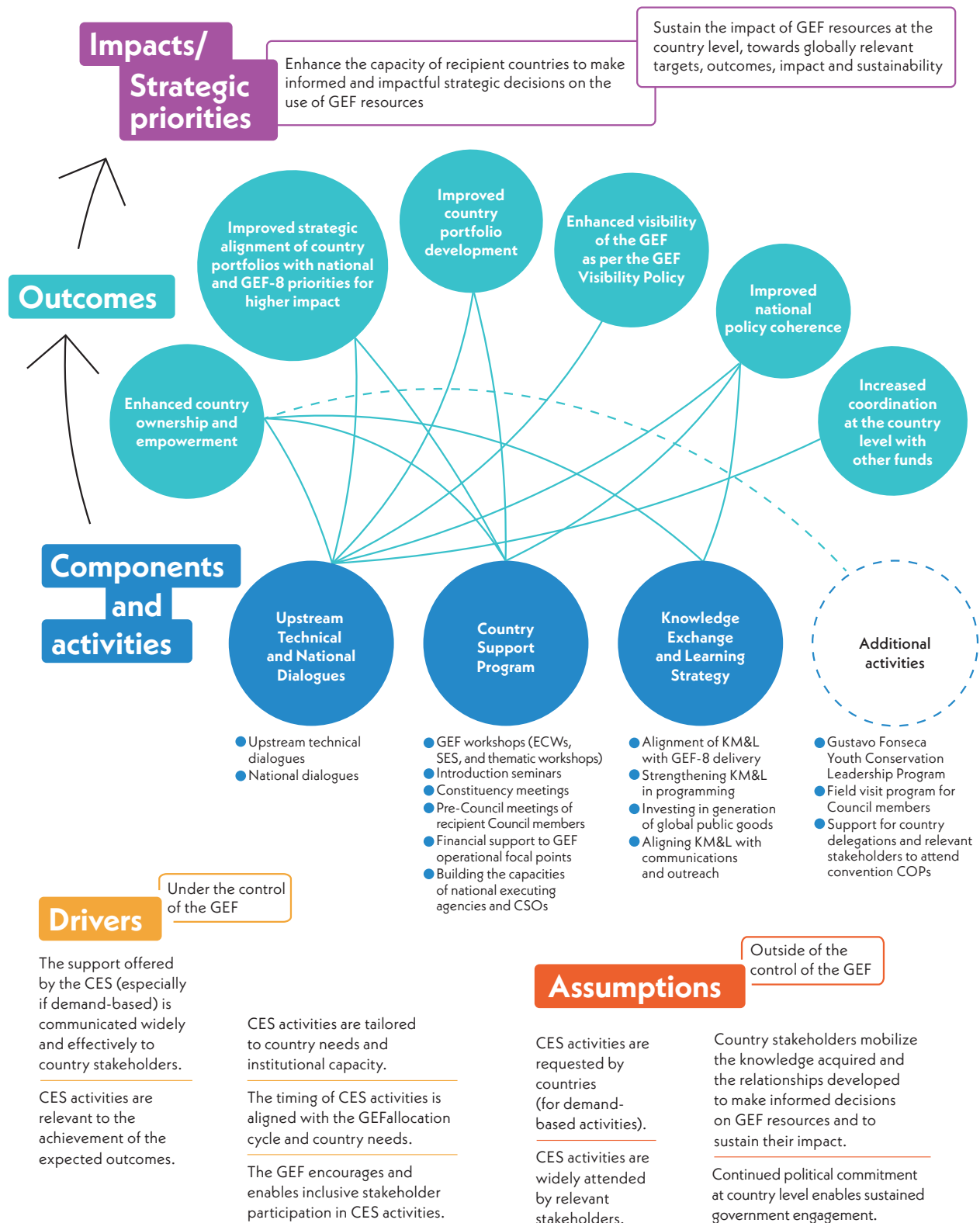
The CES is structured around four key components: upstream technical and national dialogues; the CSP, including ongoing and new activities such as financial support to GEF OFPs; the Knowledge Management and Learning (KM&L) Strategy; and a range of supplementary initiatives, including the Gustavo Fonseca Youth Conservation Leadership Program, Council member field visits, and support for international convention participation.

The total CES budget for GEF-8 rose by 44 percent from the GEF-7 CSP level. With an allocation of \$40.2 million, up from \$21.0 million in GEF-7 and representing 0.8 percent of the total GEF-8 budget, the CES budget's increase over that of the GEF-7 CSP reflected an ambition to provide deeper, more integrated support to countries. The budget included \$27.0 million for core CES activities and \$13.2 million for additional programs. On the other hand, the budget for legacy CSP activities declined by 14 percent. National dialogues and constituency meetings accounted for the largest share of the CES budget.

PROGRESS IN CES IMPLEMENTATION

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 activities 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.

By June 30, 2025, CES implementation remained uneven, with significant variations in performance across activities, countries, and regions. As of end June 2025, 75 CES activities had been conducted, a reduction from the 103 activities implemented at the same point in GEF-7. This shortfall in delivery is particularly concerning given the expanded mandate and

FIGURE 10.1 Intervention logic of the Country Engagement Strategy

Source: GEF IEO forthcoming-g.

budget of the CES. Among the activities, 29 national dialogues had been held, putting the program on track to meet its GEF-8 target of 50—although many occurred later than optimal, limiting their influence on programming. Survey data further indicate mixed perceptions of timeliness, with just over half (56 percent) of respondents rating CES activities as timely to support GEF-8 programming. While GEF-8 integrated program rollout workshops were timely, national dialogues were less effectively leveraged.

Expanded constituency workshops also fell short, with only 10 out of a planned 22 held by June 2025, because priority was given to GEF-8 integrated program rollout workshops. Other activities, such as the Stakeholder Empowerment Series and building execution capacity of stakeholders, had not begun implementation. In contrast, introduction seminars were nearly on track, with three of four planned sessions completed, benefiting from a virtual delivery format. The Gustavo Fonseca Youth Conservation Leadership Program supported 187 participants, and 39 individuals received support to attend conferences of the parties (COPs) under the relevant environmental conventions. Of a potential total of 76 constituency meetings, 20 were held; and only one pre-Council meeting had taken place. The uneven implementation of these demand-based activities highlighted a systemic issue: OFPs, who are responsible for initiating many CES engagements, often lacked the necessary institutional support, information, or time to proactively engage with the GEF Secretariat.

Performance data reveal disparities in budget execution across the CES. As of end June 2025, 47 percent of the CES's \$40.2 million budget had been committed or disbursed, with significant variation across activities. For example, 90 percent of the budget for constituency meetings was used, while less than half was disbursed for national dialogues, financial support for OFPs, and knowledge exchange and learning; this last accounted for only 3 percent of the budgeted amount. Delays in disbursing funds for OFP

support were largely due to World Bank regulations that prohibit direct transfers to individuals. This challenge was addressed through ancillary agreements, first piloted under the Gustavo Fonseca Youth Conservation Leadership Program, which has successfully disbursed 72 percent of its budget by providing fellowships to 187 participants.

Regional differences in CES activity are pronounced.

The Africa region, with the largest number of least developed countries (LDCs), had the highest participation rate, including 18 of the 29 national dialogues. Countries in Asia and the Pacific showed more balance between national dialogues and constituency meetings, while Latin America and the Caribbean participated in a broader range of newer activities, including the youth program and COP support. In contrast, Eastern Europe and Central Asia—a region with relatively higher institutional capacity—had minimal engagement and no national dialogues during the period reviewed.

Participation in CES activities has been strong among LDCs, but more limited for small island developing states (SIDS), revealing important geographic disparities. LDCs accounted for 44 percent of national dialogues (13 of 29) and participated in more than half of CES activities overall. This high engagement rate reflects both strong need and successful outreach. SIDS, by contrast, were comparatively less represented, participating in only 14 percent of national dialogues and 33 percent of all CES activities. Their participation was somewhat higher in virtual events, such as introduction seminars, due to fewer logistical barriers. Still, the lack of activities explicitly tailored to the unique needs of SIDS remains a missed opportunity.

CES ACHIEVEMENTS

The CES has made meaningful contributions to enhancing country ownership and strengthening country portfolio development, particularly in cases

where countries engaged in a wide range of its activities. In the Philippines, for instance, the CES contributed significantly to portfolio development. The national dialogue was carefully designed around project concept presentations and stakeholder feedback. It was preceded by a GEF-8 regional workshop and followed by bilateral meetings with GEF Secretariat staff; these allowed the country to refine its portfolio. Suriname, which had not held a national dialogue since 2009, used its 2024 event to launch a more inclusive and participatory approach to portfolio development for GEF-9. In Honduras, the CES helped raise awareness of opportunities beyond the System for Transparent Allocation of Resources (STAR) allocation, including the Global Biodiversity Framework Fund and the Capacity-building Initiative for Transparency, which translated into the development of proposals under multiple funding windows. Such examples underscore the potential of CES activities to strengthen strategic planning and stakeholder engagement at the national level.

The CES contributed to improved alignment between country portfolios and both national development plans and GEF programming objectives. In Uganda, for example, the CES accomplished this by creating space during the programming phase to assess how proposed projects relate to national development objectives and to identify new project ideas aligned with these priorities.

Participation in CES events increased awareness of GEF-8 focal area strategies, priorities, funding windows, and programming expectations. For example, in the Philippines, as a follow-up to the national dialogue, the GEF Secretariat staff provided detailed feedback to the OFP team on the proposed portfolio. This feedback addressed the potential eligibility of each project and the key elements that needed to be considered to better align them with an integrated programming focus.

The CES has played an indirect but supportive role in advancing policy coherence within GEF recipient

countries. As emphasized in the GEF's strategic roadmap for enhancing policy coherence (GEF 2023), this objective is embedded within the CES framework. Through interviews and field observations, it is evident that CES activities contribute to policy coherence primarily by fostering cross-sectoral engagement. For instance, CES initiatives have encouraged OFPs to include ministries of finance and planning in national dialogues and to establish interministerial GEF national steering committees. Additionally, expanded constituency workshops prompt country delegations to collaborate with diverse sectoral agencies during the preparation of integrated program child projects. These efforts have reportedly improved interministerial communication and coordination. However, their influence on formal policy alignment or long-term reform remains difficult to assess, given the limited systems in place to track such outcomes. Overall, the CES is currently better positioned as a mechanism for enabling dialogue and coordination than as a direct driver of sustained policy reform.

In terms of coordination with other multilateral climate funds, the CES had limited traction but demonstrated potential. The most notable examples came from Uganda and Rwanda, where joint programming consultations with the Green Climate Fund (GCF) were held in conjunction with CES national dialogues. These engagements led to country-driven discussions on aligning GEF and GCF investments and, in Uganda's case, influenced the reorganization of a national climate finance unit.

The CES contributed to raising the visibility of the GEF within countries, although results varied. In countries such as Lesotho and Suriname, CES activities were instrumental in raising awareness of the GEF among national stakeholders, some of whom had limited prior exposure to its role. In Lesotho, the national dialogue directly led to increased interest among CSOs in the Small Grants Programme. However, beyond event participation, visibility gains were often

limited and did not consistently translate into broader recognition of the GEF's role among communities or implementing partners. In some cases, the visibility of GEF-funded projects on the ground can be overshadowed by the presence of lead Agencies such as the United Nations Development Programme (UNDP) or the United Nations Environment Programme (UNEP). These examples highlight the potential of the CES to strengthen GEF visibility, while pointing to the need for more targeted efforts across different scales.

In terms of inclusiveness, the CES was widely perceived as an improvement over earlier frameworks.

Introduction seminars reached an average of 910 participants under CES—compared to only 80 in GEF-7—primarily due to the adoption of virtual formats. The CES was successful in reaching a wide array of stakeholders, including government agencies, CSOs, academics, and the private sector. LDCs participated in more than half of all CES activities and hosted 13 of the 29 national dialogues. SIDS, while well represented in virtual seminars and GEF workshops, were notably underrepresented in national dialogues, with only four held across SIDS. This imbalance highlighted the need for more tailored approaches to ensure that CES activities are accessible and relevant to smaller and more vulnerable countries.

IMPLEMENTATION GAPS AND AREAS FOR STRENGTHENING

Structural challenges—including limited OFP capacity, heavy Secretariat workloads, and weak internal coordination—contributed to uneven implementation of the CES. In many countries, CES-supported participation was largely event based and short term. Limited OFP capacity often hindered the uptake of CES activities. Thailand was a notable exception in this regard; its strong OFP organizational capacity enabled early national dialogue and follow-through on proposals. By the midpoint of GEF-8, several planned activities—such as direct financial support to OFPs and capacity building for broader stakeholder

engagement—had yet to be launched. Only a few countries experienced multiple or sustained engagements, and opportunities to create synergies across activities were frequently missed, reducing cumulative impact and momentum.

Ownership and engagement remain uneven. Sustainability of engagement was weak, with minimal follow-up mechanisms and delays in financial support undermining long-term effectiveness. Stakeholders outside central government rarely remained involved beyond initial meetings due to unclear roles, insufficient follow-up, and limited capacity. OFPs, although central to continuous engagement, often operate with staffing shortages and weak institutional mandates. Additionally, the absence of a central management system, a clearly articulated strategy design, and measurable indicators further limited accountability and hindered assessment of CES outcomes. The recent introduction of direct OFP support through ancillary agreements is a positive step forward, but it came too late in the replenishment period to influence early programming.

Delayed timing of national dialogues reduces strategic effectiveness. Many national dialogues are held too late in the GEF replenishment cycle, reducing their ability to influence programming decisions. Survey results show that only 56 percent of respondents felt that CES activities were timely in supporting GEF-8 programming in their country, indicating that many activities were not optimally scheduled to meet national needs. In Lesotho, for example, the national dialogue took place more than a year into the GEF-8 period, limiting its ability to influence the use of STAR allocations and align project proposals with evolving GEF priorities. Stakeholders emphasized the importance of convening national dialogues earlier in the replenishment period to enhance their relevance and impact on programming decisions.

Operational-level coordination with other multilateral funds is limited. Despite promising coordination

pilots in Rwanda and Uganda in partnership with the Task Force on Access to Climate Finance, broader operational collaboration between the GEF and other multilateral climate and environment funds remains limited. The GEF, the GCF, the Adaptation Fund, and the Climate Investment Funds did issue a joint declaration in 2023 committing to stronger cooperation, including on capacity building, but this vision has yet to be operationalized at scale through the CES and other processes, limiting opportunities for synergistic programming and resource mobilization. In GEF-8, subregional programming workshops in the Pacific, Indian, and Atlantic Oceans were organized under the LDCF/SCCF with participation from the GCF, enabling countries to explore potential synergies; their contribution to sustained coordination will depend on whether follow-up actions translate into tangible outcomes.

To improve effectiveness under GEF-9, the CES must reinforce both its strategic vision and operational execution. Establishing a clear theory of change, accompanied by SMART (specific, measurable, achievable, relevant, time-bound) indicators and a robust monitoring system, is essential to guide implementation and assess results. Strengthened leadership and coordination across the GEF Secretariat are necessary to reduce fragmentation and improve responsiveness. A more differentiated approach—tailored to the diverse capacities and needs of countries, particularly LDCs and SIDS—should underpin future programming. Deeper and more systematic engagement of OFPs, civil society, Indigenous Peoples, youth, and the private sector is needed to broaden ownership and ensure inclusivity. Finally, closer collaboration with other multilateral climate funds would support alignment, reduce duplication, and amplify impact at the country level. While the CES has laid a strong foundation for country-driven engagement, its success in GEF-9 will depend on more coherent, sustained, and adaptive delivery.

GEF Agencies

The strength of the GEF partnership lies in its broad and diverse network of 18 accredited Agencies.

These include UN bodies, multilateral development banks, and INGOs. This structure offers countries a wide range of implementation partners with complementary strengths. The UN entities provide technical expertise and alignment with global conventions; the multilateral development banks bring financial scale, policy influence, and access to high-level government stakeholders; and the INGOs contribute to innovation, inclusiveness, and strong local engagement. The GEF Agencies support countries in designing and implementing GEF-financed projects. Over 180 countries have benefited from GEF funding, with the GEF serving as the financial mechanism for key multilateral environmental agreements.

Agency relationships are integral to the GEF's operational systems, because GEF Agencies are responsible for translating GEF policies into action through project design, implementation, and oversight. The Agencies operate within their own institutional frameworks, but must meet GEF accreditation standards and comply with key policies on safeguards, gender equality, and stakeholder engagement. They manage financial flows, procurement, risk, and results monitoring, serving as the conduit between country-level execution and GEF-wide operational requirements.

DUAL ROLE OF AGENCIES

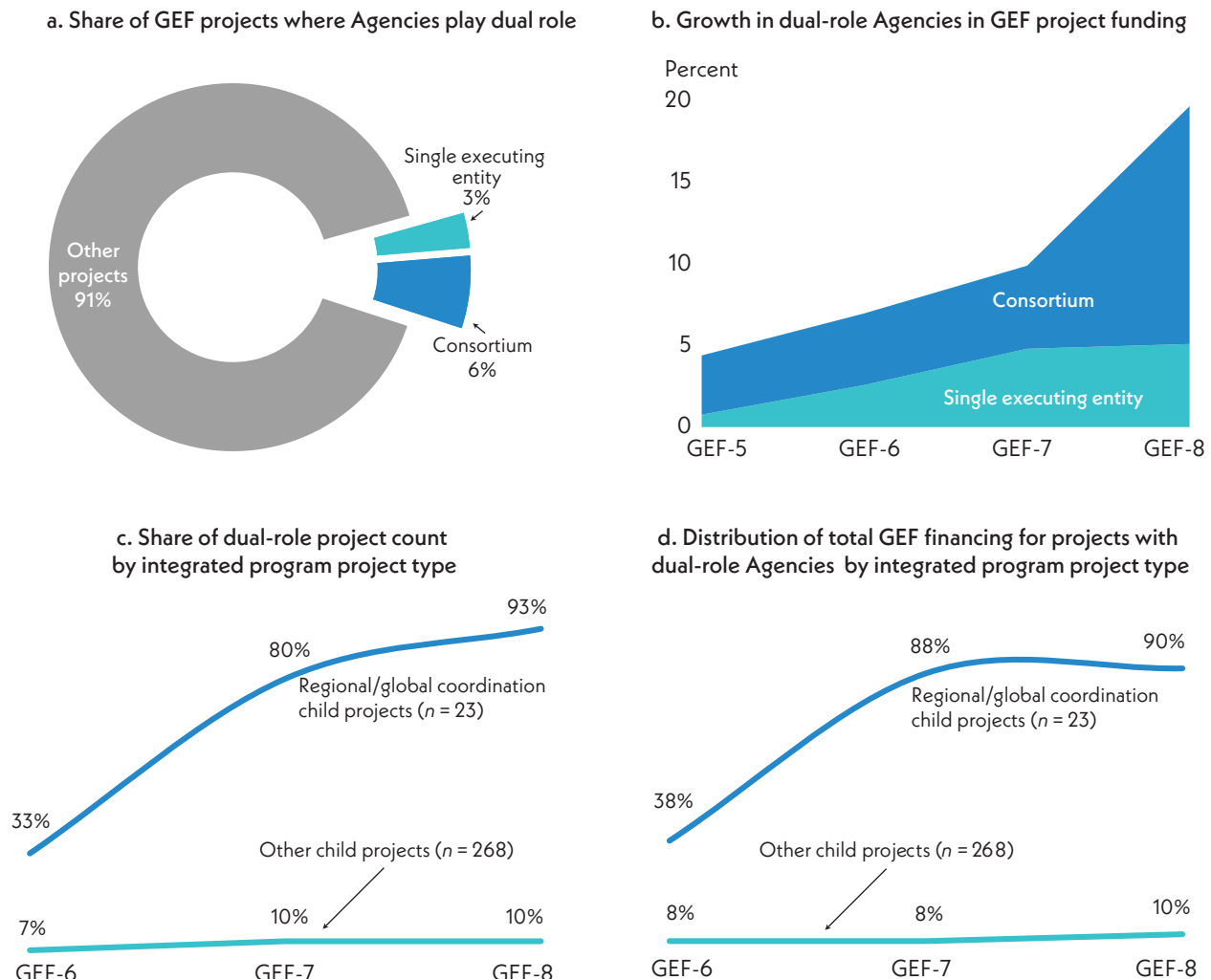
A growing number of GEF Agencies are assuming dual roles in both project implementation and execution. While the GEF defines these as distinct functions that should remain separate, flexibility is permitted in specific cases where a dual role is justified (GEF 2012, 2019a, 2025). Since GEF-5, projects involving a GEF Agency serving as both implementing and executing agency have accounted for 9 percent of the overall portfolio ([figure 10.2a](#)). The share of such projects rose

from 5 percent of projects and 4 percent of GEF financing in GEF-5 to 20 percent of projects and 23 percent of financing in GEF-8 (figure 10.2b). The prevalence of dual-role projects is notably higher among the regional/global coordination projects under integrated programs, largely due to the coordinating role played by the lead GEF Agency, which often also serves as the executing agency (figure 10.2c and figure 10.2d).

Dual-role arrangements are more common in global and regional projects than in national ones. For

example, 36 percent of global projects—and 44 percent of associated GEF financing—involve a GEF Agency serving in both implementation and execution roles. At the national level, dual-role use varies little between LDCs/SIDS and other countries, although such arrangements are more frequent in fragile or conflict-affected situations (FCS) than in non-FCS contexts. This reflects capacity and risk considerations: many FCS countries have limited institutional capacity and few reliable local partners to serve as executors. Assigning both roles to a single experienced Agency

FIGURE 10.2 Prevalence and trends in GEF projects where Agencies perform a dual role



Source: GEF Portal as of June 30, 2025.

Note: "Consortium" refers to instances where the dual-role Agency is one of two or more executing agencies.

helps manage fiduciary and operational risks; streamline oversight; and enable faster mobilization in environments where stability, security, and administrative systems are weak.

This modality is most often used by Agencies, including the Asian Development Bank (ADB), Conservation International, the Development Bank of Southern Africa, the European Bank for Reconstruction and Development, the International Union for Conservation of Nature, UNEP, and the World Wildlife Fund–US. Of the original three GEF Agencies, UNEP employs the dual-role approach more frequently than the others. Across different project modalities, the dual-role arrangement is more common in enabling activities, representing 11 percent of such projects and 34 percent of their GEF financing. It is also relatively prevalent in nongrant instrument (NGI) projects, accounting for 15 percent of projects and 26 percent of NGI-related GEF financing.

During implementation, a small but notable share of projects see GEF Agencies transition to a dual role. Of the 2,494 projects that began implementation, 203 (8 percent) reported a minor amendment or requested a major amendment requiring CEO endorsement or approval. Of those 203 projects, 26 (13 percent of amended projects and 1 percent of the total) adopted or proposed a dual-role arrangement. In 80 percent of the cases where such a switch occurs, the respective Agency assumes an executing role as part of a consortium (i.e., in partnership with other Agencies).

The main reasons cited in requests for amendment for transitioning to a dual role were to address capacity limitations, enhance operational efficiency, and ensure project continuity. The most common reason for dual-role transition—cited by 35 percent—was to address capacity limitations, especially in recruitment, procurement, and knowledge management. Additionally, 19 percent aimed to increase operational speed or resolve delays; 12 percent transitioned due to the withdrawal of an executing entity, requiring the GEF

Agency to take on additional responsibilities to ensure project continuity.

A survey of 33 OFPs found that 70 percent supported allowing GEF Agencies to assume a dual role as both implementing and executing entity. Support varied by country group: 46 percent of respondents from LDCs and SIDS ($n = 13$) were in favor, compared to 85 percent from other countries ($n = 20$). Among supporters, 91 percent cited limited national capacity, and 52 percent pointed to challenging national contexts. About 30 percent noted other barriers, including procedural constraints, restrictions on national agencies accessing GEF funds, and small project budgets. In contrast, 30 percent of respondents opposed dual-role arrangements under any circumstances, citing concerns about conflicts of interest (70 percent), risks to national capacity development (50 percent), and threats to country ownership and sustainability (40 percent).

Stakeholder views on Agency implementation fees in dual-role arrangements are notably split, with clear differences between respondents from LDCs/SIDS and those from other countries. Under current GEF policy, Agency execution costs cannot be covered by GEF project funds and must instead come from cofinancing or national contributions (GEF 2025). When asked whether the implementation fee should be adjusted in dual-role scenarios, 65 percent of respondents believed the fee should remain the same or increase, and 35 percent favored a reduction. Among the 11 respondents who supported a fee reduction, 73 percent (8 individuals) were from LDCs/SIDS—despite this group representing only 39 percent of total respondents. In contrast, just 27 percent of fee-reduction supporters were from other countries, which made up 61 percent of the sample. These findings highlight a notable divergence in perspectives on Agency fees between LDCs/SIDS and other countries in the context of dual-role arrangements.

AGENCY COLLABORATION

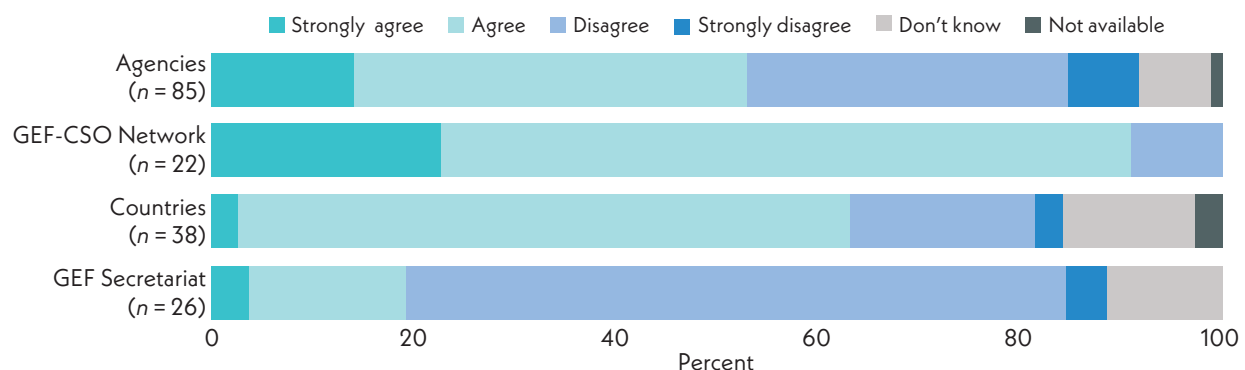
There is limited collaboration among GEF Agencies, which reduces opportunities for synergy, shared learning, and greater impact. The GEF currently lacks structured incentives to promote cooperation among Agencies, leading to competition—particularly within integrated programs—rather than joint effort. Survey evidence collected as part of the Eighth Comprehensive Evaluation of the GEF (OPS8) consistently points to limited collaboration as an area requiring attention ([figure 10.3](#)). The absence of institutional mechanisms to encourage joint planning and implementation has contributed to inter-Agency rivalry, especially regarding lead roles in parent and child projects. Even when GEF Agencies jointly implemented a project—as observed in several child projects under the Sustainable Cities Program—the level of collaboration among the implementing Agencies was low. Agencies tended to carry out their respective activities as separate projects, with limited coordination among them. Few stakeholders expressed strong confidence in current levels of collaboration, highlighting the need for systemic adjustments to better facilitate cooperative engagement.

AGENCY CHOICE AND CONCENTRATION

Since the GEF's establishment in 1991 with the World Bank, UNDP, and UNEP as founding Agencies, the GEF partnership has expanded in two major rounds. This expansion has broadened recipient countries' choice of Agencies. Greater choice has also reduced the concentration of GEF Trust Fund financing. According to GEF Portal data, concentration—measured by the Herfindahl-Hirschman Index—declined from 0.50 during the pilot phase to 0.25 in GEF-4. Following the second expansion, it fell further to 0.21 in GEF-6 and reached 0.16 in GEF-8—indicating a relatively low level of concentration with financing distributed more evenly across Agencies. Each expansion has therefore been followed by a significant drop in concentration.

Agency presence remains uneven across country groups. SIDS and fragile and conflict-affected situation areas continue to have fewer GEF Agencies, with particularly limited representation in Pacific SIDS (GEF IEO 2018a, forthcoming-t). Targeted expansion measures could help address these gaps.

FIGURE 10.3 Distribution of stakeholder perceptions on whether GEF Agencies cooperate in implementing GEF activities



Source: GEF IEO stakeholder survey conducted as part of GEF IEO forthcoming-b.

The Scientific and Technical Advisory Panel

The STAP plays a vital role in bringing science, innovation, and technical insight into GEF operations.

As the GEF's independent advisory body, the STAP supports evidence-based decision-making through thematic papers, early stage project reviews, and strategic advice on programs and policies. Its contributions—particularly through forward-looking thematic work on integrated programming, risk appetite, and innovation—have helped shape the direction of GEF strategies and enhance the scientific foundations of project design.

Science is at the core of the GEF's mission. The GEF has long recognized science as a critical foundation of its work and a unique competitive advantage in the crowded field of environmental finance. Each of the conventions is deeply rooted in scientific evidence—ranging from the climate modeling of the Intergovernmental Panel on Climate Change to the biodiversity assessments of the Convention on Biological Diversity. The conventions define global priorities based on scientific consensus and, by serving as their financial mechanism, the GEF ensures that its funding decisions are anchored in the best available knowledge about planetary systems, ecological thresholds, and environmental risks.

INTEGRATING SCIENCE AND INNOVATION ACROSS GEF OPERATIONS

The STAP serves as a key channel for integrating cutting-edge scientific and technical knowledge into its operations. Established to provide independent, objective advice on GEF policies, strategies, programs, and projects, the STAP's core responsibilities include implementing a work program developed with the GEF Secretariat and reviewing all full-size projects, preparing strategic notes for the GEF Council, flagging emerging issues, and promoting

evidence-based approaches across the GEF portfolio. For instance, the STAP strongly supported the move toward integrated programs. This shift has led to initiatives that span multiple environmental focal areas—such as biodiversity, climate change, and land degradation—reflecting the scientific reality that these challenges are interconnected and must be addressed systemically.

The STAP is tasked with promoting innovation and identifying emerging tools and approaches to strengthen environmental outcomes.

While its advisory role limits direct involvement in implementation, its recommendations have added value in advancing learning and improving project quality. As the GEF's mandate expands, the STAP has increasingly engaged with complex and cross-cutting topics; this has prompted constructive reflection on how to ensure that its advice remains both scientifically robust and practically relevant across diverse country contexts.

The STAP's role in fostering innovation is constrained by limited implementation engagement and misalignment with country realities.

The STAP plays an important but limited role in promoting innovation and scale within the GEF. Its mandate includes identifying emerging tools, technologies, and cross-disciplinary approaches to enhance environmental impact, and advising on their integration into project and program design. It is expected to support adaptive learning and the development of monitoring systems to track innovation uptake. However, the STAP's influence is constrained by its advisory role, with limited involvement in implementation or follow-up. Moreover, while its recommendations are grounded in sound science, they may not always align with country-level capacities, affecting their relevance and potential for scaling.

CONTRIBUTION

The STAP's thematic papers are widely regarded as its most impactful contribution; however, concerns

exist about the scope of its mandate and the burden of project reviews. STAP members themselves hold differing views on the panel's added value, though most agree that thematic papers offer the greatest potential to shape GEF operations. These papers also inform project-level assessments. Both STAP members and stakeholders noted that the review process is burdensome and raised questions about the panel's role in advising on topics that extend beyond its core scientific mandate. For example, issues such as risk appetite and NGIs, while relevant, may not align with the STAP's technical expertise.

The STAP's thematic work is broadly recognized as valuable, and many stakeholders share an interest in refining its role to keep pace with the GEF's evolving priorities. The STAP remains a unique and valuable asset to the GEF and has played a vital role in embedding scientific and technical rigor into GEF operations, contributing significantly through thematic guidance, project reviews, and thought leadership. However, its current structure, scope, and governance need to be better aligned with the evolving needs of the GEF. Stakeholders increasingly question the STAP's focus as it straddles the line between scientific and technical advice and operational review, with a growing share of input focused on theories of change, gender, and risk—areas beyond its core mandate. Updating its terms of reference—last substantively revised in 2011—offers an opportunity to align its structure, expertise, and work program with new strategic directions. Enhancing transparency, clarifying advisory roles, and ensuring a more structured performance and governance framework would strengthen the STAP's ability to provide timely, high-quality scientific input while supporting innovation and strategic alignment across the GEF partnership.

Civil society

CONTRIBUTION

CSOs are vital partners in the GEF's effort to deliver inclusive, sustainable, and locally grounded environmental solutions. Their knowledge of community priorities, ability to build trust, and practical experience in mobilizing grassroots participation position them as key actors across the GEF portfolio. From project design to implementation and monitoring, CSOs help ensure that interventions are responsive to local needs and more likely to deliver lasting results.

The GEF's Small Grants Programme demonstrates the potential of direct civil society engagement, supporting thousands of CSOs—often led by women, youth, and Indigenous Peoples—in developing community-based solutions. These initiatives frequently extend beyond project boundaries to strengthen local institutions, improve livelihoods, and catalyze behavioral change.

Beyond project delivery, CSOs play an important role in shaping inclusive processes, promoting gender equality, and enhancing transparency. In countries such as Indonesia and Peru, civil society engagement in project planning and social analysis has helped align initiatives with local dynamics and strengthened social outcomes. In other cases, CSOs have acted as accountability agents—helping mediate community concerns and resolve implementation challenges, as seen in countries such as Bolivia and Ghana.

The GEF-CSO Network complements the role of other GEF entities by linking grassroots experiences to global governance. Through its participation in expanded constituency workshops and regional dialogues, the network contributes to policy discussions and fosters stronger connections between CSOs, governments, and OFPs. However, its reach and influence remain uneven across regions, constrained by structural and resource limitations.

CHALLENGES AND PATHWAYS FOR IMPROVEMENT

There are clear opportunities to strengthen the GEF's partnership with civil society. CSOs are often engaged late in the project cycle, limiting their ability to influence upstream design and strategy. Administrative requirements and funding barriers can further restrict the participation of smaller or under-represented groups. Stakeholders note a gap between community-based approaches—typically designed by external actors and implemented with community participation; see [chapter 7](#) for more detail—and community-led ownership, where initiatives are originated, designed, and managed by the community itself. Bridging this gap could enhance local ownership, equity, and long-term sustainability of GEF-supported initiatives.

GEF-8 acknowledges these challenges and seeks to enhance CSO participation across the full project cycle—from planning and co-design to implementation and monitoring. Initiatives such as the GEF's Ecosystem Restoration Integrated Program are beginning to reflect this shift. At the same time, complementary roles for government remain essential—especially in areas requiring policy reform, such as land tenure and legal frameworks.

Ultimately, civil society is a crucial pillar of the GEF partnership. Strengthening this collaboration through earlier engagement, clearer roles, and more accessible resources will be key to delivering on the GEF's commitment to inclusive, locally led environmental action.

10.2 FINANCING

Donor financing

The GEF's donor base has been shrinking and becoming more concentrated over time, with a smaller group of donors providing an increasing share of total

contributions. While core support remains strong, this concentration increases the risk of funding volatility and reduced predictability—particularly if one or more major contributors reduce or delay their pledges. These trends highlight the importance of diversifying and broadening the donor base to strengthen financial resilience and sustain long-term programming.

The GEF Trust Fund has been primarily supported by a stable core of 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—France, Germany, Japan, Sweden, the United Kingdom, and the United States—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 replenishment periods. Beyond the GEF Trust Fund, Canada is the largest contributor to the GBFF and the third-largest donor to the SCCF. Belgium is the second-largest contributor to the LDCF and the fourth-largest to the SCCF.

Of the 34 countries that have contributed to the GEF Trust Fund 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 period. 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 funding—has 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. No countries from the Middle East and North Africa have contributed to the GEF Trust Fund, although several, including

Qatar and the United Arab Emirates, have pledged resources to other climate funds such as the GCF and the Adaptation Fund. Similarly, some GEF participant countries—including Latvia, Mongolia, Poland, and the Slovak Republic—have contributed to other climate mechanisms but not to the GEF since GEF-5. The LDCF has received contributions from five countries that have not contributed to the GEF Trust Fund: Estonia, Hungary, Iceland, Qatar, and Romania. Both the LDCF and the GBFF have received contributions from sub-national entities, although these remain very limited: about 1.4 percent for the LDCF and 1 percent or less for the GBFF of their total pledges.

Unlike other global funds, the GEF does not tap into a network of philanthropic foundations. Organizations such as the Global Fund to Fight AIDS, Tuberculosis, and Malaria have successfully incorporated the private sector and philanthropic organizations into their donor bases. While sovereign donors remain the most significant source of funding in all global funds, stronger engagement with nonsovereign donors could lead to more private sector engagement, opportunities for scaling up innovations, and avoid a decline, in real terms, in the GEF's funding base.

STAR financing

Introduced in 2010, the STAR allocates GEF funding to eligible recipient countries for the biodiversity, climate change, and land degradation focal areas. Other focal areas and special initiatives—such as chemicals and waste, international waters, the Least Developed Countries Fund, and the Special Climate Change Fund—operate outside its scope. Under GEF-8, national ownership was strengthened by granting countries full flexibility to reallocate STAR funds across focal areas according to their priorities, supporting more strategic and long-term planning. Additional changes included raising the focal area country allocation floors for LDCs and SIDS, lowering the country allocation ceiling from 10 percent in GEF-7 to 6 percent

in GEF-8, and increasing the weight of the gross domestic product (GDP) index. These adjustments enhanced ex ante allocations to priority countries.

Recipient countries widely recognize the predictability of STAR resources as a key comparative advantage of the GEF, particularly for those with capacity constraints or challenging circumstances. In GEF-8, 39 percent of STAR allocations went to LDCs and SIDS, while countries in fragile and conflict-affected situations received 20 percent. A 2025 IEO stakeholder survey conducted as part of the competitive advantage study of the GEF (GEF IEO forthcoming-b) found that the STAR is widely perceived as being fair in allocating GEF resources. However, channeling resources through the STAR can lead to fragmentation. To address this, GEF-8 allows countries full flexibility to use STAR resources across eligible focal areas, enabling interventions at scale.

The GEF's reliance on the STAR to provide resources for programming has declined, with the STAR's share of total GEF Trust Fund allocations dropping from 53 percent in GEF-6 to 46 percent in GEF-8. This reduction is mainly due to decreased climate change allocations and a larger share directed to set-asides, especially for integrated programming. While this trend reduces the volume of predictable resources available to eligible countries, it increases the GEF's flexibility to deliver activities at an appropriate scale.

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 (GEF 2025a) examined the effectiveness of the GEF's cofinancing strategy, comparing it with that of other organizations and assessing how the GEF mobilizes cofinancing and how its executing partners manage it. The evaluation also

explored 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, that is, a 7:1 cofinancing ratio.² 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 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.

FLEXIBLE APPROACH TO COFINANCING

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 the extent to which cofinancing is critical to achieving project objectives are important.

The 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 concessional finance and whether the project involves a loan investment or an advisory product. UN organizations and INGOs take a proactive approach to securing cofinancing, relying more on in-kind and parallel cofinancing sources.

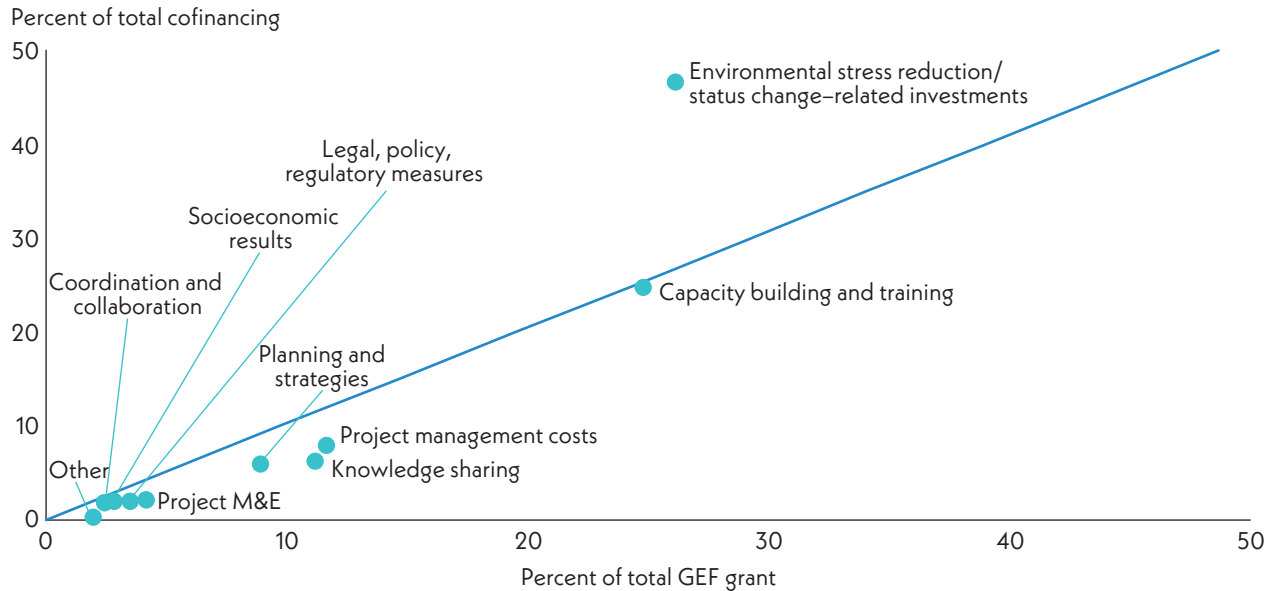
The level of cofinancing commitments for a project is influenced by its design components. Project components that directly reduce environmental stress or improve environmental conditions typically attract higher levels of cofinancing ([figure 10.4](#)). These include infrastructure development, technology 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.

COFINANCING REALIZATION

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 Least Developed Countries Fund (LDCF), and the Special Climate Change Fund (SCCF).³ Projects in the climate change mitigation and international waters focal areas, as well as national and regional projects, tend to attract higher levels of cofinancing commitments. Conversely, projects focused on biodiversity conservation, those with a global scope, and

² Note that there is some differentiation in cofinancing requirements across the GEF family of funds and that cofinancing is not a requirement for all funds.

³ These funds address different themes, countries, and priorities than the GEF Trust Fund; also, cofinancing is not a requirement for the LDCF/SCCF.

FIGURE 10.4 Project components by share in GEF financing/cofinancing for completed projects

Source: GEF IEO 2025a, based on a review of 118 completed projects for which terminal evaluations were available on the GEF Portal as of December 31, 2023.

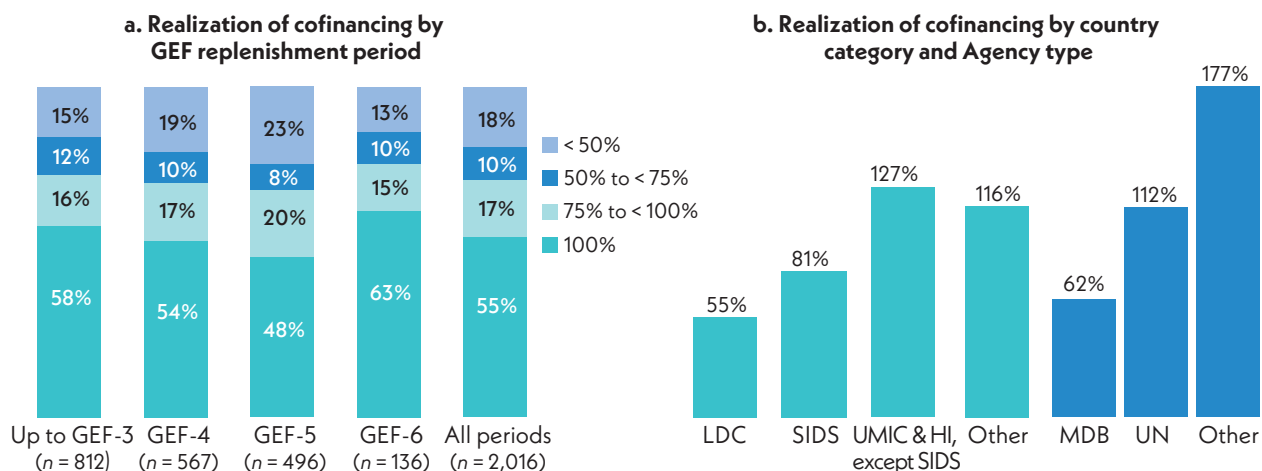
those implemented in LDCs and SIDS generate lower levels of cofinancing.

On average, GEF projects achieve their expected level of cofinancing, although 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 rates ([figure 10.5](#)). Additionally, cofinancing 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.

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 INGOs 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 INGOs actively seek alternative cofinancing during implementation, often in response to midterm review findings, although options remain limited for projects in SIDS because of the smaller pool of potential contributors.

Full realization of cofinancing commitments shows a positive correlation with both outcome and sustainability ratings. When projects fully realize

FIGURE 10.5 Realization of cofinancing by GEF replenishment period, country category, and Agency type

Sources: GEF IEO 2025a, forthcoming-s.

Note: 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; $n = 118$.

expected cofinancing, the outcome rating increases by 0.10 points on a binary scale and 0.30 points on a six-point scale. Similarly, 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 achievement.

CHALLENGES IN MANAGING AND REPORTING COFINANCING

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 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.

10.3 SUMMARY

The roles of the GEF partners—the GEF Agencies, recipient countries, civil society, the GEF-CSO Network, the STAP, and donors—have evolved significantly in advancing global environmental goals. Agencies have contributed technical expertise, financing channels, and implementation capacity; while recipient countries have strengthened ownership through the CES, which has improved alignment with national priorities and supported portfolio development. Civil society, including through the GEF-CSO Network, has broadened participation, improved legitimacy, and promoted accountability, ensuring local perspectives inform global priorities. The STAP has anchored GEF programming in scientific rigor and foresight, offering thematic guidance and innovation; and donor contributions remain the backbone of the partnership, complemented by cofinancing that has substantially increased the scale of resources mobilized. Together, these roles and elements have enabled the GEF to pursue more ambitious and integrated programming across focal areas.

Despite this progress, challenges remain. CES implementation has been uneven, with delays and gaps that limit its potential, particularly in LDCs and SIDS. Agency collaboration has often been undermined by competition, and the growing use of dual-role arrangements highlights the need to balance efficiency with accountability and country ownership. Although cofinancing has been critical for leverage, realization rates vary, and questions of credibility and proportionality persist. Civil society's contributions are highly valued, yet grassroots voices are still underrepresented, and engagement often occurs too late in project cycles.

Looking ahead, reinforcing institutional coordination, fostering deeper Agency collaboration, broadening inclusive engagement across stakeholders, updating the STAP's mandate to focus on strategic guidance, and diversifying and stabilizing financing will be essential for strengthening the partnership's reach, resilience, and effectiveness in delivering lasting global environmental benefits.

GEF results and learning systems

The Global Environment Facility relies on robust systems for results-based management (RBM) and knowledge management to guide effective programming, track performance, and promote learning across its portfolio. RBM provides a framework for setting clear objectives, measuring progress through standardized indicators, and enabling evidence-based decision-making. Complementing this, the GEF's knowledge management system is designed to capture, curate, and share knowledge generated from GEF-funded interventions—facilitating adaptive management, innovation, and broader uptake of successful practices. Together, these systems underpin the GEF's commitment to accountability, continuous improvement, and transformational impact.

11.1 RESULTS-BASED MANAGEMENT

The GEF's RBM system is designed to capture the outcomes of GEF activities, enhance management effectiveness, and strengthen accountability. It aims to achieve these objectives by setting realistic targets, monitoring progress, integrating lessons learned into decision-making, and reporting on performance.

This section draws on the IEO evaluation of the performance of key components of the RBM system conducted during GEF-8 (GEF IEO forthcoming-e). These components include the GEF Portal, the Results Measurement Framework—particularly

indicators for assessing project cycle efficiency—Agency self-evaluations, and the reporting of project results and process indicators. The evaluation also examined monitoring and evaluation (M&E) practices in fragile, conflict-affected, and violent (FCV) contexts.

The GEF Portal

The GEF Portal has made progress in automating core processes and aligning with evolving policy requirements, but still lags behind peer systems, limiting its effectiveness as a project management and reporting tool. Key business functions—such as project reviews, approvals, and Chief Executive Officer (CEO) endorsements—have been automated, and updates introduced to accommodate integrated program workflows, child project reviews, and Global Biodiversity Framework Fund procedures. Training and support from the World Bank's Information and Technology Solutions team have helped Agency users navigate the system, but resource constraints have delayed long-requested enhancements, such as more flexible reporting and analytics capabilities. Shifting priorities—such as integrating new risk-related templates under the GEF risk appetite framework—have aligned the portal with current policy needs but slowed the automation of administrative actions, including project suspensions and amendments.

Despite improvements in data validation that have strengthened compliance and efficiency, usability challenges persist. Users report issues such as unclear

error messages, limited formatting options, and a lack of automated notifications. Although features like geolocation tools and Agency fact sheets have been added, the portal is still seen as less user-friendly and efficient than comparable systems, notably the Green Climate Fund's portal. Many Agencies continue to maintain parallel data systems because the GEF Portal provides limited consolidated reporting, requiring them to manually combine data from multiple sources. Overall, progress is viewed as incremental, and stakeholders emphasize the need for a more streamlined, user-centered design to meet growing operational and reporting demands.

The GEF-8 Results Measurement Framework

Structural challenges persist in results measurement, despite progress made in GEF-8. During GEF-8, steps were taken to improve the GEF Results Measurement Framework, particularly to enhance clarity and ensure more consistent reporting of core indicators. Despite these efforts, several long-standing challenges remain. The GEF IEO's 2021 Annual Performance Report identified key gaps in coverage, such as the exclusion of outcomes related to urban biodiversity and ecosystem services, and an overemphasis on physical outputs rather than systemic change (GEF IEO 2023a). It also flagged issues like the inability to measure actual restoration outcomes during project implementation, the risk of double counting geographic areas, and the lack of baseline data to assess net environmental effects. Additional concerns included inconsistencies in counting beneficiaries and long feedback loops that limit the utility of results data for real-time decision-making. While some of these concerns have been addressed in GEF-8, others continue to affect the framework's overall effectiveness. GEF-8 has addressed some of these concerns through clearer indicator definitions and reporting guidance, but others—particularly those related to coverage gaps, baseline data, and outcome

tracking—continue to limit the overall effectiveness of the framework.

Revisions to indicators and guidance have strengthened clarity and consistency. Improvements to core indicators and accompanying guidance in GEF-8 have helped promote greater consistency in reporting and interpretation across the portfolio. A zero-baseline approach was adopted to better capture net project effects, and indicator definitions were refined to reduce overlap—such as the shift from “area of land restored” in GEF-7 to “area of land and ecosystems under restoration” in GEF-8. The adoption of SMART (specific, measurable, achievable, relevant, time-bound) criteria further enhanced clarity and practicality. First introduced in GEF-7, the core indicator guidelines were updated in GEF-8 with greater detail and alignment to corporate learning. Corporate effectiveness reporting, initiated in 2020, was further strengthened in this period as well. The GEF-8 framework places greater emphasis on adaptive management, encouraging midterm reviews to be used not only for accountability but also to support learning and improve outcomes during implementation.

Most project objectives and outcomes were supported by adequate indicators and were reported on at completion using consistent units. Each project has its own results framework, which defines project-specific objectives, outcomes, and indicators. These frameworks are aligned with the overall GEF Results Measurement Framework, which provides a standardized set of core indicators and reporting expectations for the entire portfolio. In the reviewed sample, 79 percent of project objectives and outcomes were assessed as having indicators adequate to measure achievement, and Agencies reported on 88 percent of these indicators using consistent units. However, reporting rates varied: Conservation International, United Nations Development Programme (UNDP), and the World Bank exceeded 90 percent, while others lagged behind.

Reporting on GEF core indicators—standardized metrics required across all projects—was slightly stronger, with 92 percent of these indicators reported as using consistent units, compared to 87 percent for noncore indicators. This reflects an increasing emphasis by GEF Agencies on standardized measurement, although comprehensive and uniform reporting across all indicators has not yet been achieved. Reporting rates were also higher for full-size projects (91 percent) than for other project types (85 percent), suggesting more consistent monitoring in larger interventions.

Critical gaps remain in capturing co-benefits, systemic change, and cost-effectiveness. Notably, many ecosystem-based projects generate adaptation co-benefits that are not adequately captured by current core indicators. While some of this information exists at the project level, the lack of standardization and aggregation makes it difficult to report comprehensively at the corporate level. In addition, the framework continues to struggle with tracking nonplace-specific ecosystem services and long-term systemic changes. The IEO's 2021 Annual Performance Report also noted a lack of consistent data on the costs associated with generating environmental benefits, limiting the GEF's ability to assess value for money and set realistic targets (GEF IEO 2023a). Finally, because the GEF's results system is tied closely to specific project phases, it does not effectively measure transformational change or sustained long-term impact.

Efficiency of the GEF activity cycle

The GEF has established appropriate indicators to track operational efficiency, but the current method for defining cohorts to compare performance does not reliably capture trends. Efficiency indicators—such as the percentage of projects making their first disbursement within 18 months or submitting their midterm review within four years of CEO

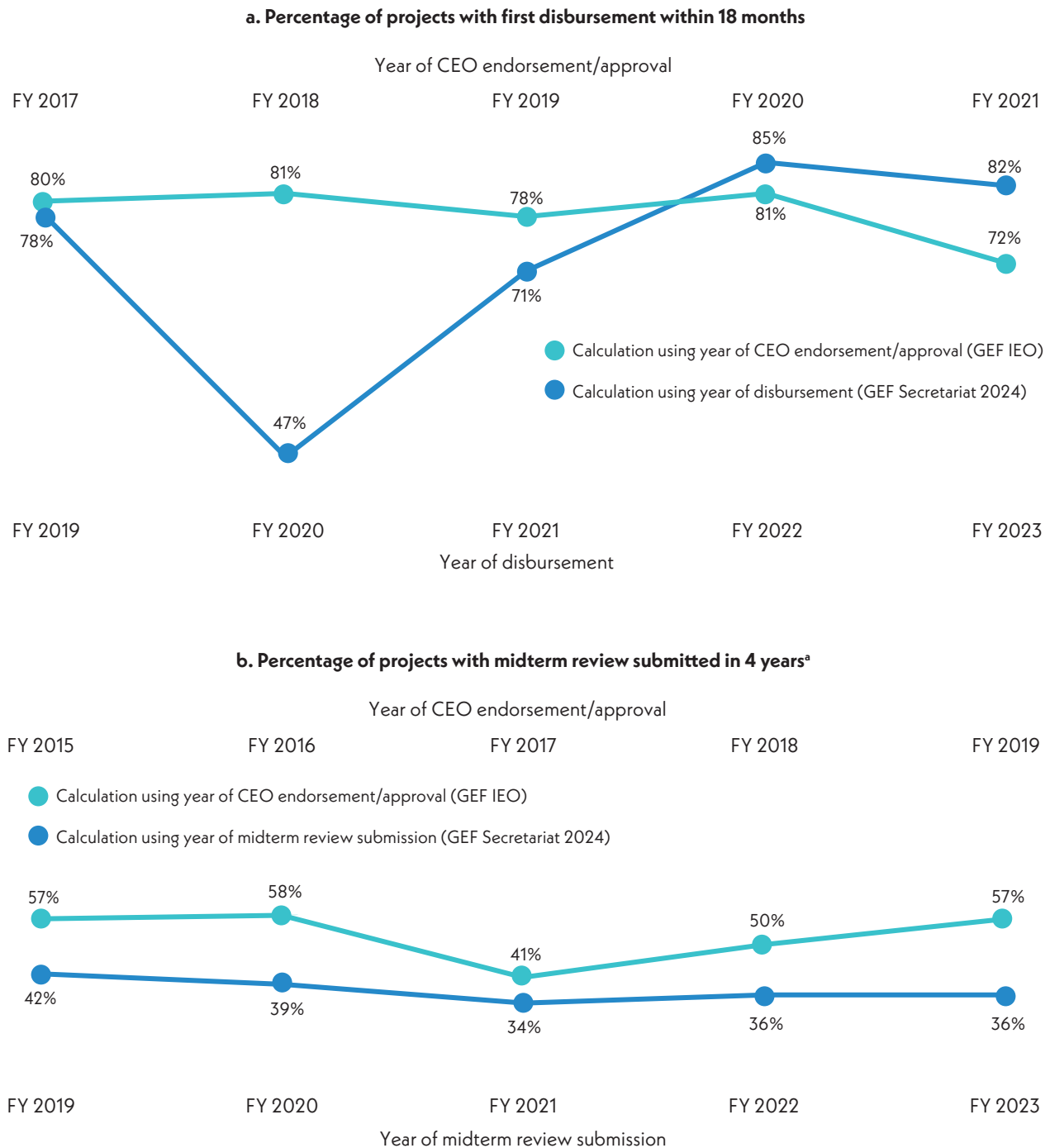
endorsement or approval—are currently based on the fiscal year in which these actions are reported, rather than the fiscal year of project endorsement or approval. This method may not accurately capture change because each year's data include projects endorsed by the CEO over a wide range of years, not just those for which the monitored threshold has recently elapsed and the share meeting the threshold can be calculated ([figure 11.1a](#)). Moreover, using the fiscal year of midterm review submission can overstate the share of projects meeting the threshold by excluding those that never submit a midterm review ([figure 11.1b](#)). Tracking by fiscal year of action pools projects endorsed or approved at different times, complicating year-over-year comparisons. The IEO's RBM evaluation found that calculating the percentage of projects meeting thresholds based on their endorsement or approval year would better capture delays within each cohort and reveal clearer patterns in meeting the monitored thresholds.

Self-evaluation system

The self-evaluation system for GEF Agencies is a core component of the GEF's RBM framework, enabling the Agencies to assess project performance and outcomes. These self-evaluations assess relevance, effectiveness, efficiency, sustainability, and lessons learned, and are guided by standardized GEF criteria. This information is conveyed by the Agencies primarily through project terminal evaluations and midterm reviews, and annual project implementation reports (PIRs). Terminal evaluations are required for all full-size projects and many medium-size projects, and are reviewed by the GEF IEO for quality and consistency.

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 GEF established requirements for midterm reviews and set a four-year threshold after

FIGURE 11.1 Variation in performance trends resulting from tracking GEF efficiency indicators by reporting year versus endorsement year



Sources: GEF IEO forthcoming-e, based on GEF Portal data and GEF Secretariat 2024a.

a. Includes both medium- and full-size projects.

CEO endorsement to monitor timely submissions (GEF 2022c). 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 it conducts regular bilateral exchanges with the Agencies. The annual GEF monitoring report also prioritizes qualitative insights, highlighting adaptive management, good practices, and risk assessments to guide operational improvements.

The availability of midterm reviews has improved with enhanced tracking by the GEF Secretariat; variations persist in their preparation and timing across Agencies. The RBM evaluation found that actions taken by the GEF Secretariat have significantly improved the submission of 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 11.1). 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 the Food and Agriculture Organization of the United Nations (FAO) tend to be timely.

TABLE 11.1 Availability of midterm reviews for projects completed in 2020

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

Sources: GEF IEO forthcoming-e, based on GEF Portal data and GEF IEO 2023b.

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 for which they were 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 least developed countries, exhibit lower rates of timely submission than national projects. Substantial variation exists across Agencies: Conservation International, FAO, the Inter-American Development Bank, the International Union for Conservation of Nature, and UNDP have high submission rates; the Asian Development Bank, the African Development Bank, the International Fund for Agricultural Development, and the United Nations Environment Programme lag. Timeliness is notably higher for Conservation International, FAO, and UNDP; and lower for the Asian Development Bank, the International Fund for Agricultural Development, and the United Nations Environment Programme. 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 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 range 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 2023b). However, some Agencies are beginning to foster a more transparent evaluation culture. For example, the Inter-American Development Bank has created a Development Effectiveness Unit, which supports projects from design to postevaluation and seeks to ensure that evaluation results are used to inform country strategies and project cycles.

M&E in fragile, conflict-affected, and violent contexts

Projects in FCV contexts represent a significant portion of the GEF portfolio, and M&E in such contexts faces unique and persistent challenges. 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 Measurement Framework. Although FCV countries represent 26 percent of GEF recipients and account for 20 percent of GEF-8 System for Transparent Allocation of Resources (STAR) allocations, the framework offers limited guidance on how to address FCV-specific challenges. Moreover, although the GEF Policy on Environmental and Social Safeguards (GEF 2018b) 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.

11.2 KNOWLEDGE MANAGEMENT AND LEARNING

Because environmental challenges are increasingly complex and dynamic, it is imperative that organizations like the GEF learn systematically from both successes and failures, with an emphasis on adaptive management from the design stage through implementation. A recent evaluation of underperforming projects and an assessment of the GEF's 2023 Knowledge Management and Learning (KM&L) Strategy implementation provide complementary insights into the GEF's evolving knowledge management system, highlighting achievements, persistent gaps, and the road ahead (GEF IEO 2025d, forthcoming-o).

Learning from underperforming projects

The evaluation examined the experience of less successful initiatives, representing approximately 20 percent of the overall portfolio, to distill lessons on risk management, adaptive strategies, and the role of learning in addressing implementation barriers. The analysis covered 202 underperforming projects, with a primary focus on 141 that had been completed.

A key finding from this analysis was the critical importance of robust risk assessment and mitigation during the project 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 addressed comprehensively. As a result, nearly half of the projects continued to face legal and policy barriers by the time of closure, and over a third encountered challenges from low government capacity. Additionally, risks perceived as beyond direct project control, including political instability and insufficient government ownership, were frequently overlooked during design, leading to 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 a successful turnaround is a World Bank–led biodiversity conservation project in Eastern Paraguay (GEF ID 2690). Initially underperforming because of competing land use priorities and weak government support and capacity, the project underwent a major restructuring following its mid-term 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 Itaipu hydroelectric company, turned the project into a success. By closure, the project had successfully created the intended forest corridor in one of the globally most important ecosystems for biodiversity conservation. The Atlantic Forest Corridor became a national priority and Itaipu continues restoration work. This transformation was rooted in context-sensitive adjustments and strategic stakeholder engagement, showcasing the power of adaptive learning.

The Paraguay case exemplifies how successful turnarounds must navigate two fundamentally different kinds of challenges: technical problems that can be solved through established expertise, and socially complex adaptive problems requiring sensitive negotiations between diverse stakeholders with different understandings of both problems and solutions. This highlights the critical insight that effective knowledge application is not only about replicating solutions, but also about learning how to adapt approaches to specific contextual conditions.

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

In response to gaps identified by the GEF IEO in its Seventh Comprehensive Evaluation of the GEF (OPS7; GEF IEO 2022f), the GEF Council approved a new KM&L Strategy in October 2023 (GEF Secretariat 2024b), developed with inputs from the GEF’s Scientific and Technical Advisory Panel, which has long championed and supported GEF knowledge management approaches (Metternicht and Stafford Smith 2022).

The strategy introduces a more structured approach to addressing knowledge management across the GEF partnership. As part of a broader reorganization of the GEF Secretariat, a new Integration and Knowledge Division was established, and two dedicated staff were recruited in 2024 to support implementation of the strategy.

The KM&L Strategy is built around three foundational pillars—people, processes, and systems—and

structured into four strategic directions encompassing 10 action areas. These directions aim to align KM&L with GEF-8 delivery, strengthen KM&L in programming, invest in the generation of global public goods, and link KM&L with communications and outreach. Some of these identified action areas predate the formal KM&L Strategy, such as the GEF Brown Bag Lunch learning series and the development of GEF online courses. In this context, the Secretariat has worked to integrate both ongoing and new learning activities into the KM&L Strategy. While this integration promotes coherence between knowledge management and learning, it also raises the risk that learning activities may overshadow other dimensions of knowledge management. As of June 2025, progress had been made in approximately half of the action areas.

There is broad support among GEF Agencies for the KM&L Strategy, along with a strong call for more practical guidance on applying knowledge management in projects. Survey responses from GEF Agency coordination units show that 84 percent agree the GEF partnership now has clear priorities and objectives for knowledge management. Agencies appreciated the inclusive development of the strategy and the appointment of dedicated KM staff, with one respondent calling it a “game changer.” Despite this positive reception, many noted that the strategy’s impact on the portfolio has been limited to date and emphasized the need for more practical operational guidance. This is reflected in divided views on the adequacy of current knowledge management resources, with 48 percent of respondents finding them sufficient and 47 percent indicating they are not. To address this, the GEF Secretariat has indicated that an action plan is under way and that key performance indicators will be used to track progress. To support implementation, the GEF IEO has also proposed eight guiding principles to strengthen the GEF partnership’s role as a learning organization (GEF IEO 2025d).

Strengthening knowledge capture remains a priority for the GEF partnership, with recent progress supported by new systems and strategy, but persistent gaps continue to limit its effectiveness across the portfolio. Since OPS7, progress has been made in strengthening knowledge capture within the GEF partnership. The GEF Secretariat has redesigned internal systems, adapted project templates, and uploaded over 1,700 lessons to the GEF Portal. Nearly all CEO-endorsed projects between July 2023 and June 2024 (97 percent) included dedicated knowledge management components, reflecting stronger integration of knowledge management into project design. The KM&L Strategy includes plans for a new Knowledge and Collaboration Platform, a long-standing recommendation by the GEF IEO and a top priority identified by GEF Agencies to support partnership-wide learning and exchange.

Challenges remain in fully leveraging the GEF Portal and strengthening knowledge systems across the portfolio. While 59 percent of surveyed GEF Agency coordination units found the portal useful for accessing knowledge, 33 percent disagreed, citing difficulties with data entry and limited user friendliness. Survey feedback and prior evaluations also point to ongoing fragmentation in knowledge capture; inconsistent collection at the program level; and gaps in documenting innovations, risks, and lessons learned. These findings underscore the need for continued improvements in the curation, consistency, and synthesis of knowledge across the GEF partnership.

The GEF has made progress in developing knowledge platforms across integrated programs, with opportunities for improving the curation and broader use of knowledge across the partnership. Progress in knowledge development and curation has included the establishment of global child projects serving as knowledge platforms within integrated programming—such as the Net-Zero Nature-Positive Accelerator, Sustainable Cities, Global Wildlife

Program, Food Systems, and the long-running International Waters Learning Exchange and Resource Network ([IW:LEARN](#)) in the international waters focal area. These platforms support knowledge exchange, adaptive learning, and coordination. Under the KM&L Strategy, the GEF Secretariat has taken steps to enhance this work, including developing an inventory of platforms and interoperability principles, and hosting expert workshops.

Evaluations and stakeholder feedback continue to highlight several challenges in knowledge management. The Global Wildlife Program evaluation called for broader participation, multilingual access, and better dissemination (GEF IEO forthcoming-n). There have been persistent weaknesses in integrating child projects into program-level platforms and a need for more dedicated knowledge management resources. Surveyed Agencies emphasized the lack of standardized indicators, limited data, and resource constraints as barriers to effective cross-country learning. They also noted the need for a more systematic approach to synthesizing and curating knowledge, including the potential use of artificial intelligence. Concerns were raised that valuable insights from project reports and evaluations remain underutilized. Survey results reflect these issues, with 58 percent rating knowledge development and curation positively, and 31 percent negatively.

Evaluations also highlight missed opportunities in the application of knowledge. Key gaps include limited integration of local and traditional knowledge (GEF IEO 2024a), inadequate delivery of early warning systems to vulnerable communities (GEF IEO 2025b), and insufficient follow-up on technical knowledge, particularly in water security programming (GEF IEO 2024c). These shortcomings are reflected in survey results: only 53 percent of GEF Agency coordination units rated knowledge application positively, while 48 percent disagreed that existing knowledge management systems meaningfully support project design and implementation.

Efforts to enhance knowledge sharing and dissemination across the GEF partnership have expanded under the KM&L Strategy, but important gaps remain. The GEF has introduced internal learning series, microlearning videos, courses, and new knowledge products to complement existing initiatives such as the GEF Brown Bag Lunch series, South-South exchanges, and expanded constituency workshops. These efforts were rated positively by GEF Agency coordination units, with 73 percent expressing satisfaction. However, limited cross-Agency exchange continues to be a challenge; only 47 percent agreed that substantial sharing of lessons occurs between Agencies, with 48 percent disagreeing. Respondents noted that inter-Agency competition can inhibit open learning around both successes and failures.

GEF IEO evaluations highlight weak knowledge exchange within focal areas, country programs, and among projects. For example, the most recent international waters evaluation (GEF IEO forthcoming-j) found insufficient communication between child projects, resulting in missed opportunities for synergy and stakeholder engagement. Similar issues were identified in the biodiversity (GEF IEO 2022e, forthcoming-n), climate change adaptation (GEF IEO 2025b, 2025c), land degradation (GEF IEO 2024f), and chemicals and waste focal areas (GEF IEO forthcoming-k), as well as in the Lower Mekong River Basin (GEF IEO 2023c).

While the KM&L Strategy includes plans to foster communities of practice, it places greater emphasis on knowledge generation and sharing than on applying that knowledge to inform project design, implementation, and future programming. IEO evaluations have documented cases where knowledge application contributed to tangible results. In Pacific small island developing states, South-South knowledge transfer helped scale Indigenous farming practices and farmer field schools across projects. These approaches, introduced in ridge to reef

projects in Fiji (GEF IDs 5398, 5404), influenced the World Bank's Jobs for Nature 2.0 initiative, which attracted substantial additional funding (GEF IEO forthcoming-t). In the international waters focal area, IW:LEARN (version 4) led to the adoption of at least one new management approach in 47 projects, while community-based approaches improved climate-smart agriculture and ecosystem protection (GEF IEO 2024a, forthcoming-j). Communities of practice, as seen with IW:LEARN, have proven to be catalytic in supporting change and impact beyond individual projects (Ijjasz-Vasquez, Karp, and Weber-Fahr 2024).

11.3 SUMMARY

The GEF's institutional systems for RBM and KM&L are essential to ensuring accountability, improving performance, and fostering adaptive and transformational change across its portfolio. During GEF-8, progress was made in improving core indicator clarity, portal functionality, and the quality of self-evaluation processes, although challenges persist in consistency, timeliness, and candor—particularly in midterm reviews and terminal evaluations. Efforts to adapt monitoring frameworks for FCV contexts remain limited. On the knowledge management side, the launch of the 2023 KM&L Strategy and establishment of a dedicated Secretariat unit marked a shift toward more structured and strategic learning. Although knowledge capture and dissemination have improved—with better integration into project design and expanded learning tools—systematic application of knowledge to enhance project implementation remains uneven. Key

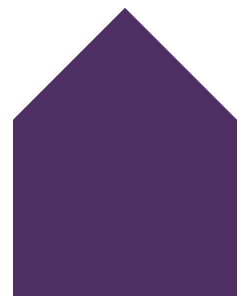
gaps remain in systematically capturing, synthesizing, and applying knowledge, especially across integrated programs. Limited interoperability between knowledge platforms and projects, and weak cross-Agency and country-level learning, continue to limit the potential for innovation and scaling.

Improved knowledge use is critical for adaptive management. Evaluation findings show that early risk identification and contextualized responses improve project outcomes, while delayed or narrow adjustments reduce impact. Strengthening knowledge platforms, creating consistent feedback loops, and synthesizing insights at the portfolio level are essential next steps.

As GEF-9 approaches, sharpening the KM&L Strategy with clear priorities, timelines, and a stronger emphasis on knowledge application, adaptive management, and support for broader adoption of successful interventions will be critical. Institutional learning; connecting people; and enabling systematic exchange across projects, programs, and Agencies and at the country level will help close the loop between learning and impact—positioning the GEF as a more adaptive and knowledge-driven institution.

PART V

Planning for GEF-9



Conclusions and recommendations

The world is entering a decisive decade for environmental action, where climate change, biodiversity loss, land degradation, chemical pollution, and declining marine and freshwater resources threaten not only ecosystems but also social and economic stability. These crises are deeply interconnected, amplifying risks to lives and livelihoods, food systems, and security as they unfold in a global context of increasing recovery costs, rising debt burdens, geopolitical tensions, and widening inequality. The urgency of action has never been greater, demanding solutions that move beyond isolated interventions toward integrated, systemic, and sustainable transformational change.

Delays in addressing these challenges will further lock in unsustainable practices, deepen vulnerability, and raise the eventual costs of transition. Immediate and coordinated action is therefore essential if the global community is to avoid irreversible tipping points and secure a more resilient future. In addition, with greater scrutiny from citizens, investors, and markets, institutions are being measured by the credibility of their actions—placing the GEF in a position to demonstrate leadership through policy reform, market transformation, and innovative finance in advancing transformational change.

The GEF serves multiple global environmental agreements, including the Convention on Biological Diversity, the United Nations Framework Convention on Climate Change, the United Nations Convention to Combat Desertification, and the Stockholm and Minamata

Conventions on chemicals and mercury. Its international waters focal area operates under several multilateral agreements addressing international and transboundary water systems, and the GEF also serves as part of the financial mechanism for the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction Agreement under the United Nations Convention on the Law of the Sea. This broad mandate gives the GEF a distinctive comparative advantage and capacity to design integrated solutions that link land, water, climate, biodiversity, forests, energy, chemicals, and cities into coherent strategies that connect global priorities with local realities and catalyze policy, institutional, and behavioral change.

The Eighth Comprehensive Evaluation of the GEF (OPS8) centers on integration as a driver of change, reflecting the need for approaches that connect sectors, actors, financing models, systems, and policy frameworks to address today's complex and interconnected environmental challenges. This focus builds on a core premise of the GEF's evolution: that solving these challenges requires coherent, multisectoral solutions and alignment of policies, institutions, and behaviors, while also acknowledging the complexity, transaction costs, and selectivity challenges involved. The GEF's mandate to serve multiple global environmental agreements positions it to pursue this broader vision of integration—not only through flagship impact programs but also by embedding social inclusion, private sector engagement, and risk-taking innovation across its portfolio.

OPS8 examines how the integration approach is shaping the GEF's work, drawing on 34 evaluations and studies completed since 2022. It assesses performance across focal areas and country programs, highlighting achievements and lessons on socioeconomic co-benefits that link environmental outcomes with improved livelihoods and resilience. The report reviews the contribution of integrated programs in driving systemic solutions, considers how inclusion—particularly the participation of Indigenous Peoples and local communities—has strengthened ownership and outcomes, and examines private sector engagement, risk-taking innovation, and the functioning of the GEF partnership that brings together diverse implementing Agencies and stakeholders. Finally, OPS8 evaluates the systems that support delivery, including results-based management and knowledge management, underscoring their importance for adaptive learning and transformational impact.

OPS8 is timed to inform negotiations for the ninth replenishment of the GEF Trust Fund, at a moment when donors and countries are seeking clarity on how the GEF can deepen its impact, enhance its efficiency, and strengthen its role as a global convener of solutions that work across sectors and scales.

The conclusions and recommendations that follow build on the evidence presented in this report to strengthen the GEF partnership and its supporting systems, build on established strengths, address key challenges, and refine its approach to deliver greater impact and drive transformational change in the years ahead.

12.1 CONCLUSIONS

Relevance and performance

CONCLUSION 1: The GEF stands out as a uniquely relevant financing mechanism for global environmental action. As the dedicated financial mechanism for six major multilateral environmental agreements,

the GEF's mandate ensures coherence between global policy commitments and country-level implementation, enabling countries to translate convention obligations into tangible environmental outcomes. The GEF continues to align its programming with the core mandates of the conventions it serves—biodiversity, climate change, international waters, land degradation, and chemicals and waste—while expanding into emerging areas such as circular economy approaches and nature-based solutions.

Its mandate has positioned the GEF to go beyond isolated, sectoral projects and embrace approaches that address complex, interconnected environmental systems. Building on its legacy of multifocal projects and the integrated approach pilots, the GEF has advanced toward large-scale impact programs grounded in systems change principles. These programs focus on tackling the underlying drivers of environmental degradation through cross-sectoral solutions and adaptive management—reflecting the GEF's competitive advantage in delivering integrated responses across sectors, scales, and stakeholders.

The recent establishment of the Global Biodiversity Framework Fund (GBFF), alongside the continued operation of the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF), highlights the evolution of the GEF family of funds and its central role in mobilizing resources for pressing global priorities. These complementary trust funds provide targeted instruments to help countries meet biodiversity objectives, support climate adaptation, and address the unique vulnerabilities of the poorest and most climate-affected nations.

Even as the GEF increases its focus on integration and systemic transformation, it continues to maintain strong alignment with focal area priorities. Integrated programming is designed to support multiple conventions simultaneously, fostering cross-sectoral synergies and ensuring that country-level actions are structured to contribute to diverse international commitments.

CONCLUSION 2: The GEF portfolio continues to deliver consistently strong results across both its global and country-level interventions.

Completed projects achieve satisfactory or higher outcome ratings—81 percent meet or exceed expectations—reflecting robust project design, effective implementation by Agencies, and close collaboration with national partners.

At the country level, many governments have strategically leveraged GEF support to integrate environmental priorities into national development frameworks, enhance interministerial coordination, and drive institutional reforms. Countries with established environmental institutions and strong leadership across sectors have reported particularly successful outcomes, including policy alignment and increased capacity. The Small Grants Programme (SGP) has further showcased the GEF's ability to empower local communities, spark innovation, and strengthen grassroots environmental stewardship.

Nonetheless, performance varies. Projects in fragile or capacity-limited contexts often face delays, sustainability challenges, and weaker alignment with national systems. Large-scale, multicountry, or multisector initiatives—while offering promise for transformational change—typically require longer timelines and involve higher transaction costs. Monitoring and evaluation frameworks also remain weighted toward outputs and biophysical achievements, with less attention to the institutional or behavioral shifts needed for enduring impact. Although outcomes are rated in the satisfactory range for over 80 percent of projects, only 59 percent demonstrate broader adoption of results, and sustainability is in the likely range for nearly two-thirds. This performance is broadly in line with other international organizations, but the persistent gap between high project-level outcomes and weaker impact and sustainability underscores a critical challenge for the GEF. Bridging this gap will require stronger integration of projects into national policies

and budgets, adequate financing mechanisms to sustain results, more consistent attention to institutional and behavioral change, and systems for learning and support beyond project closure—so that individual project successes translate into systemic and lasting global environmental benefits.

CONCLUSION 3: The GEF's focal area portfolio delivers significant environmental outcomes, aligned with its multiconvention mandate.

In biodiversity, projects have expanded protected areas, strengthened community-based conservation, promoted sustainable use and equitable benefit sharing of genetic resources, and supported policy reforms to reduce habitat pressures. Climate change interventions have promoted renewable energy, energy efficiency, and low-carbon transport, while adaptation efforts have enhanced resilience in vulnerable communities and ecosystems. Land degradation investments have improved sustainable land management, restored landscapes, and reduced deforestation, contributing to both ecological restoration and food security. Projects addressing chemicals and waste have cut the release of harmful pollutants, enhanced chemical management, and piloted circular economy models. International waters initiatives have strengthened transboundary governance and cooperation over shared marine and freshwater resources.

Persistent challenges exist. In biodiversity and land degradation, maintaining the long-term viability of protected areas and restored landscapes remains difficult in the absence of sustainable incentives and competing land uses. Climate mitigation efforts have delivered important benefits, but remain insufficient relative to the magnitude of the challenge. Funding for this area continues to prioritize established, country-driven solutions, while high-impact and experimental approaches receive limited support. At the same time, the proportion of GEF resources dedicated to climate mitigation has declined over the past decade.

Although select adaptation initiatives have demonstrated potential, systemic challenges persist in mobilizing continued financing and limit the replication of successful models. Chemicals and waste interventions face obstacles in achieving scale due to regulatory weak spots and limited private sector involvement. International waters programs continue to struggle in sustaining cross-border cooperation amid political and resource constraints. Moreover, focal area programming is sometimes siloed, missing opportunities to connect with broader systemic integration strategies—although integrated programming is gradually helping to bridge these gaps.

A growing overlap between GEF biodiversity efforts and the GBFF highlights the urgency of ensuring coordinated complementarity to prevent duplication and strengthen impact. Effective alignment between the GEF Trust Fund and related instruments such as the GBFF will be essential for optimizing resources.

Overall, GEF focal area work remains effective in delivering global benefits. To amplify impact, however, future direction should focus on deeper thematic integration, sustainable design and scalability, and strategic coordination across emerging funding mechanisms.

CONCLUSION 4: Socioeconomic co-benefits are a defining feature of GEF programming. They demonstrate how environmental investments can strengthen human and social capital, create opportunities for income generation and diversification, and enhance community resilience. These benefits foster local ownership and long-term support for conservation and sustainable resource management, helping to sustain environmental outcomes. By improving livelihoods and reducing vulnerability, they also encourage broader adoption of sustainable practices and catalyze behavior change necessary for lasting impact.

Many projects have successfully linked biodiversity conservation to improved livelihoods through ecotourism, sustainable agriculture, and nature-based enterprises. Interventions addressing land degradation and desertification have supported sustainable land management, improved soil fertility, and boosted agricultural productivity, contributing directly to food security and rural incomes. Climate mitigation and adaptation initiatives have enhanced energy access, increased agricultural resilience, and reduced vulnerability to climate shocks. Chemicals and waste interventions have contributed to safer working conditions and public health gains, while integrated programs have demonstrated the potential to couple environmental outcomes with food system transformation and sustainable urban development. These co-benefits have often strengthened local ownership and created the political and social support that helps sustain environmental outcomes over time.

Despite these achievements, socioeconomic co-benefits are not yet systematically captured or fully leveraged across the GEF portfolio. While many projects identify potential co-benefits during design, they often lack robust indicators or monitoring frameworks to track progress and assess how benefits are distributed among different social groups. The inclusion of marginalized populations—such as women, youth, Indigenous Peoples and local communities, and vulnerable rural communities—remains inconsistent and often dependent on project-specific choices rather than an institutionalized approach. While some initiatives have successfully generated new livelihood opportunities and markets, scaling these gains beyond the pilot stage remains difficult—particularly where enabling policies, market linkages, and financing are weak, and where mechanisms for coordination among country-level stakeholders to foster cross-project synergies and scaling opportunities are lacking. More systematic integration of socioeconomic considerations, supported by clear scaling strategies and sustainability pathways, would likely enhance

the socioeconomic co-benefits of GEF interventions, thereby supporting broader development outcomes while maintaining the GEF's core mandate of delivering global environmental benefits.

Enablers of transformational change

INTEGRATION

CONCLUSION 5: Integrated programs have delivered important benefits, aligning national priorities with global environmental objectives and fostering cross-sectoral collaboration. Integrated programs have strengthened alignment between national priorities and global environmental commitments, enhanced institutional collaboration across sectors, and introduced broader frameworks that connect landscapes, supply chains, urban systems, and biodiversity corridors. They have fostered innovations in governance, stakeholder engagement, and in some cases, efforts to engage the private sector and establish multistakeholder platforms. When supported by strong country ownership and capable coordination mechanisms, these programs have delivered early results such as improved landscape management, updated urban and spatial plans, and strengthened enforcement and compliance systems. They have also demonstrated the potential of linking global thematic expertise to country-led implementation, supporting the integration of environmental priorities into national development planning.

Despite these advances, integrated programs face significant challenges. Their complexity leads to heavier coordination demands at both the global and national levels. Compressed design schedules have at times limited opportunities for inclusive stakeholder consultation and full alignment with national systems, while operational focal points have not always had access to the information or support required to manage the additional demands of integrated

approaches. Coordination between global platforms and country-level child projects has been uneven, weakening knowledge exchange and overall program coherence. Scaling and sustaining results often depend on temporary funding or individual champions rather than durable institutional arrangements. Although private sector engagement has grown, it has yet to reach its potential, and mechanisms to maintain investments and outcomes beyond GEF support remain underdeveloped.

These findings underscore the importance of a more strategic focus on integrated program design.

The focus should be on contexts where institutional readiness and country demand are strong and where there is clear potential for systemic transformation, while ensuring mechanisms are in place to enable participation by countries with more limited capacity. Integrated programs work most effectively when design timelines are realistic, roles and responsibilities between global platforms and country-level components are clearly defined, and systems for adaptive learning and knowledge exchange are robust. Their transformational potential also depends on broad and inclusive participation, and the active engagement of diverse stakeholders, including the private sector.

As programs mature, evolving needs will require the GEF to introduce new programs while phasing out those that are ineffective or that have fully achieved their objectives. Clear principles and strategies are needed for selecting new programs, and graduating mature ones and sustaining the knowledge resources they produce—resources that are currently difficult to access, including through the GEF website. Incentives for participation have also shifted: with reduced System for Transparent Allocation of Resources (STAR) allocations in GEF-8, countries are increasingly joining integrated programs based on alignment with national priorities rather than financial leverage. This shift highlights the importance of ensuring program relevance,

transparent participation incentives, and accessible knowledge systems to maintain strong engagement and lasting impact.

INCLUSION

CONCLUSION 6: Inclusion has advanced across the GEF portfolio, supported by stronger policies, clearer operational guidance, and growing engagement with civil society.

Gender equality and the participation of Indigenous Peoples and local communities are now more systematically embedded in project design and implementation, with gender action plans, budgets for gender-specific interventions, and gender-responsive indicators and monitoring increasingly common. However, gender equality is not always well operationalized—measuring participation (e.g., the percentage of women in activities) is not the same as ensuring equitable decision-making and influence. This challenge extends beyond gender to other domains of inclusion, where progress often depends on the presence of committed and competent individuals within project teams. Without dedicated expertise and capacity to translate inclusion principles into practice during implementation, advances risk being inconsistent and unsustainable.

The SGP and community-based approaches have been particularly effective in demonstrating how community-driven approaches integrate social inclusion with environmental outcomes. Such initiatives empower women, Indigenous Peoples, youth, and marginalized rural groups to take leadership roles in ecosystem restoration, climate resilience, and sustainable livelihoods. These efforts show how participatory governance, benefit-sharing arrangements, and the recognition of traditional knowledge enhance local stewardship and contribute to equitable, durable environmental outcomes.

Civil society has also played an important role, with the GEF–Civil Society Organization (CSO)

Network and other mechanisms helping to amplify local voices and foster inclusive decision-making.

Many integrated programs have built on this foundation by embedding inclusion into broader landscapes and value chains, illustrating how socially inclusive approaches can strengthen environmental impact and foster local ownership.

Despite advances, inclusion remains uneven and often dependent on individual champions rather than institutionalized practice.

Engagement of youth, persons with disabilities, and other marginalized populations is still limited, rarely integrated into programmatic planning, or backed by systematic reporting and consistent monitoring indicators. The GEF-CSO Network has yet to be fully utilized, presenting an opportunity to strengthen systematic engagement across GEF programs and to build on past recommendations for reform. Many projects acknowledge inclusion as a priority but lack clear pathways or resources to operationalize it, and compressed preparation timelines frequently constrain opportunities for meaningful participation—particularly in fragile or capacity-constrained settings. Sustaining inclusive outcomes beyond the life of GEF funding also remains challenging where local institutions are weak or enabling policies are absent. Addressing these gaps will require projects to focus on strengthening institutional frameworks, fully leveraging civil society networks, building capacity for inclusive design and participatory monitoring, and ensuring adequate time and resources for social analysis and engagement across all levels of programming.

PRIVATE SECTOR ENGAGEMENT

CONCLUSION 7: Private sector engagement in the GEF portfolio has expanded and demonstrated catalytic results, but remains uneven and below its full potential.

The GEF has moved from isolated pilot initiatives toward more systemic approaches embedded in integrated programs, sustainable commodity supply chains, renewable energy, circular

economy models, and sustainable urban services. Nongrant instruments (NGIs) have shown promise in mobilizing private capital and sharing risk through blended finance and performance-based mechanisms; while partnerships with agribusiness, financial institutions, and small and medium enterprises have supported sustainable production, improved market transparency, and enabled early stage innovation. Through global supply chain programs such as the Food, Land Use, and Restoration Impact Program and GOLD (Global Opportunities for Long-term Development of ASGM [Artisanal and Small-scale Gold Mining] Sector), and national initiatives in fisheries, livestock, and e-waste, the GEF has catalyzed behavioral shifts and opened pathways for sustainable practices to take root. Collectively, these achievements underscore the GEF's value as a flexible and catalytic partner capable of influencing business practices and expanding markets for environmental solutions.

At the same time, significant challenges persist.

Many projects remain discrete rather than systemic in design, with engagement often limited by short project cycles, insufficient enabling conditions, weak business cases for sustainability, and underutilization of NGIs. Private sector contributions frequently take the form of in-kind support rather than substantial financial commitments, and the \$15 million cap on NGI projects constrains larger, more catalytic investments in capital-intensive sectors such as renewable energy and sustainable infrastructure. Additional barriers include the complexity and time required to structure NGI projects, capacity gaps among Agencies and country partners, weak regulatory frameworks, and limited appetite for higher-risk investments, particularly in least developed countries and small island developing states.

Realizing the full catalytic potential of the GEF will require combining market transformation with catalytic financing. This can be accomplished through policy reform, standards, capacity building, and value chain engagement, while scaling up the use of NGIs

to mobilize private capital and de-risk innovation. Expanding partnerships with multilateral development bank private sector arms, strengthening internal capacity for financial innovation, and embedding more strategic, investment-ready models across focal areas and geographies will also be essential. By combining market transformation with catalytic financing, the GEF can better align with private sector incentives, foster systemic change, and accelerate progress toward global environmental benefits.

Partners and systems

THE GEF PARTNERSHIP

CONCLUSION 8: The GEF's partnership model remains a core strength, but can be further leveraged by addressing complexity and strengthening engagement. The GEF's partnership structure—bringing together 18 Agencies, the Secretariat, the Scientific and Technical Advisory Panel (STAP), civil society, and national partners—delivers environmental outcomes across regions and focal areas. This model offers flexibility and breadth, as Agencies contribute specialized expertise in biodiversity, chemicals, climate mitigation, land degradation, international waters, and finance, enabling the GEF to address diverse country needs and evolving global priorities. When Agency selection is well aligned with technical requirements, performance has been strong, leveraging Agencies' institutional networks and financing capacity to achieve significant results. Institutional and operational complexity—including overlapping roles and differing Agency procedures—has at times slowed delivery and increased transaction costs, pointing to the need for clearer division of responsibilities and simplified processes.

The Country Engagement Strategy (CES) has improved alignment between GEF programming and national priorities, with opportunities for improvements in implementation. It has done so

through national dialogues, pipeline planning, and support to the operational focal points. In countries that have fully embraced the CES, environmental priorities are better defined, cross-ministerial collaboration has improved, and GEF pipelines have become more strategically focused. However, CES implementation has been uneven. Some dialogues have occurred late in replenishment cycles, limiting their ability to inform upstream programming. There have been fewer expanded constituency workshops conducted than originally planned. Engagement from nonstate actors—including civil society, the private sector, and local communities—has been inconsistent, and limited focal point capacity and political turnover have hindered follow-up and continuity. Addressing these engagement challenges by ensuring more timely and inclusive dialogues and investing in focal point capacity would strengthen country ownership and programming coherence.

The STAP plays a central role in embedding science, innovation, and technical rigor across the GEF partnership; refining its mandate could amplify its scientific contributions and strategic influence across programs. It provides independent, objective advice on GEF strategies, programs, and projects, producing thematic papers, early stage project reviews, and strategic guidance on policies. Its contributions—especially in regard to integrated programming, risk appetite, and innovation—have bolstered the scientific underpinnings of GEF operations and influenced the shift toward systemic and cross-sectoral approaches. The STAP also has been instrumental in horizon scanning for emerging tools and technologies, supporting adaptive learning, and integrating resilience and knowledge management considerations into project design. However, its influence is shaped by an advisory mandate rather than direct implementation authority, which can limit the uptake of recommendations in country-level contexts. Stakeholders value its strategic thematic work, but note that the burden of routine project reviews—which could be handled

effectively by reviewers with deep project management and field experience—may divert attention from broader horizon scanning and policy-oriented guidance to operational items. Updating the STAP's terms of reference and clarifying its focus could better align its expertise and governance structure with the evolving needs of the GEF, ensuring timely and impactful scientific input to the GEF's strategic directions while continuing to support innovation and quality assurance across the portfolio.

The GEF partnership model remains inherently complex in administrative terms. Differences in Agency risk appetites and operational policies can create inefficiencies, while multi-Agency projects often face elevated transaction costs, longer preparation times, and challenges in coordination. In many cases, components implemented by different Agencies within a multi-Agency project are managed and reported on as separate projects, sometimes resulting in reporting gaps and reducing overall coherence. Knowledge-sharing systems also are fragmented across Agencies, limiting the ability to synthesize and disseminate lessons in real time. Addressing these challenges will require harmonization of operational practices where feasible, stronger institutional support for country coordination platforms, earlier and more inclusive CES dialogues, and a more integrated, system-wide approach to knowledge management.

RISK AND INNOVATION

CONCLUSION 9: More explicit management of risk and innovation have gained greater visibility in the GEF portfolio, yet both are constrained by structural and operational limitations. Despite growing recognition that testing new approaches and deploying emerging technologies often leads to transformational change, risk-taking within the GEF is still moderate, and innovation is not yet systematically embedded across the partnership. The adoption of a formal risk appetite statement in GEF-8 marks an important step toward greater openness to higher-risk,

innovative initiatives. Further, several programs have successfully piloted novel governance models, digital tools for monitoring and transparency, and advanced technologies such as remote sensing, data analytics, and traceability systems for sustainable supply chains. These innovations have shown potential to improve efficiency, influence behavior change, and open new markets for environmental solutions—in some cases catalyzing additional investment and shaping national policies.

Constraints to adopting innovative technologies persist across multiple dimensions. Approval processes tend to favor established approaches over untested but potentially transformational solutions, slowing the introduction of innovation at scale. Many GEF Agencies and countries face technical, institutional, and infrastructure barriers to adopting advanced technologies, particularly in lower-capacity settings. Limited incentives to take risks—coupled with concerns about being penalized for failure—further discourage innovation. The partnership’s varied risk appetites, combined with limited dedicated funding (including the \$15 million cap on NGIs) and insufficient incentives to pilot and scale innovative approaches, have limited the GEF’s ability to fully exploit emerging opportunities. Mechanisms to learn quickly from both successful and unsuccessful experiments remain underdeveloped, reducing opportunities to replicate proven innovations. Strengthening innovation in the GEF will require operational guidance to manage risk consistently, targeted resources to support experimentation and technology deployment, and stronger systems for rapid learning and knowledge exchange across the portfolio. It will also require partnerships with not just ministries and public regulation agencies but with proven innovators, including private sector entities as well as universities or university spin-off enterprises in countries.

GEF FUNDING SOURCES

CONCLUSION 10: The GEF’s financial foundation remains a core strength, reflecting long-standing donor confidence in its mandate to serve multiple conventions and deliver global environmental benefits. Successive replenishments have secured stable contributions that have enabled the GEF to maintain its catalytic role in supporting global environmental action. However, the donor base has narrowed over recent cycles, with emerging and middle-income countries reducing their participation, and contributions becoming increasingly concentrated among a small number of donors. This concentration heightens exposure to financial and geopolitical risks. Despite record nominal funding secured for GEF-8, real-term resources have declined compared to GEF-5, although they remain higher than in GEF-6 and GEF-7. This erosion in purchasing power constrains the GEF’s ability to meet rising global environmental demands. At the same time, the GEF has yet to fully leverage new sources of capital, such as philanthropic contributions and private finance, leaving significant opportunities for financial diversification untapped.

Cofinancing remains central to the GEF model and has consistently exceeded corporate targets, demonstrating its catalytic effect in mobilizing additional resources; nevertheless, the quality and durability of cofinancing vary widely. Much of the reported cofinancing is derived from public sector budgets and linked to short-term project timelines, rather than representing sustained commitments. Private sector participation is still limited, and contributions often take the form of in-kind support rather than significant financial investments, reducing their transformational potential. The GEF’s flexible definition of cofinancing, which includes parallel financing and noncash contributions, has broadened participation but also raised questions about comparability and credibility, as these different types of contributions are not always equivalent or consistently reported. Realization rates are particularly low for loan-based

cofinancing—55 percent of which goes unrealized—and for projects in LDCs and SIDS. In addition, verification of actual contributions is challenging due to incomplete documentation and difficulty tracking in-kind resources.

NGIs, designed to mobilize private capital and share risk have demonstrated potential, but remain underutilized relative to their potential because of several structural barriers. These barriers include weak financial markets and regulatory environments in many recipient countries, which constrain their ability to mobilize private capital at scale and limit their contribution to the GEF's catalytic mandate. Additional challenges include the complexity of structuring financial products under current GEF procedures, uneven Agency capacity for financial innovation, and the lack of robust risk-sharing mechanisms. Addressing these constraints—including revisiting the NGI operational cap and strengthening financial structuring capacity—will be critical for scaling private sector engagement and diversifying financing for environmentally sustainable solutions.

The STAR, introduced in 2010, provides countries with a transparent, equitable, and predictable source of GEF funding. It covers biodiversity, climate change, and land degradation, while other focal areas and special initiatives—such as chemicals and waste, international waters, the LDCF, and the SCCF operate outside its scope. GEF-8 strengthened national ownership by allowing countries full flexibility to reallocate STAR funds across focal areas based on their priorities, supporting strategic and long-term planning. Although the STAR remains a predictable source of funding, STAR country allocations for GEF-8 accounted for 46 percent of total programmable resources for the period, compared to 53 percent in GEF-6; this reflects a drop in resources for the climate change focal area and an increase in resources for set-asides.

SYSTEMS FOR RESULTS AND KNOWLEDGE

CONCLUSION 11: The GEF's systems for results, knowledge, and learning have shown meaningful improvements. However, to support adaptive management, innovation, scaling, and transformation, these systems require deeper integration into core project functions, improved feedback loops, and sustained institutional commitment and resourcing. The GEF has strengthened its results-based management framework by expanding tracking tools and refining its corporate results system to better capture global environmental outcomes. Indicators are better harmonized across Agencies, aligned with environmental conventions, and tailored for integrated programming. These enhancements bolster the GEF's ability to monitor biophysical results such as greenhouse gas reductions, land restoration, biodiversity gains, and pollutants control.

However, the results-based management system remains heavily oriented toward outputs and near-term environmental outcomes. It has limited capacity to track deeper transformational changes including institutional strengthening, policy alignment, behavior shifts, and program sustainability. Reporting on socioeconomic co-benefits and inclusion outcomes remains inconsistent, making it difficult to assess broader development impacts. Weak feedback loops hinder the timely translation of data into adaptive decision-making and program refinement.

Knowledge efforts continue to grow, offering scope to overcome fragmentation and timing gaps. Knowledge management has advanced through targeted coordination platforms under integrated programs and thematic initiatives that produce technical guidance and foster exchanges within specific focal areas. Yet knowledge remains fragmented even within a program and is often confined to individual projects or Agencies. Timing mismatches—when global knowledge production does not align with country-level

implementation—reduce practical value. Lessons from innovations such as blended finance initiatives, private sector engagement, and integrated programs are captured in evaluations but not consistently converted into operational tools or shared across programs and geographies. Notably, there is no centralized repository for knowledge generated across the integrated and impact programs despite knowledge being claimed as the core element of integrated programming value addition.

The GEF has strengthened its results and knowledge systems, but institutional learning from challenges and failures is not yet fully systematized.

While valuable insights on stakeholder engagement, financial design, and risk treatment are generated, they often remain confined to individual projects. Building on existing progress, the GEF should enhance feedback loops, create incentives for learning from failures, ensure structured uptake of evaluation findings, and translate lessons into practical guidance for both project and policy design, moving toward a culture of continuous learning and improvement to support catalytic change.

12.2 RECOMMENDATIONS

Building on the above conclusions, the following recommendations outline actions to strengthen the GEF's programming approach and enhance its processes and institutional framework to deliver greater impact and transformational change in GEF-9 and beyond.

Programming

RECOMMENDATION 1: Strengthen the transformational impact of integrated programming, focusing on strategic selectivity and consolidation.

Integrated programs should be streamlined to fewer but deeper rather than broader, all-encompassing initiatives. They should be built around robust theories

of change, explicit scaling pathways, and strong knowledge and learning platforms, with a centralized repository for knowledge and lessons. This focus will provide the clarity and depth needed to address systemic drivers of environmental degradation and deliver impact at scale, including in complex areas such as food systems and sustainable urban development. Implementation must also address challenges observed in current programs, including compressed design timelines, uneven coordination between global platforms and country-level child projects, and limited opportunities for inclusive stakeholder engagement during preparation. Clear roles and responsibilities across Agencies and countries, realistic timelines that prioritize depth over breadth, and mechanisms that link global knowledge support directly to in-country implementation are essential. Programs should be structured from the outset to attract cofinancing and private sector investment, aligning financial innovation and policy reforms with programmatic goals to deliver scalable solutions that endure well beyond GEF funding. There is a distinct need for a clear exit strategy in the individual integrated programs, including well-defined criteria and guidance for determining whether and when integrated programs should continue or be phased out.

RECOMMENDATION 2: Embed sustainability and financing arrangements at design to secure long-term outcomes.

The GEF should require relevant projects to include sustainability and financing arrangements at the design stage. Early engagement with relevant ministries and technical agencies is essential to integrate environmental priorities into national budgets and financial systems, ensuring results are anchored in long-term country commitments. Greater attention should be given to institutional sustainability, including strong linkages with in-country institutions and stakeholders—notably local governments, the private sector, and civil society organizations—that can uphold and scale outcomes

over time. Stronger linkages to complementary financing sources—such as the Green Climate Fund, the Adaptation Fund, and domestic revenue streams—could enable continuity and scaling beyond GEF funding. Tracking outcomes in select projects beyond closure will generate useful feedback to strengthen future programming and reinforce lasting impact.

RECOMMENDATION 3: Pursue higher-risk, high-reward innovation with appropriate safeguards and incentives, aligned with the GEF's risk appetite framework. To achieve transformational change, the GEF should, where possible, actively prioritize innovations that carry higher risk, but have the potential to deliver breakthrough environmental solutions. This requires giving Agencies clear guidance to manage risk appropriately, deploying risk-sharing mechanisms, and enabling engagement in frontier markets and disruptive approaches such as advanced digital tools, artificial intelligence applications, and nature-based solutions. Innovation must be explicit and deliberate, with clear pathways for scaling, stronger integration of theories of change into adaptive management, and robust systems for monitoring and real-time learning. Embedding risk and innovation metrics into results frameworks and institutionalizing knowledge exchange will ensure lessons are captured, successful models are replicated, and innovative solutions achieve system-wide impact.

RECOMMENDATION 4: Unlock private sector potential and expand the use of NGIs to deliver scalable change. Private sector engagement should be strengthened by embedding it more systematically across GEF programming. This includes expanding partnerships with agribusiness, financial institutions, and small and medium enterprises; aligning project design with private sector incentives; and fostering enabling conditions—such as policy reform, standards, and institutional frameworks—that encourage investment and behavioral change.

Expand the use of NGIs to mobilize private capital and share risk, particularly in sectors requiring larger-scale and more innovative financing. Countries and Agencies need enhanced capacity to design blended finance solutions, with incentives to integrate private sector approaches across all focal areas. The GEF should capitalize on Agency strengths, leveraging multilateral development banks' investment and risk-sharing capacity alongside the technical expertise and policy support of United Nations Agencies and others. Despite growing demand, the share of NGIs in the GEF portfolio remains small due to limited resources allocated to the window, and countries are hesitant to use the STAR allocations. The GEF should seek to improve countries' understanding of NGIs and can enhance conditions for their use. Removing constraints such as the cap on NGIs can enable larger, transformative investments that can attract institutional and commercial finance in collaboration with multilateral development banks, and must be carefully balanced to avoid crowding out smaller, innovative NGI initiatives.

Processes

RECOMMENDATION 5: Streamline processes and improve efficiency across the GEF family of funds, where possible, to reduce application complexity and support countries, particularly those with limited capacity. Aligning operational processes across all GEF-managed trust funds and funding windows, to the extent feasible, could simplify access and ease the administrative burden on countries and Agencies. Project approval timelines should be accelerated through simplified review layers; a clear division of roles between the Secretariat, the GEF Agencies, and the STAP; and time-bound steps for each stage of the cycle. Simplified procedures for integrated programs can avoid delays from complex coordination arrangements. Strengthening readiness requirements at Chief Executive Officer endorsement, expanding the use

of digital tools for project development and monitoring, and systematically tracking cycle performance will further improve responsiveness. Regular benchmarking against peer funds will help maintain the GEF's comparative advantage while ensuring countries can efficiently access and implement resources across all GEF funds.

Institutional framework

RECOMMENDATION 6: Take decisive steps to address structural challenges within the GEF partnership and create an inclusive, transparent, and impactful country engagement process. This requires clarifying the dual role of Agencies as both implementing and executing entities when present, supported by transparent mechanisms to manage potential conflicts of interest and strengthen trust. Greater collaboration should be incentivized by leveraging Agencies' comparative strengths, reducing duplication of effort, and enhancing the overall efficiency of resource use.

Institutionalize country engagement through early and inclusive dialogues that involve both environmental and nonenvironmental ministries as well as civil society and the private sector. Strengthening the capacity of operational focal points will be critical to coordinating effectively across ministries and with other environmental funds, ensuring alignment with national priorities. At the same time, the GEF should adopt a unified external partnership strategy that brings together other global environmental funds, philanthropy, and financial institutions, while creating knowledge platforms to facilitate peer learning, replication of successful approaches, and the diffusion of innovative solutions.

RECOMMENDATION 7: To improve transparency and inclusivity in national planning processes, the GEF should encourage its Agencies to share their country-specific priorities and competencies.

This should be done early in the replenishment cycle to inform upstream technical planning with operational focal points and shared as part of the Country Engagement Strategy, as appropriate, to ensure that these processes and approaches are openly shared with all stakeholders. Countries and Agencies should be asked to collaboratively produce a concise outcome document summarizing priorities and agreed-upon actions following the completion of the national GEF portfolio planning process. Together, these measures will strengthen partnerships, reduce fragmentation and concentration, enhance country ownership, and improve the environmental and development impact of GEF programming.

RECOMMENDATION 8: Strengthen financial sustainability and reduce reliance on a limited group of donors by improving cofinancing practices and building on current efforts to diversify the funding base. Cofinancing targets should be recalibrated with differentiated, realistic expectations based on country income levels, project types, and financing conditions. These targets must be supported by standardized definitions of financial, in-kind, and parallel contributions, as well as independent verification mechanisms by Agencies at midterm and completion. Transparency is essential, with disaggregated data on cofinancing commitments and realization published regularly. Performance assessments should be focused on realized, high-quality leverage rather than pledged amounts.

To secure long-term funding stability, the GEF should adopt a strategic resource mobilization plan that incorporates efforts to broaden the sovereign donor base, engages former contributors, and extends outreach to underrepresented regions. The plan should also establish a structured framework to engage philanthropic foundations, corporations, and other nonsovereign contributors, drawing on proven approaches from leading global funds. In parallel, the GEF should explore engagement with regional and global groups with a strong environmental focus, such

as the G20, which has already issued recommendations directed to the GEF and whose members are all GEF partners. Together, these actions would reduce concentration risk, broaden the GEF's financial base, and enhance its ability to respond to escalating global environmental challenges.

RECOMMENDATION 9: Integrate knowledge, results, and learning systems into a coherent platform that drives adaptive management and innovation across the GEF partnership.

This requires establishing a unified knowledge platform accessible to Agencies, countries, civil society, and partners and focused on capturing and sharing lessons from integrated programs, innovative approaches, and private sector engagement. Indicators and evaluation tools must be strengthened to measure systemic change, behavior shifts, and resilience outcomes, moving beyond output-based reporting. Expanding training and peer learning will ensure that evidence and best practices directly inform project and program design, while institutionalized mechanisms for learning from both successful and failed projects will embed continuous improvement and innovation into all aspects of GEF programming.

The coming decade will determine whether the world can reverse accelerating climate change, biodiversity loss, land degradation, chemical pollution, and ocean decline, and the GEF is uniquely positioned to catalyze the integrated, systemic, and transformational

change this moment demands. The evidence from OPS8 shows that the GEF's mandate, experience, and partnership model provide an unparalleled foundation for scaling impact, aligning global commitments with country-led solutions, and leveraging diverse sources of finance and knowledge. To realize its full potential, GEF-9 must be selective and strategic in choosing what, where, and how it invests; focus on designing solutions that are sustainable from the outset; and embed pathways for scaling into every program. This requires sharpening the focus of integrated programming, embedding innovation and risk-taking in line with the GEF's risk appetite, expanding and diversifying its financing base, strengthening partnerships and country engagement, and aligning results and learning systems to drive adaptive management.

By pursuing greater selectivity and strengthening integration for impact, the GEF can optimize resource allocation, enhance effectiveness, and deliver sustained global environmental benefits while supporting resilient and sustainable development pathways.

Annexes



Contributors

Chandy Abraham
Nana Sika Ahiabor
Fernando Aragón-Durand
Alexis Rivera Ballesteros
Jacob Victor Yantovski Barth
Jose Miguel Lopez Beltran
Sandeep Bhupatiraju
Emanuele Bigagli
Hans-Martin Boehmer
Dennis Peter Bours
Alexander Francis Burger
Patrick Franz Bureauel
Angel Ivan Roman Castanon
Centennial Advisory LLC
Center for Clean Air Policy
Tamar Cherkezishvili
Kaitlyn Margaret Crowley
Sawyer Drew Czupka
Lilian Caspillo De La Pena
Hari Prasad Dhungana
Nischal Dhungel
Ezéchiél Dingamadji
Caroline Elisabeth Edwards
James Nicholas Elmore
Ariel Elyah
Environmental Law Institute
Federico Fraga
Ines Beate Freier
Joaquim Da Costa Freitas
Pavel Oceotl Galeana Guarneros
Richard Anthony Gutierrez
Md. Nabil Haque

Neerajakshi Havaligi
Glen Spencer Hearn
Gabriela Ileana Iacobuta
ICF Incorporated LLC
ITAD Ltd
Lara Del Valle Johnson
Chandrani Eva Kadirgamar
Erneus Rugemalila Kaijage
Erjon Kalaja
Ritu Kanotra
Eddah Kanini Karijo
Erlinda Cahya Kartika
Tanya Khan
Gyuri Kim
Kim Aneesh Kotru
Payal Rajender Kumar
Dalibor Kysela
Kanchan Lama
Le Group Conseil Baastel LTEE
Anna R. Linden
Daniella Nicole Marx
Mariana Vidal Merino
Graciela Isabel Metternicht
Alan Miller
Laura Kristine Kathleen Mills
Mariana Silvana Moy
Fatima Mumtaz
Roderick Douglas Myers
Sarah Kate Nagel
Suppiramaniam Nanthikesan
Renovat Nimpaye
Laura Reynolds Nissley

Phathisiwe Ngwenya
Trond Norheim
Joseph David O. Brien
Okapi Environmental Consulting Inco
Octávio Fátima Carvalho Oliveira de Araújo
Amna Ahmed Mohamed Elhassan Omer
Glenn Andrew O'Neil
Richard Paisley
T. Nang Seng Pan
Dyah Paramita
Islam Yasin Qasem
Veena Ramachandran
Matteo Ramina
David William Rejeski
Ariana Araujo Resenterra
Nathaniel P. Robinson
Alan Lopez Ruiz
Daniel Scott Miller Runfola
Nathaniel Wesley Russell
Ruslan Salmanov
Lucia Delgado Sanchez
Maria Shkaratan
Sarika Arora Sindhvani

Gabriela Lopez Sotomayor
Margaret Ann Spearman
Isabel Eleanor Stack
Stiftelsen The Stockholm Environment
Gaurav Thapak
David Michael Todd
Pietro Tornese
Sarrah Touzi
Aishwary Trivedi
Universal Management Group Ltd
Ishwor Ballav Upreti
Leonard Ijanwei Usongo
Clemencia Vela
Olivia Marie Wachob
Skye Turner Walker
Nic Kelson Kelvin Williams
Christine M.L. Woerlen
Yaxin Zhu

Independent Advisory Panel statement

All members of the Panel endorse the IEO's positive and wide-ranging evaluation of the GEF's achievements. We also support the report's sense of urgency as rationale for the GEF to not only lift performance beyond the success of individual projects towards broader system-wide impact but also to make choices that take the GEF beyond how it has operated in the past.

The Independent Advisory Panel has been actively engaged throughout the evaluation. We provided feedback on the draft approach paper, the draft briefing, and the draft final report, and reviewed in detail many of the 34 evaluations on which the comprehensive evaluation is based.

These are critical times. The gap between the worsening state of the global environment and policy actions by countries individually and as a group is widening. So is the gulf between financing needs for environmental protection and the resources that are being made available. This state of play obliges countries and the global community to go beyond incremental efforts and seek far-reaching, transformational impact from investment and policy action. Now is the time to look beyond "business as usual."

It is fortuitous that the GEF is uniquely positioned for this with its track record of both capability and commitment to its mandate and its unique business model of operating with and across a complementary group of Agencies.

The report's conclusions and recommendations point the way forward. It confirms the very solid project outcomes profile of the portfolio. And it notes the GEF's experience that success depends on selecting projects that are well designed and thus come with a high likelihood of good performance and longevity of outcomes, as much as on fostering deep country engagement and institutional ownership. These and other indicators of success—notably the strength of the partners' commitment to cofinancing—are well highlighted and can now be used by the GEF in considering new approaches to selectivity and scale.

The report includes compelling examples of projects that have managed to achieve significant reach and scale. We noted in particular efforts that involved a mix of local and external partners—including the private sector—which have been able to crowd-in investment, innovation, and knowledge and learning. We also noted the role that knowledge and learning have played in creating catalytic and multiplier effects, backed by adequate staffing and financing, thus achieving continuity in the environmental, financial, and institutional shifts created.

Pursuing greater leverage and impact will involve difficult choices and trade-offs.

The GEF's agenda is more relevant today than ever. In today's challenging global conditions, adequate resourcing of the GEF is needed to deliver a high-impact agenda that goes beyond individual projects. This will not be easy. Even though the social

benefit of acting with urgency far outweighs the financial cost of acting, the dominance of short-term financial calculus holds back the adequate delivery of environmentally and socially critical programs. OPS8 confirms, in our view, that with strong funding and engagement from its global constituency and its

country and external collaborators, the GEF can make a decisive difference.

— Patricia Rogers, Stefan Schwager, Vinod Thomas,
Hasan Tuluy, and Monika Weber-Fahr

Projects cited

GEF ID	Title	GEF Agency	Country
1692	Global Programme to Demonstrate the Viability and Removal of Barriers that Impede Adoption and Successful Implementation of Available, Non-Combustion Technologies for Destroying Persistent Organic Pollutants (POPs)	UNDP, UNIDO	Slovak Republic
2329	Global Programme to Demonstrate the Viability and Removal of Barriers that Impede Adoption and Successful Implementation of Available, Non-Combustion Technologies for Destroying Persistent Organic Pollutants (POPs)	UNIDO	Philippines
2554	Energy Efficiency Codes in Residential Buildings and Energy Efficiency Improvement in Commercial and Hospital Buildings in Morocco	UNDP	Morocco
2690	SFM Improving the Conservation of Biodiversity in Atlantic Forest of Eastern Paraguay	WB	Paraguay
2826	Uruguay Wind Energy Programme (UWEP)	UNDP	Uruguay
2926	Environmentally Sound Management and Disposal of Obsolete Persistent Organic Pollutants (POPs) Pesticides and Other POPs Wastes	UNIDO	China
3279	Citarum Watershed Management and Biodiversity Conservation Project	ADB	Indonesia
3376	Private Public Sector Partnership on Capacity Building for Sustainable Land Management in the Shire River Basin	UNDP	Malawi
3404	Promoting Climate-Resilient Water Management and Agricultural Practices	UNDP	Cambodia
3608	PRC-GEF Partnership: Sustainable Development in Poor Rural Areas	WB	China
3690	Protection and Sustainable Use of the Dinaric Karst Aquifer System	UNDP	Regional
3936	Mainstreaming Coastal and Marine Biodiversity Conservation into Production Sectors in the Godavari River Estuary in Andhra Pradesh State	UNDP	India
3941	Mainstreaming Coastal and Marine Biodiversity Conservation into Production Sectors in the Malvan Coast, Maharashtra State	UNDP	India
4111	Institutional and Policy Strengthening to Increase Biodiversity Conservation on Production Lands (PL)	UNDP	Colombia
4257	The GEF Earth Fund: IFC Earth Fund Platform	WB/IFC	Global

GEF ID	Title	GEF Agency	Country
4261	Integrating Climate Change Risks into Water and Flood Management by Vulnerable Mountainous Communities in the Greater Caucasus Region of Azerbaijan	UNDP	Azerbaijan
4340	Strategic Planning and Action to Strengthen Climate Resilience of Rural Communities in Nusa Tenggara Timor Province	UNDP	Indonesia
4343	Implementation of the Yellow Sea Large Marine Ecosystem Strategic Action Programme for Adaptive Ecosystem-Based Management	UNDP	Regional
4345	Renewable Energy for Rural Livelihood	UNDP	Nepal
4386	Environmentally Sound Management and Final Disposal of Polychlorinated Biphenyls (PCBs)	UNIDO	Ukraine
4392	Protect Human Health and the Environment from Unintentional Releases of Persistent Organic Pollutants Originating from Incineration and Open Burning of Health Care and Electronic Waste	UNDP	Egypt, Arab Rep.
4464	Integrating Traditional Crop Genetic Diversity into Technology Using a BD Portfolio Approach to Buffer Against Unpredictable Environmental Change in the Nepal Himalayas	UNEP	Nepal
4489	A Transboundary Waters Assessment Programme: Aquifers, Lake/Reservoir Basins, River Basins, Large Marine Ecosystems, and Open Ocean to Catalyze Sound Environmental Management	UNEP	Global
4515	Southeastern Europe and Caucasus Catastrophe Risk Insurance Facility	WB	Regional
4551	Community Based Flood and Glacial Lake Outburst Risk Reduction	UNDP	Nepal
4554	Effective Governance for Small-Scale Rural Infrastructure and Disaster Preparedness in a Changing Climate	UNDP	Lao PDR
4600	Reducing Pressures on Natural Resources from Competing Land Use in Non-irrigated Arid Mountain, Semi-desert and Desert Landscapes	UNDP	Uzbekistan
4626	Geothermal Power Generation Program	WB	Djibouti
4645	Hwange-Sanyati Biological Corridor Project	WB	Zimbabwe
4746	Implementation of Global and Regional Oceanic Fisheries Conventions and Related Instruments in the Pacific Small Island Developing States	UNDP, FAO	Regional
4766	Implementation of Eco-Industrial Park Initiative for Sustainable Industrial Zones in Viet Nam	UNIDO	Viet Nam
4797	Climate Proofing Local Development Gains in Rural and Urban Areas of Machinga and Mangochi Districts	UNDP	Malawi
4801	Promotion of Non-fired Brick Production and Utilization	UNDP	Viet Nam
4841	Strengthening the Effectiveness of the National Protected Area System by Including a Landscape Approach to Management	UNDP	Uruguay
4888	Environmentally Sound Management of Municipal and Hazardous Solid Waste to Reduce Emission of Unintentional Persistent Organic Pollutants	UNIDO	Senegal
4918	Partial Risk Sharing Facility for Energy Efficiency	WB	India
4959	IDB-PPP MIF Public-Private Partnership Program	IDB	Regional

GEF ID	Title	GEF Agency	Country
4993	Strengthening Climate Information and Early Warning Systems in Africa to Support Climate Resilient Development and Adaptation to Climate Change	UNDP	Uganda
4994	Strengthening Climate Information and Early Warning Systems in Malawi to Support Climate Resilient Development and Adaptation to Climate Change	UNDP	Malawi
4998	Environmental Sound Life-Cycle Management of Mercury Containing Products and their Wastes	UNDP	Uruguay
5034	Enhancing the Forest Nature Reserves Network for Biodiversity Conservation in Tanzania	UNDP	Tanzania
5143	South Eastern Mediterranean EE/ESCO Markets Platform	EBRD	Regional
5147	Enhancing Resilience of Agricultural Sector in Georgia	IFAD	Georgia
5204	Building Resilience to Climate Change in the Water and Sanitation Sector	AfDB	Uganda
5220	Sustainable Land Management Project 2	WB	Ethiopia
5271	Global Sustainable Supply Chains for Marine Commodities	UNDP	Costa Rica, Ecuador, Indonesia, the Philippines
5272	Scaling up Sustainable Land Management and Biodiversity Conservation to Reduce Environmental Degradation in Small Scale Agriculture in Western Kenya	UNEP	Kenya
5297	Promoting Access to Clean Energy Services in St. Vincent and the Grenadines	UNDP	St. Vincent and the Grenadines
5310	Enabling Transboundary Cooperation and Integrated Water Resources Management in Chu and Talas River Basins	UNDP	Regional
5318	Strengthening Climate Information and Early Warning Systems in Cambodia to Support Climate Resilient Development and Adaptation to Climate Change	UNDP	Cambodia
5362	Obsolete Pesticides Management Project	WB	Côte d'Ivoire
5376	Enhancing the Resilience of the Agricultural Ecosystems	IFAD	Chad
5393	Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas	UNDP	Regional
5395	R2R: Pacific Islands Ridge-to-Reef National Priorities – Integrated Water, Land, Forest and Coastal Management to Preserve Biodiversity, Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods	UNDP, FAO, UNEP	Regional
5398	Implementing a “Ridge to Reef” Approach to Preserve Ecosystem Services, Sequester Carbon, Improve Climate Resilience and Sustain Livelihoods in Fiji (Fiji R2R)	WB	Fiji
5404	R2R: Testing the Integration of Water, Land, Forest & Coastal Management to Preserve Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods in Pacific Island Countries	WB	Regional
5407	Disposal of Obsolete Pesticides including Persistent Organic Pollutants, Promotion of Alternatives and Strengthening Pesticides Management in the Caribbean	FAO	Regional
5508	Transforming the Global Maritime Transport Industry Towards a Low Carbon Future Through Improved Energy Efficiency	UNDP	Global
5556	West Balkans Drina River Basin Management	WB	Regional

GEF ID	Title	GEF Agency	Country
5558	Development and Implementation of a Sustainable Management Mechanism for Persistent Organic Pollutants in the Caribbean	UNIDO	Regional
5560	Forest Conservation and Sustainability in the Heart of the Colombian Amazon	WB	Colombia
5667	Climate Change Adaptation in the Eastern Caribbean Fisheries Sector	FAO	Regional
5668	Innovative Use of a Voluntary Payment for Environmental Services Scheme to Avoid and Reduce GHG Emissions and Enhance Carbon Stocks in the Highly Threatened Dry Chaco Forest Complex in Western Paraguay	CI	Paraguay
5671	Building Shoreline Resilience of Timor-Leste to Protect Local Communities and Their Livelihoods	UNDP	Timor-Leste
5677	Rehabilitation of Degraded Agricultural Lands in Kandy, Badulla and Nuwara Eliya Districts in the Central Highlands	FAO	Sri Lanka
5701	Reducing Environmental and Health Risks to Vulnerable Communities from Lead Contamination from Lead Paint and Recycling of Used Lead Acid Batteries	UNDP	Regional
5723	West Balkans Drina River Basin Management Project	WB	Regional
5765	Integrated Transboundary Ridges-to-Reef Management of the Mesoamerican Reef	WWF-US	Regional
5767	Implementation of SLM Practices to Address Land Degradation and Mitigate Effects of Drought	UNDP	Philippines
5789	Using SLM to Improve the Integrity of the Makgadikgadi Ecosystem and to Secure the Livelihoods of Rangeland Dependent Communities	UNDP	Botswana
6945	Strengthening Capacities of Rural Aqueduct Associations to Address Climate Change Risks in Water Stressed Communities of Northern Costa Rica	UNDP	Costa Rica
6960	Supporting Climate Resilient Livelihoods in Agricultural Communities in Drought-prone Areas	UNDP	Turkmenistan
6943	[[Nita: Move this one to go in numeric order by ID.]] Conservation and Sustainable Use of Globally Important Agro-biodiversity	UNDP	Azerbaijan
6962	Advancing IWRM Across the Kura River Basin through Implementation of the Transboundary Agreed Actions and National Plans	UNDP	Regional
6991	Senegal National Adaptation Plan	UNDP	Senegal
8001	Community-based Climate Risks Management in Chad	UNDP	Chad
9047	Green Logistics Program	EBRD	Regional
9050	Building Resilience for Food Security and Nutrition in Chad's Rural Communities	AfDB	Chad
9071	Global Partnership on Wildlife Conservation and Crime Prevention for Sustainable Development	WB, ADB, WWF-US, IUCN, UNEP, UNDP	Global
9132	Food-IAP: Reversing Land Degradation Trends and Increasing Food Security in Degraded Ecosystems of Semi-arid Areas of Central Tanzania	IFAD	Tanzania
9134	Food-IAP: Agricultural Value Chains Resilience Support Project	IFAD, UNIDO	Senegal

GEF ID	Title	GEF Agency	Country
9135	Food-IAP: Integrated Landscape Management to Enhance Food Security and Ecosystem Resilience	UNDP	Ethiopia
9136	Niger: Food-IAP: Family Farming Development Programme	IFAD	Niger
9139	Food-IAP: Establishment of the Establishment of the Upper Tana Nairobi Water Fund	IFAD	Kenya
9140	Food-IAP: Cross Cutting Capacity Building, Knowledge Services and Coordination Project for the Food Security Integrated Approach Pilot Program	IFAD	Regional
9141	GEF-IAP: Participatory Natural Resource Management and Rural Development Project in the North, Centre-North and East Regions	IFAD	Burkina Faso
9143	Food-IAP: Integrated Landscape Management to Enhance Food Security and Ecosystem Resilience in Nigeria	UNDP	Nigeria
9147	Sustainable Cities Development in Malaysia	UNIDO	Malaysia
9153	Climate-smart Livestock Production and Land Restoration in the Uruguayan Rangelands	FAO	Uruguay
9154	Managing the Human-Wildlife Interface to Sustain the Flow of Agro-Ecosystem Services and Prevent Illegal Wildlife Trafficking in the Kgalagadi and Ghanzi Drylands	UNDP	Botswana
9163	Enabling the use of Global Data Sources to assess and Monitor Land Degradation at Multiple Scales	CI	Global
9178	Food-IAP: Support for Sustainable Food Production and Enhancement of Food Security and Climate Resilience in Burundi's Highlands	FAO	Burundi
9180	Reducing Deforestation from Commodity Production	UNDP	Global
9182	Commodities-IAP: Generating Responsible Demand for Reduced-Deforestation Commodities	WWF-US, UNDP	Global
9194	Strengthening Adaptive Capacities to Climate Change through Capacity Building for Small Scale Enterprises and Communities Dependent on Coastal Fisheries in The Gambia	UNIDO	The Gambia
9199	Enhancing Sustainability and Climate Resilience of Forest and Agricultural Landscape and Community Livelihoods	UNDP	Bhutan
9212	Wildlife and Human-Elephant Conflicts Management	WB	Regional
9223	GEF China Sustainable Cities Integrated Approach Pilot	WB	China
9232	Sustainable Management of Peatland Ecosystems in Mekong Countries	IUCN	Regional
9272	Amazon Sustainable Landscapes Program	WB, UNDP, WWF-US	Regional
9323	Cities-IAP: Sustainable Cities, Integrated Approach Pilot in India	UNIDO	India
9340	Food-IAP: Sustainable Land and Water Management Project, Second Additional Financing	WB	Ghana
9342	Climate Smart Urban Development Challenge	UNDP	Serbia
9354	Public Lighting Energy Efficiency Program: Public lighting replacement of low-efficiency VSAP bulbs with high-efficiency LEDs in Colombia	IDB	Colombia
9367	Bhutan Sustainable Low-emission Urban Transport Systems	UNDP	Bhutan

GEF ID	Title	GEF Agency	Country
9379	Application of Green Chemistry in Vietnam to Support Green Growth and Reduction in the Use and Release of Persistent Organic Pollutants/Harmful Chemicals	UNDP	Viet Nam
9416	Conserving Biodiversity through Sustainable Management in Production Landscapes in Costa Rica	UNDP	Costa Rica
9417	Restoring Ecological Corridors in the Mayo-Kebbi Quest, Chad, to Support Multiple Land and Forests Benefits (RECONNECT)	IUCN	Chad
9431	A Ridge-to-Reef Approach for the Integrated Management of Marine, Coastal and Terrestrial Ecosystems in the Seychelles	UNDP	Seychelles
9437	Integrated Landscape Management to Secure Nepal's Protected Areas and Critical Corridors	WWF-US	Nepal
9445	Conservation and Sustainable Use of Biological Diversity in Priority Landscapes of Oaxaca and Chiapas	CI	Mexico
9451	Caribbean Regional Oceanscape Project	WB	Regional
9525	Strengthening Institutions, Information Management, and Monitoring to Reduce the Rate of Illegal Wildlife Trade in South Africa	UNEP	South Africa
9529	Strengthening Partnerships to Protect Endangered Wildlife in Viet Nam	WB	Viet Nam
9555	Sustainable Productive Landscapes	WB	Mexico
9567	Renewable Energy for the City of Marrakech's Bus Rapid Transit System	UNDP	Morocco
9593	Management of Competing Water Uses and Associated Ecosystems in Pungwe, Busi and Save Basins	IUCN	Regional
9602	Global Opportunities for Long-term Development of ASGM Sector - GEF GOLD	UNEP, UNDP, UNIDO, CI	Global
9617	Taking Deforestation Out of the Soy Supply Chain	UNDP	Brazil
9707	Integrated Sound Management of Mercury in Indonesia's Artisanal and Small-scale Gold Mining	UNDP	Indonesia
9719	Piloting Innovative Investments for Sustainable Landscapes	UNEP	Global
9741	Developing a Comprehensive Framework for Practical Implementation of the Nagoya Protocol	UNDP	Cambodia
9814	Strengthening the Capacity of Institutions in Uganda to Comply with the Transparency Requirements of the Paris Agreement	CI	Uganda
9889	Mainstreaming Biodiversity Conservation through Low-Impact Ecotourism in SINAP II	IDB	Panama
10054	Promoting Climate-smart Livestock Management in the Dominican Republic	FAO	Dominican Republic
10141	Circular Economy Approaches for the Electronics Sector in Nigeria	UNEP	Nigeria
10182	Integrated Transboundary River Basin Management for the Sustainable Development of the Limpopo River Basin	UNDP	Regional
10185	Implementing Sustainable Low and Non-Chemical Development in SIDS (ISLANDS)	UNEP	Global
10201	Food, Land Use, and Restoration Impact Program	WB, FAO, UNEP, UNIDO, WWF-US, IFAD, UNDP	Global

GEF ID	Title	GEF Agency	Country
10230	Strengthening Land Degradation Neutrality data and decision-making through free and open access platforms	CI	Global
10243	Preventing forest loss, promoting restoration and integrating sustainability into Ethiopia's coffee supply chains and food systems	UNDP	Ethiopia
10247	Scaling up Cocoa-based Food Systems, Land Use and Restoration / Transformative Innovations in Côte d'Ivoire (SCOLUR-CI)	FAO, UNIDO, UNDP	Côte d'Ivoire
10262	Food Systems, Land Use and Restoration in Tanzania's Forest Landscapes	WWF-US	Tanzania
10268	Inclusive Sustainable Rice Landscapes in Thailand	UNEP	Thailand
10282	Tashkent - Accelerating Investments in Low Emission Vehicles	UNDP	Uzbekistan
10306	FOLUR Global Knowledge to Action Platform to Support Transformational Shifts In Food and Land Use Systems	WB	Global
10307	Deforestation Free Commodity Supply Chains in the Peruvian Amazon	UNDP	Peru
10312	Community-based Climate-responsive Livelihoods and Forestry (CCLF)	UNDP	Afghanistan
10322	Food Securities Fund: A fund to finance sustainable supply chains at scale in Emerging Markets	CI	Global
10330	Wildlife Conservation Bond	WB	South Africa
10336	Agtech for inclusion and sustainability: SP Ventures Regional Fund (Agventures II)	IDB	Regional
10348	Landscape Restoration and Ecosystem Management for Sustainable Food Systems	WB	Ghana
10435	Adaptation Accelerator Program: Building Climate Resilience through Enterprise Acceleration	CI	Regional
10438	UAVs/drones for Equitable Climate Change Adaptation: Participatory Risk Management through Landslide and Debris Flow Monitoring in Mocoa, Colombia	CAF	Colombia
10461	Global Cleantech Innovation Program to support countries to accelerate the uptake and investment in cleantech innovations	UNIDO	Global
10551	The deployment of EarthRanger, a data visualization and analysis software to strengthen Protected Area Management Effectiveness in Africa's National Parks	CI	Regional
10563	Blueing the Black Sea	WB	Regional
10569	Global Opportunities for Long-term Development of artisanal and small-scale gold mining (ASGM) Sector Plus - GEF GOLD +	CI, UNEP, UNIDO, UNDP	Global
10620	Strengthening the stewardship of an economically and biologically significant high seas area – the Sargasso Sea	UNDP	Global
10700	Implementation of the Strategic Action Programmes and the National Strategic Action Plans for the Integrated Water Resources Management in the Puyango-Tumbes, Catamayo-Chira and Zarumilla Transboundary Aquifers and River Basins	UNDP	Regional
10755	Establishing the Taskforce on Nature-related Financial Disclosures	WWF-US	Global
10768	Resilient Urban Sierra Leone Project	WB	Sierra Leone
10780	Enhancing Biodiversity Considerations and Effective Protected Area Management to Safeguard the Cook Islands Integrated Ecosystems and Species	UNDP	Cook Islands

GEF ID	Title	GEF Agency	Country
10852	Green Finance and Sustainable Agriculture in the Dry Forest Ecoregion of Ecuador and Peru	CAF	Regional
10919	Enhancing capacity for the adoption and implementation of EAF in the shrimp and groundfish fisheries of the North Brazil Shelf Large Marine Ecosystem	FAO	Regional
10936	Accelerate implementation of dental amalgam provisions and strengthen country capacities in the environmental sound management of associated wastes under the Minamata Convention	UNEP	Senegal, Thailand, Uruguay, Global
11049	Circular and POPs-free Plastics in Africa	UNEP	Regional
11130	Enabling Large-Scale Ecosystem Restoration in Haiti through the Piloting and Implementation of Payments for Environmental Services Schemes	UNEP	Haiti
11133	Northern Mozambique Rural Resilience Project	WB	Mozambique
11138	Restoration of the ecological corridors of Mayo-Kebbi, Tandjilé and Fitri in Chad, in support of multiple land and forest benefits	IUCN	Chad
11156	From Conflict to Coexistence: Safeguarding Wildlife Corridors in Mexico for Sustainable Development	WWF-US	Mexico
11197	Circular Solutions to Plastic Pollution: Global Platform	UNEP, WWF-US	Global
11209	Strengthening Ecological Connectivity in Natural and Productive Landscapes Between the Amistad and Darien Biomes	UNDP	Panama
11214	Food Systems Integrated Program	FAO, IFAD, IUCN, UNDP, WB	Global
11302	First and Second Biennial Transparency Report and Fifth Communication National (1BTR + 5NC & 2BTR)	UNDP	Paraguay
11323	Indonesia Coral Reef Bond	WB	Indonesia
11324	Innovative Use of Financial Instruments for Biodiversity Conservation and Restoration in Latin America and the Caribbean	IDB	Regional
11326	Decarbonization of Textile, Apparel & Footwear Suppliers (D-TAFS) Fund	WB	Global
11418	Strengthening Adaptation through Institutional Building and Resilient Livelihoods in South Sudanese Agro-pastoral Landscapes (SABRELA)	IFAD	South Sudan
11467	Greening Transportation Infrastructure Development	WWF-US, UNEP, ADB	Global
11514	Rwanda Wildlife Conservation Bond Operation	WB	Rwanda
11757	SGP Civil Society Organization (CSO) Challenge Program	IUCN	Global
11761	GEF-8 Inclusive Conservation Initiative	WWF-US	Global
11834	Enhancing data and capacity development resources to support UNCCD country Parties in national reporting and targeting of efforts to achieve Land Degradation Neutrality	CI	Global
11903	Global Microfinance Initiative for Locally Led Action	WB	Global

Source: GEF Portal as of June 30, 2025.

Note: ADB = Asian Development Bank; AfDB = African Development Bank; CAF = Development Bank of Latin America and the Caribbean; CI = Conservation International; EBRD = European Bank for Reconstruction and Development; FAO = Food and Agriculture Organization of the United Nations; 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 Environment Programme; UNIDO = United Nations Industrial Development Organization; WB = World Bank; WWF-US = World Wildlife Fund–US.

References

- Andelman, Sandy, and Rosina Bierbaum. 2025. ["Strengthening GEF Support for Indigenous Peoples: Issues of Governance, Project Design, Financial Access, and Livelihood Benefits. A STAP Information Note."](#) Scientific and Technical Advisory Panel to the Global Environment Facility, Washington, DC.
- Bierbaum, Rosina, Blake D. Ratner, Mark Stafford Smith, Christopher Whaley, Sunday A. Leonard, Miriam L. Diamond et al. 2024. ["STAP's Initial Perspective on GEF-9."](#) STAP Advisory Document. Scientific and Technical Advisory Panel to the Global Environment Facility, Washington, DC.
- CI and IUCN (Conservation International and International Union for Conservation of Nature). ["Inclusive Conservation Initiative Phase 3 Report."](#) Inclusive Conservation Initiative, Washington, DC.
- CPI (Climate Policy Initiative). 2025. ["Global Landscape of Climate Finance 2025."](#)
- Dasgupta, Partha. 2021. ["The Economics of Biodiversity, The Dasgupta Review."](#) HM Treasury, London.
- Donaldson, J., and B.D. Ratner. 2023. ["Leveraging Innovation for Transformational Change."](#) STAP Advisory Document. Scientific and Technical Advisory Panel to the Global Environment Facility, Washington, DC.
- Environmental Finance. 2025. ["Resilience, Innovation and Reinvention: The Sustainable Bond Market in 2025."](#) Interview, March 6.
- Forster, Piers M., Chris Smith, Tristram Walsh, William F. Lamb, Robin Lamboll, Christophe Cassou et al. 2025. ["Indicators of Global Climate Change 2024: Annual Update of Key Indicators of the State of the Climate System and Human Influence."](#) *Earth System Science Data* 17: 2641–80.
- Fuller, Richard, Philip J. Landrigan, Kalpana Balakrishnan, Glynda Bathan, Stephan Bose-O'Reilly, Michael Brauer et al. 2022. "Pollution and Health: A Progress Update." *The Lancet Planetary Health* 6 (6): e535–47.
- G20 SFWG (G20 Sustainable Finance Working Group). 2024. [2024 G20 Sustainable Finance Report.](#)
- Garnett, S.T., N.D. Burgess, J.E. Fa, Á. Fernández-Llamazares et al. 2018. ["A Spatial Overview of the Global Importance of Indigenous Lands for Conservation."](#) *Nature Sustainability* 1: 369–74.
- 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). 2012a. ["Fee Policy for GEF Partner Agencies."](#) FI/PL/03. GEF, Washington, DC.
- GEF (Global Environment Facility). 2012b. ["Principles and Guidelines for Engagement with Indigenous Peoples."](#) GEF/C.42/Inf.03/Rev.1. GEF, Washington, DC.
- GEF (Global Environment Facility). 2017a. ["Policy on Gender Equality."](#) SD/PL/02. GEF, Washington, DC.
- GEF (Global Environment Facility). 2017b. ["Policy on Stakeholder Engagement."](#) GEF/C.53/05/Rev.01. GEF, Washington, DC.
- GEF (Global Environment Facility). 2018a. ["GEF-7 Replenishment Programming Directions."](#) GEF/R.7/19. GEF, Washington, DC.
- GEF (Global Environment Facility). 2018b. ["Policy on Environmental and Social Safeguards."](#) SD/PL/03. GEF, Washington, DC.
- GEF (Global Environment Facility). 2019. ["Policy on Minimum Fiduciary Standards."](#) GA/PL/02. GEF, Washington, DC.
- GEF (Global Environment Facility). 2020. ["GEF's Private Sector Engagement Strategy."](#) GEF/C.58/05. GEF, Washington, DC.
- GEF (Global Environment Facility). 2022a. ["GEF Blended Finance Global Program and Non-Grant Instruments Policy Update."](#) GEF/C.63/12. GEF, Washington, DC.

- GEF (Global Environment Facility). 2022b. [“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). 2022c. [“Work Program for the GEF Trust Fund.”](#) GEF/C.62/07. GEF, Washington, DC.
- GEF (Global Environment Facility). 2023. [“Enhancing Policy Coherence through GEF Operations.”](#) GEF/C.64/09. GEF, Washington, DC.
- GEF (Global Environment Facility). 2024a. [“GEF Introduction Seminar 2024.”](#) Slide presentation. GEF, Washington, DC.
- GEF (Global Environment Facility). 2024b. [“GEF Risk Appetite.”](#) GEF/C.66/13. GEF, Washington, DC.
- GEF (Global Environment Facility). 2024c. [“Tracking and Measuring the Socio-Economic Co-Benefits of GEF Investments.”](#) GEF/C.66/12. GEF, Washington, DC.
- GEF (Global Environment Facility). 2024d. [“Work Program for GEF Trust Fund.”](#) GEF/C.68/04/Rev.02. GEF, Washington, DC.
- GEF (Global Environment Facility). 2025. [“Policy Amendments to Streamline the GEF Project Cycle.”](#) GEF/C.69/12. GEF, Washington, DC.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2014. [“OPS5 Final Report: At the Crossroads for Higher Impact.”](#) Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2018a. [“Evaluation of the Expansion of the GEF Partnership.”](#) Evaluation Report No. 131. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2018b. [“Evaluation of GEF Support for Transformational Change.”](#) Evaluation Report No. 122. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2018c. [“Formative Review of the Integrated Approach Pilot Programs.”](#) Evaluation Report No. 126. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2020. [“Evaluation of the GEF-UNIDO Global Cleantech Innovation Programme.”](#) Evaluation Report No. 135. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2021. [“GEF Support to Innovation: Findings and Lessons.”](#) GEF/E/C.60/02. GEF IEO, Washington, DC.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2022a. [“Evaluation of the Effects of the COVID-19 Pandemic on GEF Activities.”](#) GEF/E/C.63/02. GEF IEO, Washington, DC.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2022b. [“The GEF Evaluation Policy.”](#) GEF IEO, Washington, DC.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2022c. [“GEF Institutional Policies and Engagement.”](#) Evaluation Report No. 150. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2022d. [“GEF Integrated Approach to Address the Drivers of Environmental Degradation.”](#) Evaluation Report No. 154. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2022e. [“GEF Support to Sustainable Forest Management.”](#) Evaluation Report No. 156. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2022f. [“Seventh Comprehensive Evaluation of the GEF: Working Toward a Greener Global Recovery.”](#) Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2023a. [“GEF Annual Performance Report 2021.”](#) Evaluation Report No. 155. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2023b. [“Results-Based Management: Agency Self-Evaluation and the GEF Portal.”](#) Evaluation Report No. 158. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2023c. [“Strategic Country Cluster Evaluation of the Lower Mekong River Basin Ecosystem.”](#) GEF/E/C.64/02/Rev.01. GEF IEO, Washington, DC.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2024a. [“Evaluation of GEF Support to Community-Based Approaches.”](#) Evaluation Report No. 163. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2024b. [“Evaluation of GEF Support in Fragile and Conflict-Affected Situations.”](#) Evaluation Report No. 151. Washington, DC: GEF IEO.

- GEF IEO (Global Environment Facility Independent Evaluation Office). 2024c. [Evaluation of the GEF's Approach to and Interventions in Water Security](#). Evaluation Report No. 164. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2024d. [GEF Annual Performance Report 2023](#). Evaluation Report No. 162. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2024e. [LDCF/SCCF Annual Evaluation Report 2023](#). Evaluation Report No. 161. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2024f. [Strategic Country Cluster Evaluation: GEF Support to Drylands Countries](#). Evaluation Report No. 165. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2025a. [Evaluation of Cofinancing in the GEF](#). Evaluation Report No. 168. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2025b. [GEF Support to Climate Information and Early Warning Systems](#). Evaluation Report No. 169. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2025c. [LDCF/SCCF Annual Evaluation Report 2024](#). Evaluation Report No. 167. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). 2025d. [Learning from Challenges in GEF Projects](#). Evaluation Report No. 155. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). Forthcoming-a. [Assessing the GEF Competitive Advantage](#). Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). Forthcoming-b. [Assessing Inclusion in Fragile and Conflict-Affected Situations](#). Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). Forthcoming-c. [Assessing Portfolio-Level Risk in the GEF](#). Evaluation Report No. 171. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). Forthcoming-d. [Evaluating the Transition to SGP 2.0](#). Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). Forthcoming-e. [Evaluation of Components of the Results-Based Management System](#). Evaluation Report No. 173. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). Forthcoming-f. [Evaluation of the GEF Climate Change Mitigation Focal Area](#). Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). Forthcoming-g. [Evaluation of the GEF Country Engagement Strategy](#). Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). Forthcoming-h. [Evaluation of GEF Food Systems Programs](#). Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). Forthcoming-i. [Evaluation of GEF Engagement with the Private Sector](#). Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). Forthcoming-j. [Evaluation of the GEF International Waters Focal Area](#). Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). Forthcoming-k. [Evaluation of GEF Interventions in the Chemicals and Waste Focal Area](#). Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). Forthcoming-l. [Evaluation of GEF Support to Nature-Based Solutions](#). Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). Forthcoming-m. [Evaluation of GEF Support to Policy Coherence](#). Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). Forthcoming-n. [Evaluation of the Global Wildlife Program](#). Evaluation Report No. 170. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). Forthcoming-o. [Evaluation of Knowledge Management in the GEF Partnership](#). Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). Forthcoming-p. [Evaluation of Innovation and Technologies Application in the GEF](#). Washington, DC: GEF IEO.

- GEF IEO (Global Environment Facility Independent Evaluation Office). Forthcoming-q. [Evaluation of Socioeconomic Co-Benefits of GEF Interventions](#). Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). Forthcoming-r. [Evaluation of the Sustainable Cities Program](#). Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). Forthcoming-s. [GEF Annual Performance Report 2025](#). Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). Forthcoming-t. [GEF Programs in Pacific Small Island Developing States](#). Evaluation Report No. 172. Washington, DC: GEF IEO.
- GEF IEO (Global Environment Facility Independent Evaluation Office). Forthcoming-u. [LDCF/SCCF Annual Evaluation Report 2025](#). Washington, DC: GEF IEO.
- GEF Secretariat (Global Environment Facility Secretariat). 2018. ["GEF Corporate Scorecard May 2018."](#) GEF, Washington, DC. Washington, DC: GEF IEO.
- GEF Secretariat (Global Environment Facility Secretariat). 2022a. ["GEF-8 Programming Directions."](#) GEF/R.08/29/Rev.01. GEF, Washington, DC.
- GEF Secretariat (Global Environment Facility Secretariat). 2022b. ["GEF-8 Strategic Positioning Framework."](#) GEF/R.08/28. GEF, Washington, DC.
- GEF Secretariat (Global Environment Facility Secretariat). 2024a. ["The GEF Monitoring Report 2023."](#) GEF/C.66/03. GEF, Washington, DC.
- GEF Secretariat (Global Environment Facility Secretariat). 2024b. ["Strategy for Knowledge Management and Learning."](#) GEF, Washington, DC.
- GEF Secretariat (Global Environment Facility Secretariat). 2025. ["GEF-8 Scorecard June 2025."](#) GEF, Washington, DC.
- IEA (International Energy Agency). 2023. ["Net Zero Roadmap: A Global Pathway to Keep the 1.5°C Goal in Reach."](#) IEA, Paris.
- IISD (International Institute for Sustainable Development). 2023. ["Earth Negotiations Bulletin: COP-5 Final."](#) 28 (7).
- Ijjasz-Vasquez, E., P. Karp, and M. Weber-Fahr, eds. 2024. [Communities of Practice at the World Bank: Breaking Knowledge Silos to Catalyze Culture Change and Organizational Transformation](#). Taylor & Francis.
- IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services). 2024. [Summary for Policymakers of the Thematic Assessment Report on the Interlinkages among Biodiversity, Water, Food and Health of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services](#). IPBES Secretariat, Bonn.
- IPCC (Intergovernmental Panel on Climate Change). 2023. [AR6 Synthesis Report: Climate Change 2023](#). Geneva: IPCC.
- IRENA (International Renewable Energy Agency). 2024. ["World Energy Transitions Outlook 2024: 1.5°C Pathway."](#) IRENA, Abu Dhabi.
- Koplow, D., and R. Steenblik. 2022. ["Protecting Nature by Reforming Environmentally Harmful Subsidies: The Role of Business."](#) Earth Track, Cambridge, MA.
- Lenton, T.M., D.I. Armstrong McKay, S. Loriani, J.F. Abrams, S.J. Lade, J.F. Donges et al., eds. 2023. ["The Global Tipping Points Report 2023."](#) University of Exeter, Exeter, UK.
- Ling, Alison. 2024. ["Estimated scale of costs to remove PFAS from the environment at current emission rates."](#) *Science of the Total Environment* 918: 170647.
- Metternicht, G., E.R. Carr, and M. Stafford Smith. 2020. ["Why Behavioral Change Matters to the GEF and What to Do about It."](#) STAP Advisory Document. Scientific and Technical Advisory Panel to the Global Environment Facility, Washington, DC.
- Metternicht, G., and M. Stafford Smith. 2022. ["Knowledge Management and Learning: A STAP Brief."](#) Scientific and Technical Advisory Panel to the Global Environment Facility, Washington, DC.
- MOPAN (Multilateral Organisation Performance Assessment Network). 2025. ["MOPAN Assessment Report: Global Environment Facility \(GEF\)."](#) MOPAN, Paris.
- Nabuurs, G.-J., R. Mrabet, A. Abu Hatab, M. Bustamante, H. Clark, P. Havlík et al. 2022. "Chapter 7: Agriculture, Forestry and Other Land Uses (AFOLU)." In IPCC, [Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change](#). New York: Cambridge University Press.
- Nature Conservancy. 2020. ["Closing the Nature Funding Gap: A Finance Plan for the Planet."](#) Article, September 14.
- OECD (Organisation for Economic Co-operation and Development). 2023. [Glossary of Key Terms in Evaluation and Result-Based Management for Sustainable Development \(Second Edition\)](#). Paris: OECD Publishing.

- SGP (Small Grants Programme). 2020. [“GEF Small Grants Programme 7th Operational Phase Technical Guidance Notes Compiled Version.”](#) United Nations Development Programme, New York.
- SGP (Small Grants Programme). 2021. “GEF Small Grants Programme Annual Monitoring Report 2020–2021.” United Nations Development Programme, New York.
- SGP (Small Grants Programme). 2022. [“GEF Small Grants Programme Annual Monitoring Report 2021–2022.”](#) United Nations Development Programme, New York.
- SGP (Small Grants Programme). 2023. “GEF Small Grants Programme Annual Monitoring Report 2022–2023.” United Nations Development Programme, New York.
- SGP (Small Grants Programme). 2024a. [“GEF Small Grants Programme Annual Monitoring Report 2023–2024.”](#) United Nations Development Programme, New York.
- SGP (Small Grants Programme). 2024b. [“Seychelles Results Report \(FY 2017–2023\).”](#) United Nations Development Programme, New York.
- Sigmund, Gabriel, Marlene Ågerstrand, Alexandre Antonelli, Thomas Backhaus, Tomas Brodin, Miriam L. Diamond et al. 2023. “Addressing chemical pollution in biodiversity research.” *Global Change Biology* 29 (12): 3240–55.
- STAP (Scientific and Technical Advisory Panel). 2022. [“Note on Development of Risk Appetite Framework in the GEF.”](#) Scientific and Technical Advisory Panel to the Global Environment Facility, Washington, DC.
- Tollefson, J. 2025. [“Earth breaches 1.5°C climate limit for the first time: what does it mean?”](#) Nature. News article, January 10.
- Toloken, Steve. 2020. [“Ocean plastics ‘a \\$150B problem.’”](#) Sustainable Plastics. Article, February 28.
- UNDP (United Nations Development Programme). 2024. [“UNDP takes its Blockchain Academy global.”](#) Article, November 19.
- UNEP (United Nations Environment Programme). 2023. [“State of Finance for Nature 2023. The Big Nature Turnaround: Repurposing \\$7 Trillion to Combat Nature Loss.”](#) Nairobi: UNEP.
- UNEP (United Nations Environment Programme). 2024a. [“Draft Report on the Sixth Review of the Financial Mechanism.”](#) UNEP/POPS/COP.12/INF/36. UNEP, Geneva.
- UNEP (United Nations Environment Programme). 2024b. [“Emissions Gap Report 2024: No more hot air...please! With a massive gap between rhetoric and reality, countries draft new climate commitments.”](#) Nairobi: UNEP.
- UNEP (United Nations Environment Programme). 2025. [“planetGOLD 2023–2024 Annual Progress Report.”](#)
- UNEP (United Nations Environment Programme). 2024c. [“Global Waste Management Outlook 2024: Beyond an age of waste—Turning rubbish into a resource.”](#) Nairobi: UNEP.
- World Bank. 2020. [“World Bank Group Strategy for Fragility, Conflict, and Violence 2020–2025.”](#) Washington, DC: World Bank Group.
- World Bank. 2025. [“Accelerating Access to Clean Air for a Livable Planet.”](#) Washington, DC: World Bank Group.
- World Economic Forum. 2017. [“Harnessing the Fourth Industrial Revolution for the Earth.”](#) In collaboration with PwC and Stanford Woods Institute for the Environment. Geneva: World Economic Forum.
- World Economic Forum. 2020. [“New Nature Economy II: The Future of Nature and Business.”](#) In collaboration with AlphaBeta. Geneva: World Economic Forum.
- World Economic Forum. 2021. [“Nature and Net Zero.”](#) In Collaboration with McKinsey & Company. Geneva: World Economic Forum.
- World Economic Forum. 2025. [“The Global Risks Report 2025.”](#) Geneva: World Economic Forum.
- WWF (World Wildlife Federation). 2024. [“Living Planet Report 2024—A System in Peril.”](#) Gland: WWF.
- Zazueta, A., and G. Liu. 2018. [“Independent Terminal Evaluation. Environmentally sound management and disposal of obsolete POPs pesticides and other POPs in China.”](#) United Nations Industrial Development Organization Office of Evaluation and Internal Oversight, Vienna.

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.gefio.org/evaluations.

Independent Evaluation Office, Global Environment Facility
1818 H Street, NW • Washington, DC 20433, USA
www.gefio.org



**Independent
Evaluation Office**
GLOBAL ENVIRONMENT FACILITY