



Independent
Evaluation Office
GLOBAL ENVIRONMENT FACILITY

GEF Support to Scaling Up Impact



November 2020

GEF Support to Scaling Up Impact

Evaluation Report No. 138
November 2020



© 2021 Global Environment Facility Independent Evaluation Office
1818 H Street, NW, Washington, DC 20433
Internet: www.gefief.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), *GEF Support to Scaling Up Impact*, Evaluation Report No. 138, Washington, DC: GEF IEO, 2021.

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

This report was presented to the GEF Council in June 2019.

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

ISBN: 978-1-64233-022-9

Task Team Leader: Jeneen R. Garcia
Team members: Kseniya Temnenko, Peixuan Zhou
Manager: Geeta Batra
GEF IEO Director: Juha Uitto

Editing and design: Nita Congress
Cover: Evgeny Tsapov/Shutterstock.

Contents

Foreword	v	4. Factors and enabling conditions affecting scaling-up	29
Acknowledgments	vi	4.1 Adoption of the intervention	29
Abbreviations	vii	4.2 Sustained support for scaling	33
Executive summary	viii	4.3 Learning for adaptability and cost effectiveness	38
1. Why assess scaling-up in the GEF?	1	5. A framework for scaling up impacts in the GEF	42
1.1 Background	1	5.1 Framework overview	42
1.2 Evaluation objectives and key questions	2	5.2 Applying the framework	43
1.3 Evaluation methods and limitations	2	5.3 Scaling up through the Small Grants Programme	46
1.4 Report organization	4	5.4 GEF comparative advantage in the scaling-up process	48
2. Scaling-up in the GEF context	6	5.5 Scaling-up approaches in other institutions	50
2.1 Perspectives from the literature	6	6. Conclusions and recommendations	52
2.2 GEF strategy and programming for scaling-up	7	6.1 Conclusions	52
2.3 Perspectives from the GEF partnership	8	6.2 Recommendation	54
2.4 Defining scaling-up	9	Bibliography	56
2.5 Modes of scaling	9		
3. Profile of cases and results	14		
3.1 Profile of core cases	14		
3.2 Extent of GEF support	17		
3.3 Sequence of scaling-up support	20		
3.4 Results	21		
3.5 Monitoring progress	26		
3.6 Sustainability of scaling-up initiatives	26		

Figures

- 5.1 Framework for scaling up impacts in the GEF ...43
- 5.2 Stages in the scaling-up process where GEF support has most commonly been used49

Tables

- 3.1 Profile of core cases assessed15
- 3.2 Distribution of projects and financing in assessed cases by GEF replenishment period ...17
- 3.3 GEF funding and cofinancing for scaling-up processes for cases assessed, by focal area (million \$)18
- 3.4 Years of GEF support to cases assessed, by focal area18
- 3.5 Project modalities used for piloting and scale-up stages in cases assessed18
- 3.6 GEF funding for piloting and scaling stages for cases assessed, by focal area (million \$)19
- 3.7 Different sequences of GEF support to scaling-up processes by number of cases20
- 3.8 Scale-up stages at which the GEF provided support21

- 3.9. Comparison of outcomes between pilot and scale-up stages for biodiversity cases (ha/million \$/year).....22
- 3.10 Comparison of outcomes between pilot and scale-up stages for climate change cases (million \$/year)23
- 3.11 Comparison of outcomes between pilot and scale-up stages for a land degradation/multifocal area case (ha/million \$/year)24
- 3.12 Environmental outcomes of international waters case with no common indicator between pilot and scale-up projects (million \$/year)25
- 4.1 Enabling conditions for scaling-up in the core cases30
- 4.2 Project-related conditions influencing contextual factors toward scaling-up in the core cases34
- 5.1 Enabling conditions supported by GEF-7 projects46

Foreword

Scaling-up is not new to the Global Environment Facility (GEF), and in the last decade, all GEF focal areas have been shifting from site-level pilot projects toward projects or programs implemented at higher scales. The GEF 2020 Strategy, published in 2014, sets a clear vision to support transformational change and to achieve global environmental benefits on a larger scale. It specifically aims to achieve this vision by, among others, supporting innovative activities that “are scalable across multiple countries, regions, and sectors through policy, market, or behavioral transformations.” In part, this was a response to a finding of the GEF Independent Evaluation Office’s Fifth Overall Performance Study (OPS5) that scaling-up had taken place in only 20 percent of projects upon their completion, indicating the need for a longer-term approach to achieving impact at scale.

However, the conditions under which scaling-up has been successful or unsuccessful, and the

processes by which impacts are scaled up, have not been systematically assessed. This is the first evaluation to systematically assess the scaling-up process in depth, and the influencing factors and conditions.

The evaluation’s concept note was approved and circulated in March 2018. Interviews and a survey at the corporate level were conducted between April and June 2018. Case study missions in Costa Rica, Mauritius, and North Macedonia were carried out in September and October of the same year. The evaluation report was presented to the GEF Council in June 2019.



Juha I. Uitto
Director, GEF Independent Evaluation Office

Acknowledgments

Jeneen R. Garcia, Evaluation Officer of the Global Environment Facility Independent Evaluation Office (GEF IEO), led this evaluation. The team consisted of Kseniya Temnenko, IEO Knowledge Management Officer, and Peixuan Zhou, IEO Evaluation Analyst. Technical inputs were provided by Johannes Linn for the GEF policies analysis, and Sandra Znajda for part of the case study development, both consultants to the IEO.

The evaluation benefited from guidance and oversight provided by Juha Uitto, Director of the IEO; quality control was provided by Geeta Batra, IEO Chief Evaluation Officer.

The evaluation team was supported by Francisco Grahmer, IEO Information Technology Analyst, Marie-Constance Manuella Koukoui, IEO Senior Program Assistant, Evelyn Chihuguyu, IEO Program

Assistant, and Juan Jose Portillo, IEO Senior Operations Officer. Nita Congress and Karen Holmes edited the draft report; Nita Congress did the design and layout.

The evaluation team thanks staff of the GEF Secretariat; the GEF Agencies at both headquarters and country offices; representatives of the global partnerships interviewed; and offices of the GEF focal points and executing agencies, project managers, government staff, communities, and civil society organizations in Costa Rica, Mauritius, and North Macedonia who provided both information and logistical support during the case study missions.

The GEF IEO is grateful to all these individuals and institutions for their contributions. Final responsibility for this report remains firmly with the Office.

Abbreviations

ARPA	Amazon Region Protected Areas Program	IFAD	International Fund for Agricultural Development
CAF	Development Bank of Latin America	MW	megawatt
CHUEE	China Utility-Based Energy Efficiency Finance Program	NACOMA	Namib Coast Biodiversity Conservation and Management
CIF	Climate Investment Funds	NGO	nongovernmental organization
COREMAP	Coral Reef Rehabilitation and Management Project	PCB	polychlorinated biphenyl
CRESP	China Renewable Energy Scaling-Up Program	PEMSEA	Partnerships in Environmental Management for the Seas of East Asia
CSO	civil society organization	PES	payment for environmental services
DDT	dichlorodiphenyltrichloroethane	PFD	program framework document
EU	European Union	PIF	project identification form
GCF	Green Climate Fund	PMIS	Project Management Information System
GEF	Global Environment Facility	POP	persistent organic pollutant
GFF	Global Financing Facility	SGP	Small Grants Programme
GPE	Global Partnership for Education	SLM	sustainable land management
ha	hectare	TDA-SAP	transboundary diagnostic analysis–strategic action program
IAP	Integrated Approach Pilot	UNDP	United Nations Development Programme
IDCOL	Infrastructure Development Company Limited	UNIDO	United Nations Industrial Development Organization
IEM	integrated ecosystem management		
IEO	Independent Evaluation Office		

Executive summary

Based on its findings, this evaluation defines scaling-up impacts in the GEF as **increasing the magnitude of global environmental benefits, and/or expanding the geographical and sectoral areas where they are generated, to cover a defined ecological, economic, or governance unit**. In the process of scaling up global environmental benefits, social and economic benefits may also be scaled up; in many cases, scaling up such benefits may be the means to remove barriers to scaling up global environmental benefits.

This evaluation draws on the previous experiences of the GEF in scaling-up to better understand the processes through which scaling-up occurs and the conditions under which it is effectively achieved. The IEO has been tracking scaling-up as one indicator of progress towards impact, reporting its prevalence in the GEF portfolio in the overall performance studies. This is the first evaluation to systematically assess the scaling-up process in depth, and the influencing factors and conditions. Using a purposive sampling approach, the evaluation conducted quantitative and qualitative analyses on both successful and less successful cases of GEF support to scaling up. Information was extracted from document reviews, interviews, and field visits to three countries. The evaluation provides lessons for the GEF in future

support for scaling up throughout its portfolio, and for the GEF-7 Impact Programs in particular.

CONCLUSIONS

- 1. The GEF 2020 strategy and the programming directions set a clear vision and goal to scale up global environmental benefits. This has translated into a shift towards the Integrated Approach Pilots and Impact Programs to achieve impacts at scale, but the operational guidance is not consistently clear across all programs and projects.**

Both the GEF 2020 Strategy and the GEF-7 Programming Directions set a clear vision and goal to scale up global environmental benefits. The GEF's focus on scaling is more explicit compared to many other international development institutions, and clearly indicates support for the enabling conditions necessary for impacts to be scaled up. But as with other institutions, the GEF's vision for scaling-up is not consistently clear in the operational guidance across all programs and the GEF portfolio.

During project and program design, guidelines are lacking on how interventions are expected to scale up outcomes. While technically sound, almost

half of the approved GEF-7 projects do not clearly articulate concrete links between their activities, outcomes, the scaling-up process and resulting impacts, even though they have a long-term scaling outlook.

2. In cases where the GEF has supported scaling-up, it uses multiple modes, such as replication, mainstreaming, and linking, to scale up interventions that generate global environmental benefits, drawing on the comparative advantages of the members of the GEF partnership.

The GEF contributes to scaling-up efforts by helping replicate, mainstream, and link interventions that generate global environmental benefits. Replication refers to the implementation of the same intervention multiple times by increasing numbers of stakeholders and/or covering larger areas, typically by leveraging finance, knowledge, and policy. Mainstreaming involves integrating an intervention within an institution's regular operations, usually through a policy or legal framework. Linking refers to the implementation of different types of interventions across multiple geographic locations, administrative levels, or sectors and institutions that comprise the different components of an ecological, economic, or governance system. All three scaling-up modes are often interdependent processes that may take place through one or more projects—whether in parallel or in sequence—that all contribute to generating a specific impact at a target scale.

Multilateral development banks (MDBs) such as the World Bank provide larger amounts of funding through loans, and typically scale up through replication. Other GEF Agencies with more limited funding, such as UN agencies and international NGOs, are shifting more towards linking through partnership-building across multiple sectors to leverage the comparative advantages of

other institutions. All GEF Agencies contribute to scaling-up through mainstreaming.

3. The extent of GEF support to scaling up and the rate at which outcomes are scaled up vary across focal areas, but typically take place over more than five years, and generate higher outcomes per GEF dollar per year during the scaling-up stage as compared with the pilot stage. Indicators used between the pilot and scaling-up stage were not always consistent, limiting the tracking of progress.

GEF support for scaling-up processes ranged from grants of less than \$1 million to grants over \$100 million, with the period of GEF support ranging from less than 5 years to over 25 years. Typically, GEF support for scaling was provided for more than five years, or through more than one project, and was delivered through a variety of modalities including enabling activities, Small Grants Programme projects, and medium- and full-size projects. In cases where GEF support for piloting and scaling-up stages could clearly be distinguished from project documents, measurable outcomes per dollar per year during the scaling up stage were between 1.1 to 74.5 times larger than during the pilot stage, indicative of achieving greater cost-effectiveness, and higher co-financing leveraged for scaling activities per GEF dollar. These outcomes exclude at least 40 percent of the cases where scaling-up activities have been continued by other donors and institutions.

The GEF's results framework provides corporate targets for global environmental benefits for the current replenishment period. These targets are not set or tracked relative to the specific spatial and temporal scales of the environmental issue that needs to be addressed, but to the amount of funding available for a project, program, or replenishment period. This limits the ability of the GEF to assess its progress relative to the full magnitude and scope of the environmental problems it

aims to address. Some linked projects that contribute to the same scaling-up target have no common indicators or even units of measurement to track progress towards their shared environmental targets. The core indicators address this to some extent, but projects often track other indicators for specific environmental outcomes that are not consistent across linked projects.

4. The GEF has supported scaling-up by establishing enabling conditions, choosing the appropriate influencers and institutions to work with, and leveraging contextual conditions at the right time.

GEF funding was found to support eight types of enabling conditions that contribute to the scaling-up process:

- Knowledge and information dissemination
- Participatory processes
- Incentives and disincentives
- Institutional and individual capacities
- Policy frameworks and operating guidelines
- Sustainable financing
- Multistakeholder interactions and partnerships
- Systematic learning mechanisms

These enabling conditions strengthen the three actions necessary for scaling-up to take place: adoption of interventions that generate impact, sustained support for scaling-up processes, and learning for adaptability and cost effectiveness in the face of changing contextual conditions.

GEF support has been most commonly used to support incentives and knowledge and information initiatives. These enabling conditions increase the willingness of stakeholders to adopt interventions that generated global environmental benefits and help gain the support of influential persons and institutions in making scaling a political priority. In all cases assessed, GEF support was also used

to strengthen institutional and individual capacities for scaling-up interventions. Both support for capacities and sustainable sources of financing allowed scaling-up activities to be sustained beyond GEF funding in the assessed cases. However, these sustainable funding sources are subject to risks from changes in political and economic conditions.

The GEF has also contributed to scaling up by choosing the right influencers and institutions to work with, such as technically competent champions; individuals, government agencies, and donor organizations with political and economic traction and a long-term scaling outlook; and long-term structures with wide geographic reach and implementation experience, continuity in staff, and opportunities for frequent local and global interaction. In some cases, GEF support facilitated scaling-up by leveraging contextual conditions—such as existing legal obligations and political priorities, external events, and shifts in the political landscape—at the right time to align with scaling-up objectives.

5. GEF support has catalyzed the scaling-up process by de-risking innovations and demonstrating project benefits at the pilot stage. Systematic learning mechanisms for scaling-up were not supported by the GEF in most of the earlier closed projects, but about half of the approved GEF-7 projects address learning more systematically.

GEF support contributes to scaling-up by demonstrating the benefits of effective interventions in specific contexts and helping to establish the enabling conditions to scale up these benefits in larger contexts. GEF and other institutions' support for scaling was frequently contingent on the positive results of the pilot stage, indicative of a long-term scaling outlook anchored on adaptive learning. According to interviews, the GEF's comparative advantage lies in de-risking investments

by piloting interventions that neither the public nor private sector is willing to fund and where no clear benefits have been demonstrated. Another comparative advantage is GEF's flexible grants, which attract more funding from government and other donors for scaling activities.

Systematic learning allows projects and programs to leverage the right contextual conditions at the right time to align with scaling objectives. GEF funding was found to be least frequently used to establish systematic learning mechanisms in completed projects, where learning was more on an ad hoc basis. On the other hand, slightly more than half of GEF-7 projects include a budget and details on systematic learning mechanisms, which should be able to provide timely guidance on scaling-up.

RECOMMENDATION

The GEF partnership needs to ensure that factors influencing scaling-up are identified and taken into account in program and project design and implementation, and their impact assessed at midterm and terminal evaluations.

A program or project should identify its contributions to the scaling-up process, such as through its support for appropriate enabling conditions—particularly systematic learning mechanisms and addressing contextual factors that affect scaling-up. While this evaluation found successful

cases of scaling-up in the absence of guidelines, developing such guidance may systematically increase the likelihood of outcomes being scaled up during and beyond project or program implementation in line with the GEF's vision. The expectation is not for all GEF projects to achieve impact at scale, but to clearly articulate how each project contributes to the long-term vision for achieving results at a larger scale.

Projects and programs implemented in parallel or in sequence that are explicitly linked by design must have at least one common environmental indicator that use the same unit of measurement to allow outcomes to be aggregated and progress to be tracked. The GEF's current results framework provides common core indicators which makes this possible at the portfolio level; however, projects and programs that are linked must use common units of measurement and indicators to track progress for more specific outcomes that may not be tracked by the GEF's corporate-level core indicators and subindicators.

Why assess scaling-up in the GEF?

This chapter provides a background on how the Global Environment Facility (GEF) has historically approached scaling-up and the objectives, methods, and limitations of this evaluation.

1.1 Background

SIGNIFICANCE OF SCALING FOR THE GEF

The GEF 2020 Strategy sets a clear vision to support transformational change and achieve global environmental benefits on a larger scale. One of the ways it cites for achieving this vision is by supporting innovative activities that “are scalable across multiple countries, regions, and sectors through policy, market, or behavioral transformations” (GEF 2014a, 16). In part, this was a response to a finding of the GEF Independent Evaluation Office’s (IEO’s) Fifth Overall Performance Study that only 20 percent of projects had been scaled up by their completion, indicating the need for a longer-term approach to achieving impact at scale (GEF IEO 2014b).

A review of focal area strategies and corporate-level interviews with the GEF partnership show that the GEF has gradually shifted its

focus from pilots to scaled-up interventions over the last 25 years. In part, this shift is a result of the partnership developing a much better understanding of what interventions work based on the portfolio of demonstration projects implemented during the GEF’s early replenishment periods. In the past decade, all GEF focal areas have been shifting from site-level pilot projects to projects or programs implemented at higher scales. As a more targeted response to the need to achieve impact at scale, the GEF introduced the Integrated Approach Pilots (IAPs) in GEF-6 and the Impact Programs in GEF-7, which have just begun implementation.¹

LACK OF UNDERSTANDING AROUND SCALE-UP

Despite its long history in the GEF, the conditions under which scale-up has been successful or unsuccessful, and the processes by which impacts are scaled up, have not been systematically assessed. In addition, interview responses indicate differential understanding of scale-up across the

¹ The nominal GEF replenishment periods are as follows: pilot phase: 1991–94, GEF-1: 1995–98, GEF-2: 1999–2002, GEF-3: 2002–06, GEF-4: 2006–10, GEF-5: 2010–14, GEF-6: 2014–18, GEF-7: 2018–22.

partnership and how it is achieved in operational terms.

This evaluation draws on the GEF's scaling-up experiences to better understand and extract lessons on the processes through which scale-up occurs and the conditions under which it is effectively achieved. The IEO has been tracking scale-up as one indicator of progress toward impact, reporting on its prevalence in the GEF portfolio in the overall performance studies. Moreover, evaluations contributing to the Sixth Comprehensive Evaluation of the GEF (OPS6), such as those on transformational change and the GEF's support for legal and regulatory frameworks (GEF IEO 2018b, 2018e), note the importance of the scaling-up process in achieving larger-scale impact.

This is the first evaluation to assess the GEF scaling-up process and the influencing factors and conditions systematically and in depth. Using a purposive sampling approach, the evaluation included quantitative and qualitative analyses on both successful and less successful cases of GEF support to scale-up. Information was extracted from document reviews, interviews, and field visits to three countries. The evaluation provides lessons for the GEF in future support for scaling-up throughout its portfolio, and for the GEF-7 Impact Programs in particular.

1.2 Evaluation objectives and key questions

The evaluation adopted a broad definition of scaling-up by assessing various perspectives from the literature and across the GEF partnership based on experiences with scaling up in various sectors and institutions. Using this definition, the evaluation sought to assess the factors and conditions that have influenced the scaling-up process in the GEF through purposively selected projects.

Based on the findings, the evaluation has developed a framework that includes project-related and contextual aspects that influence scale-up to inform the design and implementation stages of GEF projects and programs. The framework could also be applied ex post to completed projects to assess the likelihood of scaling-up after completion.

The evaluation aimed to answer the following questions:

- What are the ways through which scale-up has taken place through GEF support?
- How does the scaling-up process in the GEF compare to that in other sectors and institutions, especially in global partnerships?
- What factors, conditions, and project design characteristics contribute to or hinder scale-up in GEF-supported interventions?
- Under what conditions does GEF support have a comparative advantage to help scale up interventions?

1.3 Evaluation methods and limitations

Projects that aim to contribute to scaling-up processes have not been specifically tagged or tracked as such in the GEF's Project Management Information System (PMIS). This reflects the lack of a common understanding of scale-up across the GEF partnership—and made it impossible to identify a complete portfolio of GEF projects that can be assessed for the extent to which they have achieved their objectives for scaling-up. Consequently, this evaluation did not address the extent to which the GEF has or has not pursued scale-up, but instead assesses how the GEF has contributed to scaling up global environmental benefits through a purposive sample of projects.

SOURCES OF EVIDENCE

The evaluation drew its findings from the following sources of evidence:

- **Literature review and synthesis.** A literature review was conducted to identify the different definitions and models of scale-up in various sectors and development institutions.
- **Policy and programming document review.** The GEF's most recent policy and programming documents were examined against findings from the literature review to assess the extent to which they address a systematic approach to scale-up in the GEF.
- **Corporate-level interviews.** Interviews were conducted at the corporate level with staff of the GEF Secretariat and the GEF Agencies. Interviewees included nine representatives comprising the GEF Secretariat management staff and leads of the five focal area teams, as well as of the integrated programs. Also interviewed were staff of nine GEF coordination units within the seven Agencies that responded to requests for interview, including the Small Grants Programme (SGP) implemented by the United Nations Development Programme (UNDP). GEF Agency interviews were designed to gather information on experiences with and perspectives on scaling up with GEF support in particular, and on the respective institution's approach to scale-up more broadly. In addition, a supplementary written survey sent out to all Agencies was used to gather examples of successful and unsuccessful cases of scale-up.

To provide a comparison of how similar partnerships approach scaling up, interviews were conducted with five global partnerships that are, like the GEF, vertical funds. Three of these—the Global Fund, the Global Financing Facility (GFF), and the Global Partnership for Education (GPE)—are in the health and education sectors. The other two—the Climate Investment Funds

(CIF) and the Green Climate Fund (GCF)—work mainly in the climate change mitigation and adaptation focal area.

- **Field visits.** Visits to completed GEF-supported projects were carried out in three countries: Costa Rica, Mauritius, and North Macedonia. Key national- and local-level stakeholders—including civil society organizations (CSOs), the private sector, and community beneficiaries—were interviewed during the visits. Countries were selected based on reports in the corporate-level interviews and written survey of completed GEF projects with successful scaling-up outcomes. Cases within countries were selected to ensure representation of the various focal areas.
- **Project document review.** Quantitative and qualitative information on the extent of GEF support and related outcomes were extracted from project proposals and evaluations, as well as from publications on projects published after their completion, where available. Projects were assessed using an initial scaling-up framework developed on the basis of the literature review and corporate-level interviews. This framework covers the different modes of scale-up and the factors and conditions contributing to or hindering successful scale-up. Findings from the project document review were used to verify and refine the initial framework.

Program framework documents (PFDs) for the GEF-6 IAPs and project identification forms (PIFs) for GEF-7 projects approved by the GEF Council as of December 2018 were reviewed to assess whether enabling conditions and factors affecting the likelihood of scale-up were considered at the design stage.

CASE STUDY SELECTION AND ANALYSIS

A purposive sample of successful and less successful scaling-up cases was developed based on stakeholder inputs and a review of the GEF portfolio. The sample of cases assessed was selected from three sources: (1) examples provided by GEF Agencies in a written survey up to May 2018; (2) examples provided by GEF Agencies and the GEF Secretariat in interviews up to May 2018; and (3) projects in the GEF portfolio that had “scale” or “scaling” in the title as of June 2018, and had at least one associated pilot project with a terminal evaluation. It is expected that many more examples of both successful and less successful scale-ups exist in the GEF portfolio that have not been captured through these sources. Each case includes one or more GEF-supported projects.

The evaluation assessed a total of 20 cases for which positive quantitative scaling-up outcomes were reported and influencing factors could be identified. Priority was also given to cases for which information could be obtained beyond terminal evaluations, such as through evaluations by the GEF IEO and the World Bank’s Independent Evaluation Group. The 20 cases cover all focal areas and geographical regions and represent countries with large- and average-size GEF investments. Due to the difficulty of linking outcomes with factors and conditions at regional and global scales, only GEF-supported interventions at the national level are included in the 20 cases.

An additional 40 cases with varying degrees of available quantitative and qualitative information were included in the evaluation. These additional cases were drawn from case studies of previous IEO evaluations, stakeholder interviews in the countries visited, and reviews of available project evaluations. Six of the 40 cases involve regional interventions, and 14 cover SGP projects.

Of the total 60 cases looked at in this evaluation, 10 provided information on factors and conditions that influenced negative scaling-up outcomes. In six cases, field visits were conducted to obtain information on the sustainability of scaling-up initiatives supported by the GEF. Other experiences of both GEF and non-GEF initiatives that were shared in interviews also have been drawn upon in this report.

LIMITATIONS

The selected cases are not statistically representative of the GEF portfolio; however, the findings have been assessed for consistency against the broader institutional experience of the GEF through stakeholder interviews, as well as with the findings of previous evaluations. This evaluation does not and cannot address the question of whether the GEF appropriately supports the scaling-up process across the portfolio, but it provides useful information and lessons on the conditions and factors that affect scale-up where outcomes are known.

In addition to project documents, evidence is drawn from interviews with GEF stakeholders at the corporate and country levels. Aligned with the evaluation’s purposive approach, the information provided captures stakeholders’ most successful scaling-up experiences, as well as their intentions and perceptions regarding scale-up. Therefore, findings from these interviews should not be interpreted to reflect typical project implementation experience, or the current or previous practices of the respective institutions.

1.4 Report organization

This report is organized in four main chapters.

- [Chapter 2](#) presents findings from the literature, GEF policies and programming, experiences

in comparable partnerships, and experiences across the GEF partnership.

- [Chapter 3](#) describes the project characteristics and scale-up sequence in the 20 cases for which positive quantitative outcomes were reported, and compares outcomes during the pilot versus the scale-up stage.
- [Chapter 4](#) discusses the contextual factors and enabling conditions that affect the success of scale-up efforts based on interviews and the larger sample of 60 cases, which include lessons from less successful experiences in scaling-up.
- [Chapter 5](#) presents a framework of GEF support to scaling up impact based on findings from the previous chapters, and applies the framework to assess the design of the most recent GEF programs and projects for the presence or absence of scale-up factors and conditions. It also looks at the GEF's niche and comparative advantage in the scale-up process.

These chapters are followed by a set of conclusions and recommendations ([chapter 6](#)) and a [bibliography](#) with information on sources either reviewed for and/or cited in this report.

Scaling-up in the GEF context

This chapter presents findings from the literature on scaling up, scaling-up experiences in comparable partnerships, and scaling-up experiences across the GEF partnership.

2.1 Perspectives from the literature

A literature review spanning more than 20 years shows that the term “scaling-up” has consistently been associated with the expansion of benefits and impacts over a wider geographic area and a larger number of beneficiaries.

Many papers also define scaling-up in terms of the quality of impact, such as efficiency (Indig et al. 2018; WHO 2007, 2010), equity, adaptability, and sustainability (Agapitova and Linn 2016; Gündel, Hancock, and Anderson 2001; Hartmann and Linn 2008; IIRR 2000; Pachico and Fujisaka 2004; UNDP 2013; World Bank 2005). More recently, organizations have emphasized the idea of scaling-up as a process of leveraging resources and relationships (Enright 2014; IFAD IOE 2017), as well as disseminating knowledge about successful approaches (GIZ 2014) to improve the quality of impact.

The literature identifies different dimensions of scale-up. Geographical expansion is typically referred to as “horizontal scaling-up”; expansion to include policy and institutional reforms at higher levels is referred to as “vertical scaling-up” (Begovic, Linn, and Vrbensky 2017; GTZ 2011; Gündel et al. 2001; Pachico and Fujisaka 2004; Tengberg et al. 2014; Uvin 1995; WHO 2007). In addition, some organizations recognize “functional scaling-up,” or expansion to include additional issues or types of activities as part of the intervention to be scaled up (Begovic, Linn, and Vrbensky 2017; GIZ 2014; GTZ 2011; Uvin 1995).

Other organizations describe the dimensions of scale-up in terms of its origination, such as top down, bottom up, or spontaneous (Jonasova and Cooke 2012; World Bank 2012; WRI 2015). The Management Systems International scaling-up process framework (Cooley 2016), on the other hand, describes scaling up in terms of who manages the process relative to who implements the pilot.

Cooley and Linn (2014) have distinguished the enabling factors and conditions for scaling up into two broad categories: drivers and spaces. **Drivers** are factors and conditions that catalyze the scaling-up process and push it forward. Examples

would be a clear vision of what and where to scale up, a champion who recognizes the need for and feasibility of scaling up, changes in political and economic conditions, and incentives for scaling such as competition and benchmarking. **Spaces** are those factors and conditions necessary for an intervention to expand into larger areas. Examples are sustainable financing, a legal and policy framework for implementation, capacity to deliver resources and services, and partnerships for implementation.

Hancock (2003) discusses the sequencing of interventions in the scaling-up process, which begins with innovation, followed by effectiveness or demonstration of impact at a local level, proceeding to efficiency or better use of resources as the intervention is implemented across a greater population and geographical area, and finally expansion or replication and institutionalization of interventions for wider impact. As the extent of scaling increases, learning from the wider experience also expands—which at the same time builds evidence of what works and allows greater applicability of the scaling experience in new settings.

2.2 GEF strategy and programming for scaling-up

The GEF 2020 Strategy and focal area programming directions envision scale-up and support the necessary enabling conditions for it. The intent to scale up varies by focal area or program.

GEF 2020 STRATEGY

The GEF 2020 Strategy calls for “developing a comprehensive approach toward scaling up the impact of its investments” (GEF 2014a, 16). The strategy encompasses important elements of an effective operational approach by positing that large-scale impact can be achieved in three ways: through GEF interventions being scaled up by others, through

market or behavioral transformation, and by the intervention working directly at a large scale. The strategy envisions the GEF’s contribution to scale-up to be through mainstreaming environmental priorities into broader policies, strategies, programs, and actions; working on supply chains and with industrywide approaches; implementing larger programs; and cofinancing and leveraging via innovative financial instruments. The strategy notes a number of enabling conditions for scaling up impact, including incentives, policies and regulations, institutions and institutional capacity, partnerships and coordination, financing, learning, and monitoring and evaluation.

GEF PROGRAMMING DIRECTIONS

The GEF-6 and GEF-7 Programming Directions have a clear vision of impact at scale articulated in all the focal area sections, and in the IAPs in GEF-6 and in the Impact Programs in GEF-7 (GEF 2014b, 2018). In this regard, the documents appear to be distinct from, and more explicit in their scaling focus than, the programming documents of other international development organizations.

The GEF-6 and GEF-7 Programming Directions present a common approach to addressing key opportunities and challenges in scale-up objectives. While the GEF-6 document articulates the scaling approach for the focal areas and IAPs, GEF-7 offers a clear approach for scaling-up through Impact Programs; there is no specific scaling framework for the focal areas. GEF-7 also stresses that the SGP will be more focused in supporting scaling-up and replication.

The operational guidance for the Impact Programs specifically states that countries will be asked to indicate their commitment to a national institutional framework that has an approach for scaling up interventions, among other issues, with the end goal of promoting systems change (GEF 2018b).

However, there are some differences among the programs and across the focal areas.

For example, in the climate change focal area, the GEF-7 Programming Directions stress the use of GEF support for reducing risks and addressing barriers rather than providing direct support for large-scale deployment and diffusion of mitigation options. The focal area strategy envisions scale-up to be financed by other actors, especially the private sector. The Sustainable Cities Impact Program similarly focuses on developing solutions with a potential for scaling by other actors.

On the other hand, the Sustainable Forest Management and Food Systems Impact Programs highlight the need to scale up the successes of GEF-supported pilots, particularly by addressing drivers of environmental degradation. The Food Systems Impact Program will specifically support integrated solutions that generate multiple benefits at scale. Most important, financing from the program will require “a clearly identified approach for converting results into larger scale impact in terms of geographies covered, financing mobilized, and number of actors influenced” (GEF 2018b, 89). Multistakeholder initiatives and platforms are expected to help scale and replicate the results. These approaches build on previous efforts in the land degradation focal area as well as the Sustainable Forest Management program to scale up impacts by integrating the objectives of multiple focal areas to address both environmental and economic issues, often through a programmatic approach.

In general, both the GEF-6 and GEF-7 documents recognize the long-term nature of the scale-up process and how it involves a sequence of actions that must go beyond a project-by-project engagement. The sequencing requirement is especially well documented in the GEF-6 guidance for climate change and international waters and for the Impact Programs in GEF-7.

Both programming documents also require creating enabling conditions for effective scale-up of impact. Such conditions include support for changes in policies, laws, and regulations; institutional capacity; and mainstreaming environmental concerns in public budgets. In addition, both programming documents emphasize engagement with the private sector and the use of market-based mechanisms and incentives as impact multipliers.

The GEF-6 and GEF-7 Programming Directions also require leveraging partnerships with other development finance agencies—which is at the very core of the GEF business model—as well as with other relevant stakeholders, including CSOs and communities. Learning and knowledge management are elements emphasized in the documents.

2.3 Perspectives from the GEF partnership

Across the GEF partnership, there is a varied understanding of what scale-up is. However, most understand it as the geographical expansion of interventions that produce environmental benefits.

Interviews with members of the GEF partnership revealed different interpretations of scale-up and of the process through which it takes place. When asked how their respective institutions defined scaling up, nine representatives of various GEF Secretariat teams and of nine GEF Agency coordination units gave varied responses that broadly included descriptions of the term, conditions related to the scaling-up process, types of interventions intended to result in scaling up, and what their respective institutions aimed to scale up. The most common description of scaling, cited by nearly half of those interviewed, was the geographical expansion of interventions that produce environmental benefits. Other common descriptions included an increase in financing, the broader adoption of interventions into government policies

and institutions, and systemic or transformational changes. More than half of the interviewees from the GEF Secretariat mentioned systemic or transformational change to describe scaling up, compared to only two interviewees from the GEF Agencies.

Among the GEF Agencies, the most common description of scale-up referred to partnerships and collaboration among different institutions as an approach to implementing an intervention at scale. This was mentioned by more than half the GEF Agency representatives interviewed. Only a third mentioned an increase in financing to describe scale-up.

Interviewees from the five global partnerships also did not appear to have explicit definitions of scaling-up. However, in their descriptions, scaling was equated with an increase in positive socioeconomic and environmental impacts, as well as with an increase in financing. Like the GEF, these entities approach scale-up of impacts by strengthening the underlying systems, addressing drivers, and removing barriers to delivering impact at scale. The two climate change partnerships (the CIF and the GCF) explicitly connect the concept of scaling-up with their vision of transformation or paradigm shift toward low-carbon or climate-resilient development. In this way, they associate scale-up with the transformation of economic systems.

Planning for and the process of scaling-up varies across focal areas. Interviewees noted that many interventions in the biodiversity, land degradation, and chemicals and waste focal areas were assumed to be spontaneously adopted and replicated through knowledge dissemination if the results of the pilot were successful. The climate change mitigation focal area has had a more concrete model for scaling that starts from piloting an innovation, which is then replicated incrementally at larger geographical scales, until there is full market penetration. In the international waters

focal area, even prior to the GEF's broader shift toward scaling-up, GEF support has typically first focused on examining the environmental issues to be addressed at the larger scale, and then identified the interventions that need to be piloted at smaller scales, before eventually scaling up impact.

2.4 Defining scaling-up

Drawing on the range of definitions and perspectives from the literature and interviews, this evaluation defines scaling-up impacts in the GEF as **increasing the magnitude of global environmental benefits, and/or expanding the geographical and sectoral areas where they are generated, to cover a defined ecological, economic, or governance unit**. In the process of scaling up global environmental benefits, social and economic benefits may also be scaled up; in many cases, scaling up such benefits may be the means to remove barriers to scaling up global environmental benefits. Scaling is a continuous process which often takes place over longer time horizons. As such, scale-up objectives need to be continually set and achieved until impacts are generated at the magnitude and scope of the targeted scale.

2.5 Modes of scaling

Three modes of scaling—often interdependent—emerged from the interviews: replication, mainstreaming, and linking. These terms, more specific to the GEF context, are analogous to horizontal, vertical, and functional scaling-up, respectively, which are more commonly used in the literature. All three modes are processes that may take place through one or more projects—whether in parallel or in sequence—and contribute to generating a specific impact at a target scale.

Within the GEF 2020 Strategy, replication and mainstreaming correspond broadly with the idea

of GEF interventions being scaled up by others, while linking is associated with market or behavioral transformations and working directly at a large scale. In previous evaluations, the IEO has assessed progress toward impact, specifically the broader adoption of GEF-supported interventions by other actors, in terms of processes similar to these modes. This current evaluation assesses these processes specifically in terms of how they contribute to scaling up impacts.

REPLICATION

Replication refers to the implementation of the same intervention multiple times, thereby increasing the number of stakeholders and/or covering larger areas beyond a project's original geographic or administrative borders. In the GEF context, replication was said to occur through the leveraging of finance, knowledge, and policy. That is, an intervention may be implemented across a wider area either through government or other funders investing more money for this purpose, through knowledge about the intervention motivating stakeholders to implement it using their own resources, through a policy requiring or encouraging stakeholders to implement an intervention, or a combination of these. This evaluation defines replication as a mode of scaling-up only where the expanded implementation of an intervention was clearly intended to reach a specific scale, such as a province or a country, rather than a simple repetition of an intervention.

For example, in Senegal, the GEF supported piloting of 10 ecovillages in the UNDP-implemented project Participatory Biodiversity Conservation and Low Carbon Development in Pilot Ecovillages in Senegal (GEF ID 4080). During the course of the project, initial successes allowed the national government to replicate the approach in 84 more villages without additional GEF funding, by reallocating GEF funds mainly toward training and

livelihoods, and tapping civil society and private sector funds for renewable energy infrastructure. By the end of the project, the national government had scaled up the approach at the national level by initiating replication in an additional 400 villages through an agency created specifically for this purpose.

When high-impact, effective approaches already exist, the comparator global partnerships interviewed mentioned that they replicate such approaches at a larger scale, particularly in the health sector. In the climate change sector, the GCF seeks to scale up effective interventions that have been previously implemented by other institutions, including by the GEF. The GCF also aims to develop faster and more efficient approaches based on the experience of other institutions.

While replication is the most common form of scale-up mentioned in the literature, none of the institutions interviewed described scaling-up exclusively in terms of replication. Other forms of scale-up included sectoral and institutional expansion through mainstreaming and linking.

MAINSTREAMING

Mainstreaming involves integrating an intervention within an institution's regular operations, usually through a policy or legal framework. While mainstreaming typically happens within a specific national or local government agency, it may also occur simultaneously through multiple government sector agencies, or in other institutions, such as donors, CSOs, and the private sector. This evaluation defines mainstreaming as a mode of scaling only where the adoption by institutions results in the intervention being implemented and expanded to reach a specific higher scale, such as a province, country, or region.

For example, national governments, research institutions, and private sector companies may all

commit to applying integrated coastal management in their respective areas of work as signatories of the GEF-supported Sustainable Development Strategy for the Seas of East Asia (SDS-SEA). One national government may accomplish this by creating more marine protected areas, a research institution may develop and advocate for more sustainable fishing regulations, and a private company may decide to switch to fishing technology that reduces bycatch. These interventions, applying the same management approach in different sectors and different contexts, in aggregate contribute to increasing sustainable fisheries in the East Asian seas.

Four of the five global partnerships interviewed aim to systematically mainstream their approaches into the regular operations of implementing institutions by only supporting interventions that can be sustained through domestic financing. In the education sector, all GPE support is channeled through national processes and policies. In the climate change sector, the CIF supports the mainstreaming of climate change mitigation and resilience considerations in government institutions and multilateral development banks, especially in their decision-making and budgeting processes.

LINKING

Almost all GEF stakeholders interviewed described scaling-up as the linking of interventions and actors across either different geographic locations, administrative levels, focal areas, or sectors and institutions, or a combination of these. Linking was often described as the implementation of multiple types of interventions that, by design, all contribute to the same impact at the scale of a system defined by environmental, economic, or administrative boundaries. Among the systems mentioned were a landscape, seascape, ecoregion, value chain, supply chain, or national government.

Within value and supply chains, linking takes place between interventions that address causes and effects—for example, by working both in countries where deforestation or wildlife poaching occurs, and where demand for forest and wildlife resources is high. Market change, which the IEO has tracked in previous evaluations to assess progress toward impact, may be one form of linking within value chains when it addresses both supply and demand sides.

When the United Nations Industrial Development Organization (UNIDO) and the Development Bank of Latin America (CAF) engage in a country, they map out the activities of the various stakeholders to address issues in a particular value chain. Periodically mapping out existing interventions and resources in a logical chain or matrix helps them identify existing gaps. The Agencies then design interventions to fill those gaps. The international waters focal area takes a similar approach through its transboundary diagnostic analysis–strategic action program (TDA-SAP) methodology.¹ Linking is also the basis for scale-up in the IAPs in GEF-6 and the Impact Programs in GEF-7.

Within national or subnational administrative systems, scaling-up through linking is done across different levels of governance—such as municipal, provincial, and national government units—as well as across multiple sectors—such as agencies for environment, health, agriculture, and social welfare.

Scaling up through the creation of links has been referred to as implementing different interventions under a common theme or transboundary issue,

¹ The TDA-SAP methodology refers to the focal area's approach of first defining the key environmental issues to be addressed in a large marine ecosystem or water basin through a TDA, followed by an SAP endorsed by countries that outlines how each of them will address these issues to achieve global environmental benefits at the scale of the transboundary waterbodies.

such as water pollution or fisheries. This includes implementing projects that address multiple focal areas in an integrated manner within a specific geographic or ecological unit, such as under the SGP's current approach to approving grants in graduated countries. The GEF's Sustainable Forest Management program also identifies the implementation of multifocal area projects, particularly those that link livelihoods and food security to ecosystem services in production landscapes, as a strategy for promoting large-scale transformation.

Interventions are often linked through a programmatic approach. The 2008 GEF programmatic approach paper identifies programs as a means of securing "larger-scale and sustained impact on the global environment through integrating global environmental objectives into national or regional strategies and plans using partnerships" (GEF 2008, 2). The approach to scale-up through linking is consistent with the GEF's shift toward addressing drivers rather than symptoms of environmental degradation to achieve more sustainable impacts at scale. The programmatic approaches aim to achieve impact at scale in part by providing more support to multistakeholder platforms at the regional and global levels than was given in earlier replenishment periods.

Interviews confirmed that this shift is taking place within GEF Agencies as well. Increasingly, emphasis is placed on working across sectors and designing focused interventions within ecologically important areas, rather than on implementing several independent interventions in multiple locations. However, it was also clear from the interviews that this shift has not been influenced by the GEF, but is part of an overall global move to maximize impact with limited funds—especially among international nongovernmental organizations (NGOs) and technical UN Agencies, which typically have to work with smaller funding envelopes.

Four of the five global partnerships interviewed for this evaluation scale up through action plans and investments that link across sectors and sub-sectors, supply and value chains, and—in some instances—common transboundary issues. For example, the CIF's country investment plans set out strategically connected investments built around a transformative vision. These plans are aligned with existing initiatives and focus on cross-sector linkages. The GCF has recently started using linking as a way of scaling up climate change impacts through its 2017 Framework for Complementarity and Coherence. This framework sets out principles to strengthen the fund's complementarity and enhance coherence with other climate finance institutions. As an application of the framework, national institutions and key stakeholders in the Lao People's Democratic Republic met in February 2019 to explore synergies between proposed programming plans for the GCF and the GEF in the country.

GEF AGENCY APPROACHES TO SCALING-UP

Interviews revealed that grant organizations, such as UN agencies and international NGOs, scale up through linking by partnering with institutions across different sectors. In this way, they leverage the resources and comparative advantages of their partners. For example, in non-GEF projects, UNIDO demonstrates the potential impact and viability of a project through its technical assistance. This demonstration then leverages larger funds from the Asian Development Bank and the World Bank to implement the infrastructure component of the project, allowing an intervention to be scaled up through replication. UNIDO may also partner with a country's ministry of finance and/or ministry of health and bilateral donors to implement other types of interventions. Through linking, these grant organizations primarily play a convening and coordinating role to bring coherence to multiple

interventions, such as in UNIDO's matrix mapping. They may also scale up through replication, but mainly by leveraging cofinancing from partners.

On the other hand, multilateral development banks such as the Asian Development Bank and the World Bank provide larger amounts of funding through loans and typically scale up through replication. Governments use the loans to duplicate successful pilots within a larger region or throughout the entire country. In addition to financing, multilateral development banks provide technical expertise in ensuring standards for implementing an intervention are maintained in the course of replication.

Partnership building is an advantage for implementing regional or systemwide scaling initiatives. Although loans tend to be driven by national economic priorities rather than global environmental priorities, at the same time they have the advantage of giving multilateral development banks access to the ministry of finance and key policy makers in each country who can influence scale-up processes.

Profile of cases and results

The evaluation reviewed 20 cases for which quantitative positive outcomes were reported and where information on the factors influencing scaling could be assessed. This chapter presents a profile of these core cases and the outcomes of GEF support to their scaling. Findings from analysis of an additional 40 cases are referenced where relevant; these comprise

- 14 cases with information on financial support and quantitative outcomes, and
- 26 cases with qualitative information used to understand the factors influencing scaling.

3.1 Profile of core cases

The 20 core cases consist of 38 projects; almost two-thirds (65 percent) of the cases consist of at least two projects each. Projects within each case are explicitly stated as being linked in the project documents and contribute to the same impact.¹ The maximum number of projects in a given case was

¹ Any projects not explicitly mentioned as linked in the project documents, even if they may have contributed to scaling up the same outcomes within the same context, have therefore not been included in a case, as there was no systematic way of identifying them. The analyses

in this chapter similarly exclude support from and the results of non-GEF initiatives.

six child projects under a single program. Seven cases had one project each. Most climate change mitigation cases had one project. Table 3.1 presents a profile of these cases, including the short names by which the cases are referenced throughout this report. The cases are not meant to be representative of the scaling-up experience in each focal area, but rather demonstrate a range of interventions and results corresponding with the range of GEF support provided and the variety of contexts in which the GEF works.

The core cases cover a time span of 20 years from the GEF pilot phase to GEF-5; a third of the projects were approved under GEF-4 (table 3.2). The earliest project, under the Mexico Ilumex case (High Efficiency Lighting Pilot, GEF ID 575), started implementation in 1994. The most recent project, under the Philippines Climate Change Adaptation case (Scaling up Risk Transfer Mechanisms for Climate Vulnerable Agriculture-based Communities in Mindanao, GEF ID 4967), started in November 2014. All projects have been completed, with the exceptions of the scaling-up project in the Ethiopia SLM case (Sustainable Land Management

in this chapter similarly exclude support from and the results of non-GEF initiatives.

Table 3.1 Profile of core cases assessed

Case	GEF-supported project(s)	Focal area	Target scaling outcome	Target scale
Bangladesh IDCOL	Rural Electrification and Renewable Energy Development (GEF ID 1209)	CCM	Expand access to solar home systems in rural areas	Country
Brazil ARPA	Amazon Region Protected Areas Program (ARPA) (GEF ID 771); Amazon Region Protected Areas Program Phase 2 (GEF ID 4085)	BD	Expand and consolidate protected areas system	Amazon region
Brazil Rio Rural	Rio de Janeiro Integrated Ecosystem Management in Production Landscapes of the North-Northwestern Fluminense (GEF ID 1544)	LD/MF	Demonstrate and increase adoption of biodiversity- and climate-friendly agricultural practices through integrated ecosystem management	Northwest region of the state of Rio de Janeiro
China CHUEE	China Utility-Based Energy Efficiency Finance Program (CHUEE) (GEF ID 2624)	CCM	Develop partnerships and capacities for a commercially sustainable delivery mechanism for energy efficiency projects	Country
China CRESP	Renewable Energy Development (GEF ID 446); Renewable Energy Scale Up Program (CRESP), Phase 1 (GEF ID 943); China Renewable Energy Scaling-Up Program (CRESP) Phase II (GEF ID 4493)	CCM	Demonstrate and increase installed renewable energy capacity to reduce carbon emissions	Country
China DDT	Improvement of DDT-Based Production of Dicofol and Introduction of Alternative Technologies Including IPM for Leaf Mites Control in China (GEF ID 2629); Alternatives to DDT Usage for the Production of Anti-fouling Paint (GEF ID 2932)	CW	Dispose of DDT waste, eliminate production and consumption of dicofol, demonstrate and replicate integrated pest management technology, commercialize alternatives to DDT and TBT in anti-fouling paint	Country
China IEM	Land Degradation in Dryland Ecosystems: Project I-Capacity Building to Combat Land Degradation (GEF ID 956); An IEM Approach to the Conservation of Biodiversity in Dryland Ecosystems - under the PRC-GEF Partnership on Land Degradation in Dryland Ecosystem Program (GEF ID 2369); Capacity and Management Support for Combating Land Degradation in Dryland Ecosystems (GEF ID 3484); Partnership: Forestry and Ecological Restoration in Three Northwest Provinces (GEF ID 3483); Sustainable Development in Poor Rural Areas (GEF ID 3608); Mainstreaming Biodiversity Protection within the Production Landscapes and Protected Areas of the Lake Aibi Basin (GEF ID 3611)	LD/MF	Demonstrate and establish enabling conditions for adoption of integrated ecosystem management in agricultural areas adjacent to protected areas	Dryland ecosystems
China Termite Control	Demonstration of Alternatives to Chlordane and Mirex in Termite Control (GEF ID 2359)	CW	Eliminate production and consumption of chlordane and mirex by termite control professionals	Country
Costa Rica PES	Ecomarkets (GEF ID 671); Mainstreaming Market-based Instruments for Environmental Management Project (GEF ID 2884)	BD	Increase the area of forest under protection and sustainable management through payments for environmental services in private lands adjacent to protected areas	Country
Ethiopia SLM	Country Program for Sustainable Land Management (GEF ID 2794); Sustainable Land Management Project 2 (GEF ID 5220)	LD/MF	Increase area of agricultural land under sustainable land management	Vulnerable watershed areas
Indonesia COREMAP	Coral Reef Rehabilitation and Management Project (COREMAP I) (GEF ID 116); Coral Reef Rehabilitation and Management Project Phase II (COREMAP II) (GEF ID 1829)	BD	Demonstrate and establish framework for community-based coral reef management	Country

(continued)

Table 3.1 Profile of core cases assessed *(continued)*

Case	GEF-supported project(s)	Focal area	Target scaling outcome	Target scale
Mauritius POPs	Enabling Activities for the Stockholm Convention on Persistent Organic Pollutants (POPs): National Implementation Plan for Mauritius (GEF ID 1824); Sustainable Management of POPs in Mauritius (GEF ID 3205)	CW	Dispose of DDT and PCBs, treat contaminated soils, establish integrated vector management system as alternative to DDT	Country
Mexico Ilumex	High Efficiency Lighting Pilot (GEF ID 575)	CCM	Demonstrate feasibility of energy efficient lighting and replicate demand-side management approach	Country
Namibia NACOMA	Namib Coast Biodiversity Conservation and Management (NACOMA) (GEF ID 1505); Namibian Coast Conservation and Management Project (GEF ID 4669)	BD	Strengthen and finance the protected area system and mainstream biodiversity conservation in adjacent lands	Terrestrial and marine protected area systems
North Macedonia PCB	Enabling Activities to Facilitate Early Action on the Implementation of the Stockholm Convention on Persistent Organic Pollutants (POPs) in the Republic of Macedonia (GEF ID 1518); Demonstration Project for Phasing-out and Elimination of PCBs and PCB-Containing Equipment (GEF ID 2875)	CW	Demonstrate cheaper alternative for treating PCBs	Country
Philippines Climate Change Adaptation	Climate Change Adaptation Project, Phase I (GEF ID 3243); Scaling up Risk Transfer Mechanisms for Climate Vulnerable Agriculture-based Communities in Mindanao (GEF ID 4967)	CCA	Build capacity for and promote adoption of weather-based insurance index	Country
Romania International Waters	Agricultural Pollution Control Project - under WB-GEF Strategic Partnership for Nutrient Reduction in the Danube River and Black Sea (GEF ID 1159); Integrated Nutrient Pollution Control Project-under the WB-GEF Investment Fund for Nutrient Reduction in the Danube River and Black Sea (GEF ID 2970)	IW	Increase use of agricultural practices that reduce nutrient discharge to the Danube River and the Black Sea	Country
Senegal Ecovillages	Participatory Biodiversity Conservation and Low Carbon Development in Pilot Ecovillages in Senegal (GEF ID 4080)	MF	Demonstrate integrated approach to reduce carbon emissions, protect biodiversity, and create livelihood opportunities in rural areas	Country
Uganda Protected Area	Institutional Capacity Building for Protected Areas Management and Sustainable Use (GEF ID 101); Protected Areas Management and Sustainable Use (GEF ID 1830)	BD	Strengthen institutional capacity for long-term biodiversity conservation	National protected area system for wildlife
Uruguay Wind Energy	Uruguay Wind Energy Programme (GEF ID 2826)	CCM	Demonstrate wind power plant and remove barriers to commercial investments in wind energy	Country

Note: BD = biodiversity; CCA = climate change adaptation; CCM = climate change mitigation; CW = chemicals and waste; IW = international waters; LD = land degradation; MF = multifocal.

Table 3.2 Distribution of projects and financing in assessed cases by GEF replenishment period

Period	Case projects		GEF funding to case projects	
	Number	% of total	Million \$	% of total
Pilot phase	1	3	10.00	3
GEF-1	5	13	56.60	17
GEF-2	7	18	97.57	29
GEF-3	8	21	71.27	21
GEF-4	13	34	62.33	18
GEF-5	4	11	41.22	12
Total	38	100	338.99	100

Source: Project documents.

Project 2, GEF ID 5220) and the most recent project in the China CRESPP case (China Renewable Energy Scaling-Up Program Phase II, GEF ID 4493). Ongoing projects in the Brazil ARPA, Indonesia COREMAP, and China IEM cases have not been included in this analysis, as they have not undergone midterm reviews.

In terms of GEF grants to the case projects, GEF-2 has the largest share (29 percent), which includes funding for a \$40 million China CRESPP project (phase 1) and a \$30 million Brazil ARPA project.

3.2 Extent of GEF support

GEF support to scaling-up activities in the 20 cases varied widely in terms of funding, time frame, and project modality, but typically lasted longer than five years and leveraged higher cofinancing ratios at the scaling-up stage than at the pilot stage.²

² Support calculations in most cases include the full GEF grant and cofinancing amounts; few cases distinguished between activities contributing to the piloting and scale-up stages, both of which are part of the same scaling-up process within each case. The analyses in this chapter assume that all project activities contributed directly or indirectly to achieving the reported results.

The amount of GEF support provided for the scaling-up process ranged from \$0.95 million to \$100.5 million. On average, this translates to \$16.9 million in GEF grants per case, with the median at \$10.3 million. GEF support was complemented by an average of \$129 million in cofinancing, with a median of \$35.8 million. Combining GEF and cofinancing support, the average amount of funds invested for the scaling-up process in each case was \$145.9 million (median of \$46.1 million).

As with the overall GEF portfolio, the climate change mitigation cases received the largest amount of GEF funding and cofinancing on average (table 3.3).

The median time period over which the GEF provided support was 10 years, with some scaling-up outcomes achieved in as little as 3.5 years—which is about the span of a medium-size project—and some in as many as 18 years (table 3.4). Other cases reviewed for this evaluation received GEF support for as long as 25 years or more, with targets at higher scales in terms of outcomes and geographic area. This confirms the broader experience in the literature and stakeholder interviews that successful scale-up takes about 10–15 years of sustained effort.

PILOTING VERSUS SCALING

GEF support for pilot and scale-up stages were identified through explicit references in project titles, objectives, or project components. While piloting was carried out through different project modalities, all scaling-up support was provided through full-size projects (table 3.5).

GEF grants were larger for the pilot stage (table 3.6). The GEF provided an average of \$8 million for the pilot stage, ranging from \$0.95 million for the Uruguay Wind Energy case to \$35.00 million for the China CRESPP case. The Uruguay Wind

Table 3.3 GEF funding and cofinancing for scaling-up processes for cases assessed, by focal area (million \$)

Focal area	No. of cases	GEF funding				Cofinancing				Total			
		Min.	Max.	Mean	Total	Min.	Max.	Mean	Total	Min.	Max.	Mean	Total
BD	5	6.8	46.0	18.5	92.3	29.7	121.5	78.2	390.9	36.5	167.4	96.7	483.5
CCA	1	6.0	6.0	6.0	6.0	66.7	66.7	66.7	66.7	72.7	72.7	72.7	72.7
CCM	5	1.0	100.5	27.2	136.2	6.0	1,021.4	253.0	1,265.2	7.0	1,121.9	280.3	1,401.3
IW	1	10.7	10.7	10.7	10.7	81.8	81.8	81.8	81.8	92.4	92.4	92.4	92.4
LD/MF	3	6.7	28.8	19.2	57.5	8.2	590.4	240.7	722.1	14.9	619.2	259.9	779.6
CW	4	1.3	16.4	8.4	33.4	1.0	23.9	10.0	40.0	2.3	40.3	18.4	73.5
MF	1	2.9	2.9	2.9	2.9	13.2	13.2	13.2	13.2	16.1	16.1	16.1	16.1

Source: Project documents.

Note: BD = biodiversity; CCA = climate change adaptation; CCM = climate change mitigation; CW = chemicals and waste; IW = international waters; LD = land degradation; MF = multifocal. LD/MF = cases combined in the analysis that implement similar interventions with similar target outcomes. Minimum funding for CCM rounded to 1.0.

Table 3.4 Years of GEF support to cases assessed, by focal area

Focal area	No. of cases	Elapsed time (years)		
		Min.	Max.	Mean
BD	5	10.0	15.0	12.8
CCA	1	7.5	7.5	7.5
CCM	5	3.5	16.5	8.9
IW	1	15.5	15.5	15.5
LD/MF	3	6.5	14.0	9.7
CW	4	5.5	12.5	8.9
MF	1	6.0	6.0	6.0

Source: Project documents.

Note: BD = biodiversity; CCA = climate change adaptation; CCM = climate change mitigation; CW = chemicals and waste; IW = international waters; LD = land degradation; MF = multifocal. LD/MF = cases combined in the analysis that implement similar interventions with similar target outcomes. Minimum funding for CCM rounded to 1.0.

Table 3.5 Project modalities used for piloting and scale-up stages in cases assessed

Modality	Piloting	Scaling
Enabling activity	2	0
Medium-size project	3	0
Full-size project	24	13
Total	29 ^a	13 ^a

Source: Project documents.

a. Four full-size projects are counted twice, as each contains both piloting and scaling components.

Energy case had the smallest amount of GEF funding because it only had one medium-size project. However, in the other cases reviewed for verification, the GEF grant at the pilot stage was as low as \$45,000; this was for an SGP project.

An average of \$5.5 million in GEF funds was invested for the scale-up stage ($n = 11$, for cases where GEF support at this stage could be distinguished). In some cases, information on GEF funding was only available for the pilot stage, as the scale-up stage was funded by government or other donors. The China CRESP case has the largest amount of GEF funding for the scale-up stage (\$65.5 million), which is the sum of the grants for two full-size projects.

For the 11 cases with available data, the median ratio of GEF grants allocated for piloting versus scaling is 1.9. This means that almost twice as much funding was invested at the pilot stage than at the scale-up stage, and reflects the higher upfront costs of establishing appropriate enabling conditions as well as a learning curve. The piloting-to-scaling ratios of grant amounts vary greatly across cases, ranging from 0.5 for the China CRESP case—which had one full-size project funded in the pilot stage and two in the scale-up

Table 3.6 GEF funding for piloting and scaling stages for cases assessed, by focal area (million \$)

Focal area	No. of cases	Pilot stage				Scale-up stage			
		Min.	Max.	Median	Total	Min.	Max.	Median	Total
BD	5	4.1	30.0	8.0	57.0	0	16.0	8.8	35.3
CCA	1	5.0	5.0	5.0	5.0	1.1	1.1	1.1	1.1
CCM	5	1.0	35.0	10.0	70.7	0	65.5	n.a.	65.5
IW	1	5.2	5.2	5.2	5.2	5.5	5.5	5.5	5.5
LD/MF	3	6.7	28.8	9.0	44.6	0	13.0	n.a.	13.0
CW	4	1.3	11.1	6.0	24.5	0	1.6	0.8	2.3
MF	1	2.4	2.4	2.4	2.4	0.2	0.2	0.2	0.2

Source: Project documents.

Note: n.a. = not applicable; BD = biodiversity; CCA = climate change adaptation; CCM = climate change mitigation; CW = chemicals and waste; IW = international waters; LD = land degradation; MF = multifocal. LD/MF = cases combined in the analysis that implement similar interventions with similar target outcomes. Minimum funding for CCM rounded to 1.0. Fewer projects are included in the calculations for the scale-up stage, as GEF support was only for the pilot stage in several projects or has just started for the scale-up stage. In three cases, calculations for the pilot stage include only the amounts allocated for piloting in the project components; for all other cases, the full GEF project grant amounts were used. Median values are given rather than means because the distribution was not normal. Median values are not reported where only one case of multiple cases received funding at the scaling stage.

stage—to 14.2 for the China Termite Control case—which consisted of a single project with both piloting and scaling components. Most of its funds were used to demonstrate integrated pest management in three provinces through pilots; a smaller portion of its funding was allocated for scaling, specifically for the development of a national replication program.

Higher levels of cofinancing were achieved for the scale-up stage. The median ratio of cofinancing for piloting to scaling is 0.7, indicating higher cofinancing leveraged at the scale-up stage, in terms of dollar values. The cofinancing ratio for GEF projects across the cases is also higher for scaling than for piloting. GEF grants leveraged up to 12.6 times more cofinancing per GEF dollar in the scale-up projects compared to pilot projects, with an average of about double the cofinancing ratio in scale-up projects relative to their corresponding pilot projects. Conversely, GEF grant amounts tended to be smaller in the scale-up projects relative to their corresponding pilot projects. This suggests that as a result of GEF-supported pilots and enabling conditions, other donors contributed more resources to support the scaling-up process.

MODES OF SCALING

In 95 percent of the 20 cases, scaling-up was achieved by **replicating** interventions over a wider geographical area. At the same time, 16 of the 20 cases (80 percent) also aimed to **mainstream** the implementation of interventions within plans and programs at different levels of government and/or different government agencies. Only four cases used **linking** in addition to the two other modes to scale up impact. These cases addressed specific environmental issues through multiple sectors—although linking was not planned from the beginning in all cases. This breakdown is not surprising and reflects earlier GEF project designs, as it was only in 2014 when the GEF introduced a greater focus on scaling up through linking interventions across sectors.

3.3 Sequence of scaling-up support

The GEF supported the pilot and scale-up stages in the cases examined in four distinct ways (table 3.7), with most investments contingent on the positive results of pilots:

Table 3.7 Different sequences of GEF support to scaling-up processes by number of cases

Focal area	Piloting and scaling planned for and implemented within same project through different components	Piloting and scaling planned for at design stage of pilot project, and implemented through consecutive or parallel projects	Piloting and scaling implemented through consecutive GEF projects based on results of pilot stage	Piloting supported by GEF projects; scaling funded through other sources based on results of pilot stage	Total
BD	0	<ul style="list-style-type: none"> • Brazil ARPA • Indonesia COREMAP 	<ul style="list-style-type: none"> • Costa Rica PES • Namibia NACOMA 	Uganda Protected Areas	5
CCA	0	0	Philippines CCA	0	1
CCM	0	0	China CRESP	<ul style="list-style-type: none"> • Bangladesh IDCOL • China CHUEE • Mexico Ilumex • Uruguay Wind Energy 	5
IW	0	0	Romania IW	0	1
LD/MF	0	0	<ul style="list-style-type: none"> • Ethiopia SLM • China IEM 	Brazil Rio Rural	3
CW	<ul style="list-style-type: none"> • China DDT • China Termite Control 	0	0	<ul style="list-style-type: none"> • North Macedonia PCB • Mauritius POPs 	4
MF	Senegal Ecovillages	0	0	0	1
Total	3	2	7	8	20

Source: Project documents.

Note: BD = biodiversity; CCA = climate change adaptation; CCM = climate change mitigation; CW = chemicals and waste; IW = international waters; LD = land degradation; MF = multifocal. LD/MF = cases combined in the analysis that implement similar interventions with similar target outcomes.

- Piloting and scaling were planned for and implemented within the same project through different components
- Piloting and scaling were planned for at the design stage of the pilot project, and implemented through multiple consecutive or parallel projects
- Piloting and scaling were implemented through consecutive GEF projects based on results of the pilot stage
- Piloting was supported by GEF projects, while the scale-up stage was funded through other sources based on results of the pilot stage

The 20 cases assessed do not necessarily represent typical scaling-up experience in each focal area. Of the cases evaluated, the biodiversity and land degradation/multifocal area cases focusing

on protected area systems and integrated ecosystem management were mainly scaled up through a series of sequential projects, whether planned or unplanned. These types of interventions typically rely on community members and government field staff to implement activities on the ground through incremental expansion over a progressively wider geographical area. On the other hand, most climate change mitigation cases were scaled up with government or other resources after the GEF supported piloting through a single project. In these cases, GEF support was used to test the technical and financial feasibility of a certain technology, as well as support the establishment of enabling conditions for scaling-up by other stakeholders.

While only one international waters case was assessed, under the TDA-SAP approach, the GEF

supports pilot and scale-up stages before governments and other donors fully support further scaling. The IEO's recent international waters focal area study showed that GEF-supported projects in large marine ecosystems such as the Yellow Sea that are linked by the TDA-SAP approach have scaled up outcomes to some extent through long-term GEF funding (GEF IEO 2018f).

In most cases, scale-up was not planned and budgeted for at the outset, but was contingent on the success of the pilots. While the analysis revealed that 19 of 20 cases had a vision to scale up, as indicated in their project documents, table 3.7 shows that 75 percent of cases (15 out of 20) did not allocate a budget for scaling at the outset. This suggests that support for scale-up was often contingent on the success of pilots, making use of adaptive learning rather than fixed plans.

The pilot stage may consist of a pilot intervention to test effectiveness in a specific context, followed by pilots at a larger scale to test their viability for scaling. In most cases (17 out of 20), the GEF provided support in sequence: first by supporting pilots at a small scale to test feasibility of a technology or approach, then providing support for pilots and enabling conditions at a scale larger than previously, but not the full extent of the target scale (table 3.8). In 3 cases, bilateral funding was used to test the viability of the intervention in the country. In all cases, GEF was involved in creating or strengthening the enabling conditions for scaling up pilots that had previously shown results at a smaller scale.

For example, in Brazil, the Rio de Janeiro Integrated Ecosystem Management in Production Landscapes of the North-Northwestern Fluminense project (GEF ID 1544) was originally designed to introduce sustainable land management practices within one of the poorest regions of the state of Rio de Janeiro. The project did not have a scale-up objective, yet created enabling conditions—such as a multistakeholder partnership of different state agencies—that subsequent World Bank projects used for further expansion.

The GEF has continued to support scale-up processes beyond the establishment of enabling conditions in 4 out of 20 cases—Brazil ARPA, China IEM, Indonesia COREMAP, and Namibia NACOMA. The Brazil ARPA and Indonesia COREMAP cases are long-term programs funded by multiple donors with clear objectives for scaling-up from the beginning.

3.4 Results

As discussed here, results have been standardized and are reported as the magnitude of environmental outcomes achieved per million dollars of GEF grant per year. Standardized outcomes were calculated by dividing total reported units of the outcomes by the total GEF grant amount and by the total number of years of implementation of all projects within each case. The numbers represent the combined outcomes of the pilot and scale-up stages where the GEF provided support for both. Given the difficulty in systematically tracking

Table 3.8 Scale-up stages at which the GEF provided support

Period of GEF support	No. of cases	Percentage (n = 20)
Piloted intervention within specific context	17	85
Piloted for scaling/established enabling conditions for scaling	19	95
Actual scaling of intervention	4	20

Source: Project documents.

scaled-up outcomes beyond GEF funding, the calculations only include results reported in terminal and midterm evaluations and may underestimate the outcomes catalyzed by GEF support.

In five cases where results were reported separately for the pilot and scale-up stages, outcomes during the scale-up stage were larger per dollar of GEF grant per year than in the pilot stage. This suggests not only greater cost-effectiveness through learning from pilots and potential economies of scale, but also higher levels of cofinancing leveraged for scaling per GEF dollar.

Case outcomes in the scale-up stage ranged from 1.1 to 74.5 times larger than those in the pilot stage, with a median of 4.6. These outcomes are not representative of the results of each focal area, but show a range of results corresponding with the range of GEF support provided and the variety of contexts in which the GEF works.

The following analysis illustrates the various types of interventions supported by the GEF in each focal area and the corresponding results that contribute to each focal area’s objectives within their specific contexts. It presents only environmental results with common units of measurement across and within cases within a focal area. In at least two cases, common indicators could not be found between projects within the same case, or with other cases within a focal area. Having at least one common indicator within and across cases is a prerequisite to measuring progress in scaling-up at the project as well as portfolio level.

BIODIVERSITY

Standardized outcomes were as much as 74.5 times higher in the scale-up stage than in the pilot stage within the same case. All cases in this focal area aimed to increase biodiversity conservation through various types of interventions. In two of the cases, results at the pilot and scale-up stages were reported separately (table 3.9).

In the Brazil ARPA case, two major activities implemented were the creation of new protected areas and the consolidation of existing ones. During the pilot stage, a total of \$30 million in GEF grants helped create 24 million ha of new protected areas and consolidate 0.94 million ha of protected areas in six years. In the scale-up stage, \$15.9 million in GEF grants contributed to the creation of 5.6 million ha of protected areas and the consolidation of 33.9 million ha of protected areas in 5.5 years. The scaling project was able to consolidate an area 74.5 times larger than the pilot project for the same cost within the same amount of time. On the other hand, the scaling project was able to create less than half the area of new protected areas as the pilot project for the same amount. This is likely due to political changes during the scale-up stage that led to Congress freezing the budget and degazetting protected areas, instead of increasing the government budget for scale-up, which was key to the project’s exit strategy. Because of this unexpected political change, international donors and the national government’s executive branch decided to maximize the funds by maintaining the existing protected areas rather than expanding to new areas.

Table 3.9. Comparison of outcomes between pilot and scale-up stages for biodiversity cases (ha/million \$/year)

Case	Environmental outcome measured	Pilot stage	Scale-up stage
Brazil ARPA	New protected areas created	133,333	64,077
Brazil ARPA	Existing protected areas consolidated	5,211	387,894
Costa Rica PES	Forest under PES contracts	2,727	3,018

Source: Project terminal evaluations.

In the Costa Rica PES case, the first project brought 130,900 ha of land under payment for environmental services (PES) contracts in six years with \$8 million in GEF grants. The second project placed another 166,004 ha of land under PES contracts in 5.5 years with \$10 million in GEF grants. The rate at which forests were protected under PES contracts was at least 11 percent higher during the scale-up stage compared to during the pilot. However, the bulk of the GEF grant for the second project (\$7.5 million) was used to capitalize a biodiversity trust fund, which did not generate outcomes until after the project ended in 2014. In effect, only \$2.5 million in GEF funds was used to generate the results in the second project, increasing the rate to 12,073 ha/million dollars/year, or 4.4 times higher than in the pilot stage. The higher outcome per GEF dollar may be attributed to the increase in cofinancing: from \$41.2 million in the first project to \$118.1 million in the second project. The actual cofinancing was about \$30 million higher than what had been committed during the second project's design stage. The benefits of the approach demonstrated by the first project convinced the national government to invest more, illustrating the leverage made in using GEF grants. As of 2017, 1.2 million ha were reported to be under PES contracts, not including the area benefiting from the biodiversity trust fund.

CLIMATE CHANGE MITIGATION AND ADAPTATION

Annual carbon dioxide emissions reduction was the common indicator in four out of five climate change mitigation cases. Of the five cases, only the China CRESPP case received GEF support for scaling up beyond one project. The pilot project demonstrated the viability of large-scale wind and photovoltaic technology with \$35 million in GEF grants over nine years. The scaling-up project and its second phase currently under implementation have focused on wind energy, accounting for \$65.5 million in GEF support over an expected implementation period of 12 years. China CRESPP used a second common indicator across its three projects—the increase in installed renewable energy capacity in MW (table 3.10). While the rate of annual carbon dioxide emissions reduction decreased by 25 percent from piloting to scaling, likely because the second scaling project is currently still being implemented, the installed capacity has increased 8.6 times during the same period.

The only climate change adaptation case assessed, implemented in the Philippines, tracked the number of farmer beneficiaries in both piloting and scaling projects. In the pilot project, 607 people benefited over 6.5 years from a \$5 million GEF grant, while the scale-up project reached 2,413 beneficiaries over 3 years of implementation and \$1.1 million in GEF funding. The rate of

Table 3.10 Comparison of outcomes between pilot and scale-up stages for climate change cases (million \$/year)

Case	Environmental outcome measured	Pilot stage	Scale-up stage
China CRESPP	Installed renewable energy capacity	19.0 MW	164.5 MW ^a
China CRESPP	Annual carbon emissions reduction	80,808 tCO ₂ /yr	55,203 tCO ₂ /yr ^a
Philippines CCA	Farmers covered by weather index-based insurance	18.8 users	766 users

Source: Project terminal evaluations.

Note: tCO₂ = tons of carbon dioxide.

a. Includes results reported at midterm; GEF grant amount prorated according to actual years of implementation as of 2018.

beneficiaries supported during the scaling project is almost 40 times higher than that during the pilot.

LAND DEGRADATION

Two out of three land degradation/multifocal area cases used increased area under sustainable land management as an indicator to measure scaled-up environmental outcomes; however, the Ethiopia SLM case was the only one where results of GEF support for both piloting and scale-up stages have been reported. The pilot stage lasted five years, bringing 2,734 ha of land under sustainable land management per million dollars per year. In the 3.5 years of scale-up following the pilot thus far, this amount has increased 4.6 times, to 12,674.5 ha/million dollars per year (table 3.11).

CHEMICALS AND WASTE

All but one among the chemicals and waste cases eliminated 100 percent of targeted chemicals by project end. Among other indicators, projects in this focal area measure environmental outcomes in terms of the percentage of the total amount of chemicals identified in the national inventories that have been eliminated. In this focal area, either piloting and scaling were completed within the same project, or scale-up took place after GEF support ended; therefore, outcomes for the two stages cannot be compared.

Postproject information on the North Macedonia PCB case illustrates how GEF grants may be leveraged to scale up outcomes beyond the project period. The case includes an enabling activity and

a medium-size project, which together spanned an implementation period of 11.5 years. Almost 22 percent of identified PCBs (167.25 out of 764.00 tons) was eliminated by the end of the medium-size project in 2013, resulting in a standardized outcome of 1.32 percent of PCBs eliminated per million dollars of GEF support for every year of implementation. The enabling activity that preceded this project established a persistent organic pollutants (POPs) unit within the Ministry of Environment. The POPs unit has now built the capacity to manage all chemicals-related projects in the country. As of July 2018, PCB elimination in North Macedonia had increased to 87 percent from 22 percent within 5 years after GEF support ended. This translates to a standardized outcome of 3.63 percent of PCBs eliminated/million dollars/year, or almost three times higher than at project end. Financial challenges have led to slow progress in treating the few remaining transformers with PCBs; this is discussed further in [section 3.6](#).

INTERNATIONAL WATERS

While not representative of all projects in this focal area, the Romania International Waters case did not have environmental indicators or units of measurement common to its two projects, illustrating how it can be difficult to track progress in scaling up when no common indicators exist. The most similar environmental indicators found for this case's two projects involved areas under management. The first project tracked increased percentage of area under nutrient management systems, while the follow-on project

Table 3.11 Comparison of outcomes between pilot and scale-up stages for a land degradation/multifocal area case (ha/million \$/year)

Case	Environmental outcome measured	Pilot stage	Scale-up stage
Ethiopia SLM	Area under sustainable land management	2,734	12,675 ^a

Source: Project terminal evaluation.

a. Results reported at midterm; GEF grant amount prorated according to actual years of implementation as of 2018.

tracked hectares under sustainable management (table 3.12). The World Bank started implementing a follow-on scale-up project without GEF support in 2017, the same year the first scale-up project ended. Among other environmental outcome indicators, the World Bank project also tracks hectares under sustainable management.

The main environmental objective of this case was to reduce nutrient discharge into waterbodies. While a reduction of 255.5 tons of nitrogen per year was achieved by the end of the second project—allowing the country to comply with the European Union (EU) Nitrate Directive—this indicator was not tracked in the first project.

As mentioned elsewhere in this section, other project outcomes are not presented here because of a lack of common indicators between the piloting and scale-up stages.

GENDER-RELATED OUTCOMES

Six cases reported gender-disaggregated results.

In the Bangladesh IDCOL case, the availability of rural electricity through solar home systems increased women’s empowerment. A 2012 impact study found that these homes had statistically better empowerment outcomes, specifically general decision making and economic decision making, than households without solar home systems (IEG 2014). It also found that women had increased mobility and increased feelings of security due to lighting. Village women were also receiving trained on assembling solar home system

components; these women became entrepreneurs running their own technology centers.

Nearly half of the farmer beneficiaries (46 percent) in the Philippines Climate Change Adaptation case were women. The risk insurance payout supported their income to defray school, food, and labor expenses, as well as debt from previous seasons.

Seventy-three percent of the women beneficiaries in the Senegal Ecovillages case were employed in low-carbon income-generating activities, such as manufacture of clay stoves, processing of nontimber products, and soap production. The amount of time women had available for earning income also increased, in part due to the reduced need to collect firewood. In interviews, women in one village said that they could now solve problems without waiting to ask men for money.

In the Brazil Rio Rural case, 9 percent of almost 3,000 subprojects were implemented under the direct leadership of women, in small-scale agro-industries, crafts, and clothes making, among others. Because GEF support did not continue beyond the pilot stage, the number of beneficiaries was not scaled up past the pilot stage; data on the number of beneficiaries during the scale-up stage were not obtained. However, the original target number of beneficiaries was reached due to replication within the project period.

A deliberate preference for women beneficiaries in the Costa Rica PES case resulted in 15 percent of 16,712 PES contracts being issued to female landholders as of 2017.

Table 3.12 Environmental outcomes of international waters case with no common indicator between pilot and scale-up projects (million \$/year)

Stage	Type of land management measured	Standardized scaling-up outcome
Pilot	Area under nutrient management systems	1.2%
Scale-up	Area under sustainable management	290 ha

Source: Project terminal evaluation.

Almost half (48 percent) of the beneficiaries in the China IEM case were women. They were encouraged to participate in project management, decision making, village implementation groups, and public affairs—a major departure in some rural areas where women historically did not have access to education. However, interviews found that traditional tasks such as managing their households continued to prevent women from participating in these activities, as these barriers were not addressed by the pilot projects.

3.5 Monitoring progress

While GEF-supported projects typically set quantitative targets to be achieved, it is less common for these targets to be monitored and reported on relative to the scale of the environmental issue to be addressed—such as the total number of hectares of a threatened biome that needs to be protected in a country or region.³ One exception is the chemicals and waste focal area, where outcomes are measured against the total amount of chemicals in the country that need disposal or treatment. The GEF provides funding through enabling activities to help countries build inventories of chemicals specified in the Stockholm and Minamata Conventions. The target is then typically set to eliminate 100 percent of the total tons of chemicals in an inventory, whether this is to be accomplished within the project period, or beyond, without GEF support.

In the GEF's Guidelines on Core Indicators and Sub-Indicators (GEF 2018c), the core indicators relate to absolute numbers—area, tons, number of systems, etc. They specify quantitative corporate targets for GEF-7 relative to the funding

³ Such indicators are more common in the health and education sectors, where scale-up often refers to increasing reach, and data on the total population of persons to be treated or educated within a country are available.

envelope available, but there is no reference to the total magnitude of each global problem being addressed. Such information would allow the GEF to assess how large or small the targets are relative to the global or other relevant scale, and the resources that would be needed to achieve impact at those scales.

Further, terminal evaluation guidelines require the GEF Agencies to report on progress toward impact, which includes the extent to which interventions and results have been scaled up (GEF 2017a). However, these outcomes are often not reported in quantitative terms.

3.6 Sustainability of scaling-up initiatives

In cases where scaling-up activities continued beyond GEF support, the GEF contributed to their sustainability by catalyzing or establishing sustainable sources of financing and strengthening institutional capacities. However, their long-term sustainability is subject to risks arising from political and economic changes.

Cases that were assessed through previous evaluations have demonstrated mechanisms promoting the sustainability of scaling-up efforts beyond GEF support. For example, in the Uganda Protected Area case, the financial management system set up by the GEF-supported projects that ended in 2010—Institutional Capacity Building for Protected Areas Management and Sustainable Use (GEF ID 101) and Protected Areas Management and Sustainable Use (GEF ID 1830)—continues to be used and has allowed the government to allocate both tourism revenues and any incoming donor funds according to the needs of individual protected areas in the national system.

In the Bangladesh IDCOL case, the World Bank-implemented project (Rural Electrification and

Renewable Energy Development, GEF ID 1209) managed by the Infrastructure Development Company Limited (IDCOL) developed a market for microfinance institutions to compete for customers for sales and servicing of solar home systems. Use of local microfinance institutions that enjoyed high levels of consumer trust helped increase the demand for the systems. The project also helped develop the supply of solar home systems, batteries, and related equipment. By its completion in 2012, the project had far exceeded its initial target of 50,000 solar home systems, installing 1.88 million systems and bringing clean energy to 6 percent of the nation's population (IEG 2014). After project completion, and with support from other donors, the market continued to grow. By December 2017, IDCOL had installed 4.13 million solar home systems, bringing solar energy to 12 percent of the entire Bangladesh population (IDCOL 2017). However, since late 2014, the rate of solar home system installations in Bangladesh has slowed, partly due to the rapid acceleration of grid connections in the government's push to achieve its target of universal electricity access by 2021. In response, IDCOL is taking steps to keep microfinance institutions in the market by providing financing to engage in other renewable energy programs, such as solar irrigation, improved cookstoves, and solar minigrids (World Bank 2018).

As part of this evaluation, field visits were conducted in Costa Rica, Mauritius, and North Macedonia to assess the sustainability of scaling-up processes. In each country, the GEF had supported at least two linked projects contributing to the same impact, but no longer supported any projects in that sector as of 2018.

COSTA RICA

The PES program in Costa Rica has been running for five years since GEF support ended in 2014 (Ecomarkets, GEF ID 671; and Mainstreaming

Market-based Instruments for Environmental Management Project, GEF ID 2884). The program continues to be funded by revenues from a fuel tax and water tariff that are intended to offset, respectively, carbon emissions from fossil fuel use and the costs of maintaining watersheds that provide water to municipalities. The GEF capitalized a trust fund to provide payments for protecting high-biodiversity forests on private land, as the government had no existing funding source for that purpose. This trust fund currently generates a guaranteed annual return of 5 percent, which is used to fund operations and biodiversity payments.

While these and other smaller revenue sources have allowed the program to continue, the program is continually oversubscribed, and beneficiaries interviewed said that payments are not sufficient to replace income. The program itself has no specific scaling-up targets, as its coverage depends entirely on the amount of funds available for distribution.

Since the government has made a strong push toward decarbonization, revenues from the fossil fuel tax are expected to eventually end. Private companies that used to be another source of revenue for payments—such as hydroelectric power plants and bottling companies—have stopped participating in the program, as it was no longer financially viable for them. As of 2018, the newly elected government was in discussions over possible new revenue sources.

MAURITIUS

An octopus fishing ban in Mauritius that was scaled up from an outer island to the national level is now currently funded by the national government. The GEF and other donors invested in awareness campaigns and community training programs through multiple consecutive SGP projects. However, the outcomes so far have been much lower than in the pilot—partly because the larger area needs a higher investment in law enforcement efforts, and

partly because legislation at the national level did not apply the ban to the entire supply chain, as was done in the pilot.

The national government of Mauritius has also funded its own interim storage hazardous waste facility after an enabling activity (National Implementation Plan for Mauritius, GEF ID 1824) and a medium-size project (Sustainable management of POPs in Mauritius, GEF ID 3205) built capacity to eliminate DDT and other POPs. The government is in the process of establishing a cost-recovery mechanism that makes hazardous waste generators responsible for paying for the management and safe disposal of such waste. It is expected that once the cost-recovery mechanism is operational, it will serve as an incentive to private companies to properly manage hazardous waste, as well as contribute to the long-term sustainability of the facility.

NORTH MACEDONIA

In North Macedonia, the GEF funded the purchase of equipment to treat PCBs through a medium-size project (Demonstration Project for Phasing-out and Elimination of PCBs and PCB-Containing Equipment, GEF ID 2875). The equipment was operated by Rade Končar, a private company that has an existing network of clients in the country as well as in the larger Balkan region. Since the equipment was provided at no cost, providing PCB treatment services is a profitable venture for Rade Končar, and is affordable for the client companies that are required by law to have their transformers treated.

PCB treatment activities have continued after project completion in 2013 without additional support from the GEF or the government. The project's original plan was for the equipment's use to be expanded to neighboring countries, but this has

not yet taken place, as PCB inventories need to be completed in those countries before they can start treatment activities.

Not all PCB-containing transformers in North Macedonia have been treated, in part because the companies that own them have gone bankrupt and cannot pay for the treatment. This limitation was known before the project ended but has not been addressed thus far. In contrast, a similar GEF-supported project in Mongolia has established a PCB treatment facility run by the government. As it is publicly owned, the government has introduced financing schemes for bankrupt companies to have their PCBs treated.

The GEF, through the World Bank, has supported both the piloting of small-scale hydropower plants (Mini-Hydropower Project, GEF ID 32; and Development of Mini-Hydropower Plants, GEF ID 637) and the establishment of a financing facility for energy efficiency and renewable energy investments (Sustainable Energy Program, GEF ID 2531) in North Macedonia. While these projects were said to have demonstrated the feasibility of new technologies and a financing mechanism, the country's renewable energy scaling targets are driven by requirements for EU accession. After completion of these GEF-supported projects, the World Bank, especially the International Finance Corporation, has helped sustain the growth of investments in renewable energy through technical advisory services. The continued expansion is mainly supported by government subsidies in the form of feed-in tariffs and premiums.

Factors and enabling conditions affecting scaling-up

This chapter discusses the factors and enabling conditions for scaling up, and the GEF's contributions toward establishing or improving these factors and conditions as illustrated by the 20 core cases. The quantitative analysis draws on interviews and the evaluation's fuller sample of 60 cases, 10 of which provided information on how scaling was not achieved or sustained when these factors and conditions were absent.

GEF funding was most frequently used to support three enabling conditions for scaling up:

- Knowledge and information that motivated stakeholders to adopt an intervention
- Incentives that addressed barriers to adoption
- Strong institutional and individual capacities for stakeholders to adopt an intervention at scale

GEF support was less frequently used to establish systematic mechanisms for learning that would allow the scaling-up process to adapt to changing contexts. Table 4.1 shows the number of core cases in which the GEF contributed to establishing or strengthening each enabling condition, as well as the number of cases where the GEF was not found to provide any support. The enabling conditions contribute to the three key actions needed

for scaling-up to take place: adoption of the intervention, sustained support for the scaling-up process, and learning for adaptability and cost-effectiveness.

In most of the cases, a long-term outlook and support for scale-up came from the government, primarily due to existing plans and legal obligations. However, in many cases, GEF support influenced contextual factors to be more favorable toward scaling by establishing the appropriate enabling conditions, choosing the right people and institutions with which to work, and seeking opportunities to leverage contextual conditions at the right time.

4.1 Adoption of the intervention

The GEF helped increase stakeholders' willingness to adopt an intervention by engaging them through participatory processes that increased ownership, and through knowledge and information initiatives that provided evidence of benefits.

Table 4.1 Enabling conditions for scaling-up in the core cases

Enabling condition	Supported by the GEF		Supported only by other institutions		No support found	
	No.	%	No.	%	No.	%
Knowledge and information dissemination	16	80	0	0	4	20
Participatory processes	12	60	0	0	8	40
Incentives and disincentives	18	90	1	5	1	5
Institutional and individual capacities	20	100	0	0	0	0
Policy framework and operating guidelines	15	75	4	20	1	5
Sustainable financing	10	50	5	25	5	25
Multistakeholder interactions and partnerships	10	50	0	0	10	50
Systematic learning mechanisms	6	30	4	20	10	50

Source: Case documents; interviews.

Note: $n = 20$. Table reflects the 20 core cases with the most complete quantitative and qualitative information on scaling-up outcomes. The 40 additional cases with varying degrees of quantitative and qualitative information are not included.

CONTEXTUAL FACTORS

Ownership of intervention

Having ownership means stakeholders find meaning and utility in a program’s vision within their respective context. Stakeholder ownership has been identified by the IEO’s previous portfolio- and country-level evaluations as a key contributing factor to broader adoption. Stakeholder ownership of or buy-in to an intervention was in some cases inherent given cultural norms, such as a high environmental consciousness in Costa Rica, or the pride companies in North Macedonia took in fulfilling their corporate social responsibility.

In some cases, buy-in was inevitable due to pressing needs that required urgent solutions, such as electricity shortages in Bangladesh, lack of rural livelihood options in Senegal and Ethiopia, river flooding in China due to soil erosion, environmental and health hazards resulting from improper chemicals storage in Mauritius, and nitrate poisoning of infants in Romania. In these cases, the willingness to adopt an intervention did not depend on the presence of a GEF-supported project.

Evidence of benefits

In all 20 successful scale-up cases, stakeholders were motivated to adopt the intervention because they saw the benefits of doing so. Gains were usually in the form of higher income, cost savings, or new business opportunities; losses avoided were usually in the form of penalties, legal liabilities, or decreasing income resulting from a degraded natural resource base.

In some cases, adopting the intervention had the synergistic effect of both creating gains and avoiding losses. For example, in Brazil and China, the introduction of integrated ecosystem and sustainable land management practices increased income from livestock by providing more nutritious fodder. At the same time, these practices allowed former pasture areas to regenerate and thus provide ecosystem services that benefited farms over the long term. In North Macedonia, a cheaper alternative for PCB decontamination together with the risk of penalties for noncompliance created mutual reinforcement for private companies to decontaminate their equipment.

In at least five cases, specific pilot activities were not successfully scaled up because the gains were not sufficient to overcome either the losses or the costs of changing the status quo. For example, in the Romania International Waters case, a GEF-supported project introduced the planting of buffer strips and pasture rehabilitation with trees as part of managing nutrient pollution in the Danube River. The pilot was successful, yet did not scale in a subsequent project, in part due to state subsidies for pastures that left little incentive to include forestry activities in land management. Other components of the project that demonstrated benefits, such as reduced manure in waterways, were successfully scaled and continue to be scaled up without GEF support.

In Mauritius, the POPs project was initially scaled up through replication when national stakeholders supported the disposal costs of additional quantities of the relevant chemicals, as well as of managing a larger class of hazardous wastes. One of the main barriers for further scaling remains the lack of liability for private companies that improperly store hazardous wastes. The national government is currently updating regulations to obligate private companies to use the interim hazardous-waste storage facility and pay for the safe management of these wastes.

Existing legal commitments, such as the global environmental conventions, were identified as powerful motivators for adopting new technology or approaches, as these introduce both incentives (e.g., access to financing from government and/or donors) and disincentives (e.g., legal liabilities and penalties for noncompliance). For example, EU accession has been a major motivation for North Macedonia to comply with EU directives on PCBs and other chemicals. Similarly, Romania was driven to scale up GEF-supported agricultural waste management practices to comply with the EU Nitrate Directive, allowing it to become an EU member soon after. When such legal commitments

are combined with a market that has financial incentives to invest in new technologies, scale-up can occur without much additional resources.

One example is the international waters GloBallast program. It was first conceptualized when shipping companies were required to fulfill the ballast water regulations of the International Convention for the Prevention of Pollution from Ships (MARPOL). The industry demand for new technologies created by these regulations motivated research-oriented companies to develop cheaper and more efficient ballast water systems without the need for government or donor financing. The international standards had the added benefit of saving shipping companies from having to comply with national regulations that differed from country to country, making them open to financing the new technology.

Similarly, multinational companies operating in North Macedonia were motivated to maintain the same environmental standards with regard to POPs there as in all other countries in which they do business, even if North Macedonia's regulations were less stringent. As most of these multinationals are headquartered in EU countries, they were eager to participate in the GEF-supported PCB treatment activities, not only to protect their reputation, but also to avoid legal liabilities in their home countries.

Despite evidence of gains or avoided losses, cultural norms, cognitive and social biases, or simply resistance to change may still impede adoption. For example, one SGP project successfully piloted composting in Mauritius, but faced difficulties during scaling at the national level. Part of the reason was that the composting approach at the higher scale was changed to one that mixed farm waste and baby diapers, which the farmers refused to use. In addition, unlike during the pilot stage, training and awareness building among the prospective users was insufficient.

In an International Fund for Agricultural Development (IFAD) project in Swaziland (Lower Usuthu Smallholder Irrigation Project, GEF ID 3390), both government officials and younger chieftains had already shifted to more participatory GEF-supported approaches after seeing the benefits of doing so. Some older chieftains, however, continued to resist the shift for fear of losing their authority. In recent years, development organizations have been applying findings from behavioral science to overcome such barriers in intervention design.

ENABLING CONDITIONS

Participatory processes

Ownership may be developed by engaging stakeholders through participatory processes. In at least 12 out of 20 cases, buy-in to and adoption of the intervention was attributed at least in part to participatory activities or mechanisms introduced through a GEF-supported project. Examples of such processes are public consultations during project preparation, village groups, and community-based natural resource management activities around protected areas.

In the land degradation/multifocal area cases, organizing community members into village-level groups increased their willingness to implement the agreed-upon solutions, as they themselves prioritized the issues to be addressed. In China and Ethiopia, for example, farmer beneficiaries were asked to come up with sustainable land management solutions after they had identified the negative effects of land degradation. Both programs have been scaled up to at least subnational levels.

Similarly, in a suite of biodiversity and multifocal area projects in Namibia, reduced poaching and increased support for protected areas were reported due to community engagement in

developing policies and bills for biodiversity protection and tourism. In Indonesia, the COREMAP projects increased community and local government ownership by involving stakeholders in the planning and management of no-take zones in coral reef areas.

Participatory processes often involved stakeholders at different geographic and administrative levels. In China, the extensive preparation effort for the CRESPI project, which was funded by a GEF project preparation grant, was cited as essential in achieving consensus and cohesiveness among key stakeholders about policy directions and reforms to be promoted by the project.

In at least 8 out of 20 cases, frequent, positive interactions with intervention implementers (project management, NGO, or government staff) were cited as an important factor in leading stakeholders on the ground to develop trust and ownership of the intervention. In the IDCOL case in Bangladesh, the ongoing rural consumer support and on-the-ground presence of the microfinance NGOs and private organizations generated trust and larger consumer uptake of solar home systems.

In less successful cases, such as an IFAD project in Comoros, the challenge of limited transport options between project sites on the islands led to a lower level of interaction between project staff and beneficiaries, reducing opportunities to build trust.

Knowledge and information initiatives

Knowledge and information initiatives associated with scaling-up can be used to create awareness of an environmental problem and its consequences, and to disseminate information about the effectiveness and benefits of an intervention. In at least 16 of 20 cases, knowledge and information initiatives in the form of scientific studies, public information campaigns, and educational workshops played an important role in scale-up.

For example, in North Macedonia and Mauritius, GEF support in the chemicals and waste focal area included extensive awareness-raising initiatives on the hazards of DDT and PCB among both government and private sector stakeholders. According to stakeholders, this prompted them to fund their own initiatives to train their staff. In China, the CHUEE project hosted, sponsored, and supported 152 events and generated coverage in 1,357 media reports that improved market awareness and public understanding of energy efficiency measures.

In at least eight cases, increased awareness of the problem as a result of project preparation activities motivated adoption before the intervention generated any benefits. In China, a chemicals and waste project (Improvement of DDT-Based Production of Dicofol and Introduction of Alternative Technologies Including IPM for Leaf Mites Control in China, GEF ID 2629) raised farmers' awareness of the harm of dicofol to human health and the environment, prompting them to apply integrated pest management using their own funds.

Incentives

Incentives often create a business case for switching to solutions that generate global environmental benefits. In almost all cases (18 out of 20), GEF support was used to provide incentives that addressed individual and institutional barriers that were typically financial. These incentives came in the form of savings, lower costs, higher income, new sources of revenue, and access to financing.

In the protected area system of Namibia, for example, GEF support provided adjacent communities the incentive to discontinue poaching through new income sources from wildlife tourism; in the Uganda case, incentives were provided for protected area management staff to enforce the laws by ensuring improved work benefits such as vacation time and field housing.

Not all financial incentives were designed to be sustainable. In the Mauritius POPs project, integrated vector management was implemented with the participation of community volunteers in cleaning mosquito breeding sites as a malaria control measure. The project had difficulty mobilizing and retaining volunteers partially because incentives were not part of the project design. Eventually, the project started allocating small stipends that helped mobilize volunteers and demonstrate the positive results of community-level integrated vector control. After the project, no funding was allocated to sustain the incentive, and this component was discontinued due to low participation.

Disincentives, such as peer pressure or loss of operating license, create or demonstrate social or economic disadvantages for not switching to solutions that generate global environmental benefits. In the seven cases where disincentives to continue the status quo were applied, these were typically provided by an existing law through some form of penalty rather than as part of the GEF-supported intervention.

4.2 Sustained support for scaling

GEF projects helped sustain support for scaling by building institutional capacity and sustainable financing sources, working with the appropriate people and institutions, and gaining political support through participatory processes.

According to Agency interviews, a time frame of between 10 and 20 years is necessary for scaling-up to take place; on occasion, the process could range from 3 to 5 years for interventions where markets are the main driver. These assessments were confirmed through the cases reviewed by this evaluation, as discussed in chapter 3. Management Systems International (Cooley 2016)

estimates scaling-up as taking place over at least 15 years, based on experiences in different sectors.

The minimum amount of time the GEF has provided support is 3.5 years, which is about the typical approved duration for a medium-size project. However, all 20 cases have received some form of support for longer than one project cycle, mainly from the government. In fewer than half of the cases, project documents report long-term support from GEF Agencies outside of GEF funding, or from other organizations such as bilateral donors, CSOs, and sometimes even private companies.

Three factors emerged as important in ensuring long-term support for scaling-up processes, all of which could be influenced by a project's or program's appropriate choices of people and institutions with which to work:

- Scaling-up becoming a political priority
- Gaining the support of political and economic influencers
- Working through existing, long-term structures

Table 4.2 shows the number of cases where the GEF and other institutions created conditions that favorably shifted institutional support for scaling-up. Apart from these, enabling conditions such as building the individual and institutional

capacities of influencers and long-term structures, establishing the policy framework and operating guidelines for scale-up, and setting up sustainable financing sources contributed to sustaining institutional support.

CONTEXTUAL FACTORS

Political priority

Interviews confirmed that when a national government takes ownership of an intervention by making it a priority, it invests a large amount of long-term funding. This investment signals a degree of stability that in turn attracts funding from other donors and the private sector. For example, under UNIDO's Program for Country Partnership, Ethiopia has invested \$900 million over four to five years for infrastructure projects and is actively pushing the program's agenda. This commitment has led to long-term partnerships with the European Investment Bank, Food and Agriculture Organization of the United Nations, Italy, Switzerland, and others.

In almost all cases assessed, governments made scaling a priority because the intervention was part of their existing development plans and policies or was a response to urgent external events. In at least 12 of 20 cases, governmental prioritization of scale-up was explicitly mentioned as being

Table 4.2 Project-related conditions influencing contextual factors toward scaling-up in the core cases

Condition	Cases	
	No.	%
Evidence of benefits motivating scale-up support from other institutions through participatory processes and knowledge and information initiatives	7	35
Appropriate choices of people and institutions facilitating scale-up ^a	—	—
Working with existing long-term structures contributing to sustainability and cost effectiveness of scaling-up process	14	70
Partnering with other actors to share costs of scale-up activities	14	70
Structure of supporting institutions promoting knowledge transfer across projects	10	50

Note: — = n.a. *n* = 20.

a. The conditions listed below are some of the ways this was demonstrated during implementation.

due in part to existing legal obligations such as commitments to the global environmental conventions, requirements for EU accession, national laws, or loans from the World Bank or other financial institutions.

In at least seven cases, the political priority to scale up was further motivated by an external event such as a national crisis or international pressure to scale up interventions that would generate both environmental and social benefits. For example, in Bangladesh, gross domestic product growth of more than 6 percent created an increasing demand for electricity access. Because the electricity grid was growing slowly and often experienced supply shortages, promotion of off-grid solar home systems became a priority for the government.

Despite shifting political and economic landscapes in 12 cases, high political priority pushed scaling-up activities to continue. In Brazil, the Congress voted to undermine the ARPA's gains by degazetting federal protected areas in the Amazon in 2017. But pressure from national and international stakeholders, especially civil society, contributed to the president vetoing that decision in the same year. Political shifts also created opportunities for governments to prioritize the scale-up of new approaches in at least five cases.

Participatory processes and evidence of benefits disseminated through knowledge-sharing activities have helped make scaling-up a political priority. For example, in China's Hai Basin (Hai River Basin Integrated Water Resources Management, GEF ID 1323), farmers in pilot counties earned more income from farming while reducing groundwater use from 420 to 265 m³/year, as a result of GEF support introducing the use of remote sensing analysis to assess existing resources against water needs. Consequently, the government moved to scale up the intervention using additional GEF support. A similar phenomenon has been observed in other international waters

regional projects with country-level interventions, such as the Livestock Waste Management in East Asia project (GEF ID 2138) and the subsequent Ningbo Water and Environment Project under the World Bank-GEF Partnership Investment Fund for Pollution Reduction in the Large Marine Ecosystem of East Asia (GEF ID 2750).

In the absence of participatory processes, scale-up did not occur. For example, an evaluation of the Strategic Investment Program interventions, also known as the TerrAfrica Program, noted that none of them was very effective at engaging policy makers or at communicating project results widely by engaging regional organizations, the media, and similar institutions (FAO 2016). The desired policies were thus not mainstreamed at the national level in many of the countries where the program was implemented. Similarly, despite a high level of engagement by farmers in India under the Sustainable Land and Ecosystem Management Program, at least one project did not engage the district and state governments, leading to participatory land use plans not being incorporated into laws and guidelines. The program has also not achieved its objective of scaling up sustainable land management at the national level.

In one regional chemicals and waste program that took place in the Europe and Central Asia, Middle East and North Africa, and Africa regions, it was the seeming lack of government interest in the intervention (integrated vector management to eliminate DDT use for malaria outbreaks) that prevented the respective child projects from moving forward—despite support from multiple donors, and evidence that the intervention was viable and cost-effective. One reason cited for this failure to scale was the insufficiency of awareness-raising activities for government officials and the wider public on the benefits of reducing DDT use. A similar GEF-supported regional program in Latin America was more successful, with lessons being

exchanged among countries through a regional network established by the program.

Support of influencers

Advocates for implementation, at various administrative levels, ensure efforts are sustained. In Senegal, the main champion for the Ecovillages initiative was the country's president himself. In Costa Rica, having a technically competent champion in an influential position—specifically, the minister of environment—has been an important driver in sustaining scaling-up support. Champions have also been found within GEF Agencies.

Scale-up depends critically on working with the right people and institutions. For example, the Sustainable Land and Ecosystem Management Program in India chose to work through state-level land use committees to develop land use plans. The terminal evaluation noted, however, that these committees had no convening power, meaning that mainstreaming did not occur in other government agencies as planned. The comparative advantages of the Agencies with which the GEF has chosen to work are also a factor in gaining the support of influencers.

Working through long-term structures

The use of existing structures and mechanisms for implementing an intervention help sustain scaling-up processes. Such structures and mechanisms were used in 14 of 20 cases. Examples are the network of termite control stations in China to help eliminate chlordane use, and the microfinance institutions already active in rural Bangladesh to promote solar home systems. Such structures and mechanisms typically have a long-term presence and wide geographic coverage. They therefore have the capacity and experience to implement and follow up on interventions over a large area beyond a project's or program's lifetime.

Using existing structures is also more cost-effective. For example, when implementing Costa Rica's PES program, the government decided to make use of its protected area field offices to house the forest engineers who would be reviewing applications from landowners. In the Bangladesh IDCOL case, the existing network of microfinance institutions was one of the decisive factors in the expansion of solar home systems in rural areas.

Long-term outlook

Agencies interviewed indicated the importance of partnering with supporting institutions that have a long-term outlook to sustain the momentum of scale-up beyond one project. In 14 out of 20 cases, resources from stakeholders other than government or community members supported scaling-up initiatives. These included not only bilateral donors but also CSOs and private companies. The Brazil ARPA and Indonesia COREMAP cases are examples of how donors' long-term outlook from the beginning led to support that has helped sustain scaling-up initiatives through severe political and economic crises—specifically, a presidential impeachment and budget freeze in Brazil and the Asian financial crisis in Indonesia.

UNDP highlights how the GEF's sustained strategic vision to eliminate invasive alien species over successive replenishment periods allowed GloBallast to continue throughout extended negotiation processes among governments and shipping companies over almost 20 years. Having a long-term outlook also allows partners to adapt project implementation so it remains consistent with the long-term scaling-up objective despite temporary failures and unfavorable contextual conditions.

Without sufficient financing, interventions planned with an explicit long-term outlook can fail. In Senegal, a GEF-supported project that introduced sustainable use community nature reserves as part of the country's protected area system was

designed to be implemented in three phases. The first two phases successfully established 26 reserves that linked fragmented ecosystems across 270 villages, as well as a network of mutual savings groups that provided financing to local entrepreneurs. After funding for the third phase fell through, many of the alternative livelihood activities were discontinued—regardless of the initial socio-economic benefits generated—because of a lack of funds to purchase equipment that would allow community members to apply the training they had received from the first two phases. Operations at the community reserves continue at present but at a minimal scale.

ENABLING CONDITIONS

Individual and institutional capacities

Working with long-term structures is only effective if they possess the capacities for scaling-up. GEF support contributed to building institutional and individual capacities for scale-up in all 20 cases. This included establishing or strengthening government agencies that took on lead roles in implementing an intervention at scale. In the Brazil ARPA case, for example, very early GEF support helped establish the Brazilian Biodiversity Fund (FUNBIO), the organization that is now implementing GEF-supported projects on the ground. At the individual level, capacity building has included training stakeholders on how to implement an intervention—such as training villagers in the use of solar panels for electricity, or mining company staff on careful handling of transformers with PCBs. Interviewees also noted that GEF support helped build local capacities to understand environmental problems as well, and was not just focused on implementing solutions.

Policy framework and operating guidelines

In 75 percent of the 20 cases, the GEF helped develop a policy framework or operating guidelines

for adopting an intervention at scale. In the climate change mitigation cases, this typically took the form of regulations for reducing the costs of investing in new technology for the private sector, as well as setting standards for manufacturing the technology. In biodiversity and land degradation/multifocal area cases, GEF support to the policy framework allowed the mainstreaming of more sustainable approaches into plans at national and local government levels. In the international waters focal area, the Strategic Action Program (SAP) approach provides a framework for the contribution of national-level activities to regional-level impacts—and, through formal endorsement, obtains country commitments to action. An earlier IEO study on GEF support for legal and regulatory frameworks similarly found that this type of support has contributed to scaling up interventions (GEF IEO 2018e).

Sustainable financing

Sustainable financing of scaling-up efforts allows for continued replication as well as maintenance of other enabling conditions. In interviews, sustainable financing was also cited as important for covering gaps in public or private investment to maintain the momentum of the scaling-up process, particularly when priorities shift among stakeholders. Of the 20 cases, 15 had identified sustainable financing sources for scale-up at project completion. GEF contributions in half of these cases took the form of market-based mechanisms, trust funds, or a mainstreamed government budget allocation; in the other cases, sustainable financing was provided through government initiatives or other donor projects. At the regional level, one recent example of a sustainable financing mechanism is a private-sector partnership hub managed by the GEF-supported Partnerships in Environmental Management for the Seas of East Asia (PEMSEA). The hub is intended to further scale up integrated coastal management in East Asian seas.

4.3 Learning for adaptability and cost effectiveness

GEF support has contributed to scaled-up outcomes by leveraging contextual conditions and working with institutions that promote continuity among staff as well as interactions at the local and global levels. GEF support has less frequently been used to establish systematic learning mechanisms beyond project funding.

Three characteristics of supporting institutions contribute to scaling impacts even in the absence of plans or certainty in the scaling-up process:

- The ability to leverage current contextual conditions to align with scaling-up objectives
- Continuity of staff
- Institutional structures that promote both local and global interaction

Enabling conditions such as multistakeholder interactions and partnerships and systematic learning mechanisms helped scaling-up processes be adaptable and cost-effective where these were established.

CONTEXTUAL FACTORS

Leveraging contextual conditions

GEF Agency representatives pointed out in interviews that Agencies can leverage the right contextual conditions at the right times toward scaling targets to maximize the effects of timing. They do this by being on the lookout for developments in the social and ecological landscape that can be linked with interventions' objectives. For example, in Ecuador, Conservation International leveraged the president's socialist leaning to introduce PES in forests as a poverty alleviation program for farmers, rather than as an environmental conservation program.

In the Danube River and Black Sea, GEF support came at a time when two conventions linked to the waterbodies were just coming into force, the Soviet Union had just collapsed, and the countries bordering these two waterbodies were preparing for EU accession. The region had also just experienced a hypoxia disaster. The combined political priorities of preventing another such disaster, enforcing the conventions, and joining the EU attracted hundreds of millions of dollars in funding from development banks and other donors. Terminal evaluations of the various projects implemented in these waterbodies report a decrease in livestock and increase in number of wastewater treatment plants, as well as an increase in crop productivity during the period between the mid-1990s and early 2000s, when these projects were completed.

Timing within an Agency has also proven to be important. The GEF-supported Andean bio-trade project (Facilitation of Financing for Biodiversity-based Businesses and Support of Market Development Activities in the Andean Region, GEF ID 2391) was completed just as CAF, the executing agency, was applying to become a GEF Agency. Thus, CAF was paying particular attention to organizing its monitoring and evaluation system. The newly organized system was immediately put to use for, among other things, disseminating the successful results of this project to CAF's multiple country teams. Concurrently, the environmental agenda gained prominence among development banks as the 20th conference of the parties for the United Nations Framework Convention on Climate Change and the Convention on Biological Diversity were both hosted in Lima, the project's headquarters. CAF's director became a champion for the initiative, convincing the bank's vice presidents to mainstream the concept of a green economy within CAF. CAF's green finance portfolio increased from 5 percent to 20 percent in 2018. The project itself has scaled up in the form of a regional partnership forum currently focused on

cocoa, while spinoff projects are under implementation in Colombia and Peru.

Continuity of staff

In at least 11 cases and several interviews, continuity among implementing staff was cited as contributing to successful scaling-up outcomes. In nine cases, these staff members were either government employees or consultants on the project who later joined the government, often in technical positions and dedicated to implementing solutions despite multiple election cycles or changes in GEF Agency staff.

Such champions embedded and transitioning within institutions in their respective countries were critical in establishing sustainable use regimes for Namibia's protected area system and the market for energy efficient lighting in Mexico. In North Macedonia, where the minister of environment has been replaced every year for more than a decade, staff members of its POPs management unit who have been there since its creation in 2002 have built an institutional memory and capacity that now also benefit other countries in the Balkan region.

Structures for local and global interaction

Frequent interactions provide opportunities to exchange knowledge and information in real time, which translate to learning and adaptability in the midst of changing contexts. The structure of the SGP is particularly conducive for such interactions, thanks to its long-term national coordinators who are often local and well connected with key staff in government, CSOs, and academia. Stakeholders in Costa Rica and Mauritius have also mentioned that their countries' smaller geographical area make it easier to communicate across different agencies and offices, giving rise to solutions that may not otherwise have developed.

GEF Agencies with a wide geographic reach, geographical mobility among staff, and a multiscale organizational structure are better positioned to build up institutional expertise on specific interventions and issues, and facilitate knowledge exchange and replication across regions. For example, UNDP's presence at country, regional, and global scales provides a built-in structure for transferring knowledge and linking interventions from the ground to other locations and scales. The World Bank's requirement for staff to periodically move between regions is another example of a built-in mechanism for knowledge transfer. In several of the cases where the World Bank was the implementing Agency, it was noted that its previous work in other countries or regions contributed to the improved design of projects included in the cases. UNIDO's focus on chemicals and its long-term work in specific regions has allowed it to develop approaches that are replicable in different countries within the same region.

ENABLING CONDITIONS

Multistakeholder interactions and partnerships

In half of the cases, multistakeholder interactions and partnerships were cited as one enabling condition that helped coordinate multiple mandates, objectives, and activities among stakeholders—an important function that kept implementation at scale cost-effective.

In the China IEM and Senegal Ecovillages cases, regular discussions among government sector agencies allowed the delivery of training and services to villages to be streamlined, thus reducing both financial costs from similar sectoral activities and conflicts in mandates. In the biodiversity case in Namibia, similar discussions were critical in fostering collaboration among government and private sector stakeholders who otherwise would not have interacted. In China, where it was otherwise

unusual for the Ministries of Environmental Protection and Agriculture to collaborate, the DDT case proved a rare opportunity, enabling the phaseout of DDT and mainstreaming integrated pest management throughout the Ministry of Agriculture.

The PEMSEA series of projects, which the GEF's international waters focal area has been supporting for more than 25 years, has scaled up integrated coastal management from a few pilot sites to a regionwide intervention largely through multistakeholder partnerships. Among the activities it has supported to this end are regional networks for local governments, research institutions, and legal experts; regional governance structures such as a high-level forum composed of environmental ministers of participating countries in the region, and a partnership council with representatives from national and local governments, communities, NGOs, research and educational institutions, the private sector, and regional and international organizations; and the triennial East Asian Seas Congress that allows regional stakeholders to have dialogues, share lessons, and formally endorse regional targets to which each will contribute.

Systematic learning mechanisms

In general, lessons from previous projects were used to significantly shape the design of subsequent projects, but the process has not been systematic. In many cases, learning took place during implementation through trial and error or on a needs basis through one-time commissioned studies.

Most of the assessed cases learned and adapted during project implementation, resulting in interventions being scaled up more cost effectively and making it easier for stakeholders to adopt the intervention. Only in six cases did the GEF support this through a systematic process or mechanism for learning and adaptation. In four other cases,

systematic learning mechanisms were supported by the government or projects funded by other donors. In half of the cases, no such mechanism was found.

Systematic learning mechanisms have usually taken the form of knowledge exchange networks and regular multistakeholder meetings. A few cases integrated adaptability into project design by allowing flexibility to decide on which interventions to adopt and scale up during project implementation based on actual contextual conditions.

For example, the Rural Electrification and Renewable Energy Development project in Bangladesh (GEF ID 1209) integrated systematic learning in its design to scale up successful models adaptively. In addition to incorporating lessons from previous experiences in Bangladesh and other countries, the project design had a provision to scale up support for the model with the most promise.

Throughout its implementation, the project continuously incorporated lessons from its own pilot approaches, and as the national demand for solar home systems grew shifted its focus to this component. Ultimately the project scaled up support to the most successful model, which used micro-finance ownership rather than a fee-for-service approach. Within this model, the project also utilized monitoring and evaluation data from the field to incorporate new specifications and technologies (such as light-emitting diodes—LEDs) in solar home systems to better serve lower-income households; this in turn made solar home systems more attractive to a larger population (IEG 2014).

At least five cases cited the use of midterm reviews and terminal evaluations as directly contributing to improvements in the scaling-up process. In World Bank projects, these improvements typically corresponded with loan restructuring. For example, in the Romania International Waters case, the restructuring led to a shift from an expensive

concrete-based agricultural waste management platform to a cheaper and equally efficient plastic alternative, allowing more farmers to benefit. In the China Termite Control case, the restructuring

resulted in a decision to use a more cost-effective form of integrated pest management. The cost savings were reallocated toward additional technical training and public awareness-raising activities.

A framework for scaling up impacts in the GEF

This chapter draws on the findings from the previous chapters to present a revised framework of GEF support to scaling up impact.

The framework summarizes the scaling-up process as observed in the GEF experience, particularly the enabling conditions and factors that are important to consider when designing projects and programs that will contribute to a long-term scaling-up process. The framework may be applied to projects and programs that are completed or under implementation to assess the extent to which they have addressed key factors and conditions and identify further actions that may improve the likelihood of scale-up. The chapter thus assesses the presence or absence of these enabling conditions and factors in the GEF-6 IAPs and GEF-7 projects cleared for implementation, all of which have yet to report on their outcomes.

5.1 Framework overview

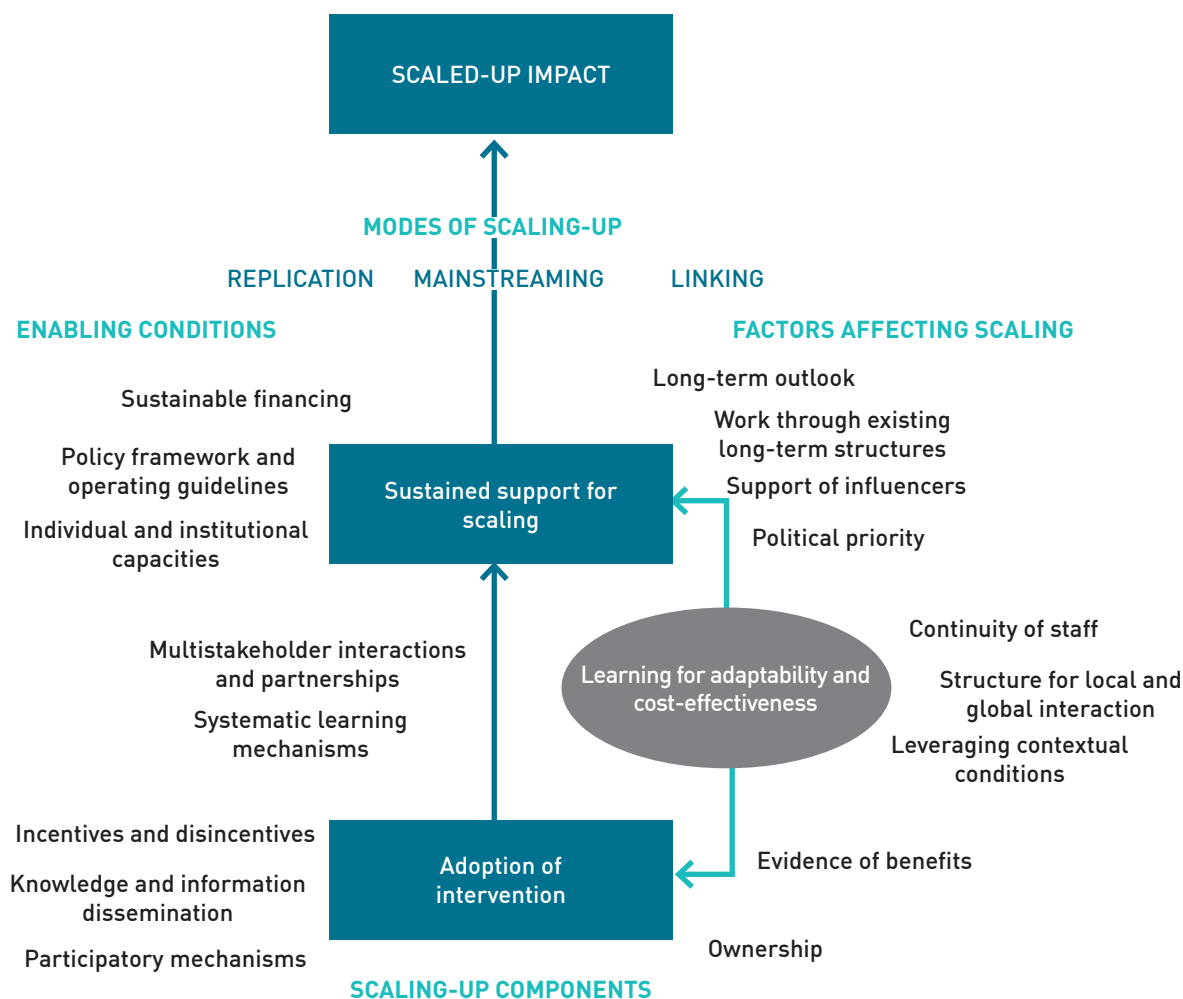
Scaling up impacts is defined as increasing the magnitude of global environmental benefits, and/or expanding the geographical and sectoral areas where they are generated, to cover a defined ecological, economic, or governance unit. The process of scaling up impact involves three actions: the

adoption of interventions that generate global environmental benefits; sustained support for enabling conditions that allow scaling-up processes to continue; and learning to allow these first two actions to be adaptable and cost-effective to meet scaling-up targets in the face of shifting socio-ecological contexts (figure 5.1). These components typically need to be iterative beyond the duration of a single project to allow sufficient time for global environmental benefits to be generated and become measurable at scale.

The GEF contributes to the scaling-up process in two ways: by funding the implementation—including the piloting—of interventions that generate global environmental benefits, and by supporting enabling conditions that allow these interventions to generate impact at scale. In the GEF, impacts are scaled up through the replication, mainstreaming, and linking of interventions that generate global environmental benefits. These three modes of scaling are often interdependent.

While contextual factors affect each component of the scaling-up process, GEF support is able to influence these factors through appropriate choices in the people and institutions with which it works, and by leveraging changes in the

Figure 5.1 Framework for scaling up impacts in the GEF



socio-ecological context to align with scaling-up objectives. The GEF also influences contextual factors to be more favorable toward scaling-up through the enabling conditions it supports. Figure 5.1 shows which enabling conditions are most relevant to influence the corresponding contextual factors.

5.2 Applying the framework

GEF-supported projects and programs have a vision to scale, with some projects and programs more clearly articulating how activities will result in scaled-up outcomes at project design than others.

To assess the extent to which current GEF projects consider scale-up in their design, the evaluation applied the framework on the three IAPs approved in GEF-6 and the 16 projects approved under GEF-7 as of December 2018. The PFDs and PIFs of these programs and projects were assessed. These documents are reviewed by both the GEF Secretariat and the GEF Scientific and Technical Advisory Panel, and are the basis for approval or rejection by the GEF Council. These reviews assess projects for technical soundness; this evaluation assessed the same documents for the extent to which projects identify their contributions to the scaling-up process.

GEF-6 IAPS

For GEF-6, the evaluation focused on the IAPs because these programs were especially designed “to further encourage early adoption and scaling-up of projects and programs that overcome focal area silos” in their respective sectors: commodities and forestry, sustainable cities, and food security (GEF 2014b, 173). The IAPs are also the precursor to the Impact Programs, which have similar scaling aims under GEF-7.

A formative evaluation of the IAPs by the GEF IEO reported that all 18 commodities and food security child projects included measures for scaling up interventions into larger geographical areas, while 10 out of 12 cities projects did the same (GEF IEO 2018d). Because impact at scale is designed to be achieved through the *programs* rather than through individual *projects*, this evaluation’s scaling-up framework is applied to assess how this aim is operationalized at the program level: individual projects that contribute to this impact may or may not aim to implement scaling-up activities within their respective project scopes.

The Commodities IAP has a global scale, while the Food Security and Cities IAPs aim to generate impacts at the country and city scales, respectively. In the objectives, only the Food Security IAP has a quantitative target: to cover 10 million ha of production landscapes in 12 countries to benefit 2–3 million households. Beyond this, it aims to have an impact at a regional scale through knowledge sharing among the 12 countries.

In its PFD section on innovation, sustainability, and potential for scaling up, the Food Security IAP mentions its support for regional multistakeholder platforms in Sub-Saharan Africa that are intended to be vehicles for expansion to other countries. It specifically tracks the “involvement of CSOs, farmer cooperatives and the private sector in pro-poor and pro-environment value chains to help

smallholder farmers to scale up good practices” (GEF 2015a).

The Food Security IAP also has a specific program component for scaling up integrated approaches, allocating \$56.3 million, or 53 percent of total GEF funding for the IAP, with the aim of large-scale transformation of agro-ecosystems. The PFD’s results framework also specifies how other program activities aim to contribute to scaling-up, such as the establishment of multistakeholder and multiscale institutional frameworks, including for multiscale assessment and monitoring. These frameworks are intended to support policy and institutional reforms, which are then expected to scale up integrated natural resource management.

The Food Security IAP’s PFD defines scaling-up as “expanding, adapting, and sustaining successful projects, programs or policies over time for greater development impact,” and identifies multiple pathways for scaling, including “a) scaling-up by adaptation of an innovation; b) scaling-up by diffusion of an innovation; c) scaling-up by replication; d) scaling-up by value addition; and e) temporal scaling-up.” The other IAPs are not as explicit in their respective documents.

The Commodities IAP indicates support for “south-south cooperation and technology transfer to scale up the successes,” as well as an adaptive management and learning component intended to expand knowledge sharing and track areas where the program would need to expand geographically. Policy changes within countries and corporations are expected to expand the results of the IAP throughout the food and agriculture sectors beyond GEF support.

The Commodities IAP PFD further explains that interventions at the landscape level will be scaled up by mainstreaming pro-environment commitments throughout all landholdings of producer companies. Experiences at the landscape level

will be used to inform policy support activities at a subnational or national level, as well as influence international demand for production that does not create as much deforestation. Apart from private sector engagement, target engagements at the national level are also expected to lead to scale-up.

The Cities IAP did not have a response related to scaling-up in this section, focusing instead on the innovative nature of the IAP. However, one of its selection criteria for child projects is the potential for impact and replication within the country and globally. Among the interventions it supports are national- and city-level policy reform to create an enabling environment for other cities.

Thus, the Food Security IAP, which aims to scale up to country and regional levels, has the clearest links between its vision to scale, program objectives, and program components. The Cities IAP, whose main aim is to scale up impact within city boundaries, with a secondary aim of scaling up through replication within countries and beyond, was the least explicit about how scaling to wider areas would take place. The Commodities IAP, with an aim to achieve impact at a global scale, relies more on cooperation among partners to scale up impact.

GEF-7 PROJECTS

All approved GEF-7 projects had a vision to scale impacts to a country or region either within or beyond the project implementation period.

The PIF template for GEF-6 and GEF-7 projects includes a specific question on scaling under the project description heading. The documents are technically strong; however, guidance is limited on how to approach the scaling-up dimension—particularly on whether the project envisages any specific steps to support a scaling-up process (e.g., the development of sector strategies or scaling plans).

Of the 16 projects approved so far in GEF-7, only 2 provided concrete descriptions in this section of how the project would contribute to scaling-up. Five noted that the enabling conditions to be established by the project would lead to scale-up, but did not elaborate on how this would take place; others either referred to the possibility of other actors scaling up the intervention after project completion or did not provide a response to the question. This reflects findings from interviews that some members of the GEF partnership expect scaling-up to happen without recognizing the links between the project's activities, its immediate outcomes, and the scaled-up impacts.

In assessing other sections of the PIFs, half of the GEF-7 projects specified concrete activities that would contribute to scaling up. These activities took the form of financing, coordination, and knowledge-sharing mechanisms, among others. The other half of the projects mentioned “systematization” of knowledge and lessons from the project as a means of scaling up but did not cite any specific activity by which this would occur.

Nine projects provided concrete information on scaling-up plans to some degree. Of these, only one specified concrete scale-up activities both in its project components and in the PIF's scaling-up section. Seven provided activities for scaling up elsewhere in the document.

The nine projects were assessed against the evaluation's scaling-up framework on the extent to which they considered and addressed enabling conditions and factors influencing scaling-up processes. Each of the projects aims to contribute to at least six of the eight identified enabling conditions. Common to all projects are disseminating knowledge and information, building institutional and individual capacities, and contributing to the development of policy frameworks and operating guidelines. Least common are the establishment of sustainable financing measures and

systematic learning mechanisms, reflected in the design of five projects. These results are similar to those found in the 20 successful scaling-up cases (table 4.1). Proportionally, more GEF-7 projects aim to put in place systematic learning mechanisms than the older projects assessed (table 5.1).

Three of the projects specifically aim to establish enabling conditions for processes that would take place over the next 10–20 years, indicating a long-term outlook on scaling. Seven identified existing long-term structures to work with to deliver the intervention, through four of which the government has implemented prior initiatives. Most multistakeholder partnerships for scaling up implementation were with the private sector and sectoral government agencies.

In four projects, the government and other stakeholders are identified as having strong ownership of the intervention by virtue of either previously implementing a similar intervention or having high awareness of the problem. At least one project had support from the country’s president. In another three, the PIFs identified the countries’ global environmental commitments as being key to the governments making the intervention a priority. The presence or absence of other contextual factors was difficult to ascertain through the PIFs.

Table 5.1 Enabling conditions supported by GEF-7 projects

Enabling condition	Projects	
	No.	%
Knowledge & information dissemination	9	100
Participatory processes	7	78
Incentives and disincentives	7	78
Institutional and individual capacities	9	100
Policy framework & operating guidelines	9	100
Sustainable financing	5	56
Multistakeholder interactions & partnerships	7	78
Systematic learning mechanisms	5	56

Source: CEO-endorsed project documents.

Note: $n = 9$.

Consistent with older projects assessed in this evaluation, the newly approved projects plan to support most of the enabling conditions for scaling-up, even though the majority do not clearly articulate the link between these conditions and their respective visions to scale. All projects made some reference to how scale-up would occur, but half mentioned that it would occur through knowledge management without providing details on a concrete, systematic mechanism for this critical activity.

5.3 Scaling up through the Small Grants Programme

One GEF-supported initiative that has been given a mandate to scale is the UNDP-implemented SGP. The GEF Council in 2009 decided that countries with SGP portfolios between 5 and 15 years old “should be focusing on replication, scaling-up, and mainstreaming of successful projects, as well as generating useful knowledge management products” (GEF 2009, 14). Although the SGP’s grant ceiling is \$50,000 and the average SGP grant is \$25,000, grants of up to \$150,000 are funded in cases deemed to have high potential for wider-scale benefits.

The SGP’s most recent 2017–18 annual monitoring report shows that 157, or 16 percent, of completed projects were reported as having replicated or scaled up SGP interventions between July 2017 and June 2018—up from 113, or 15 percent, in the previous reporting period (UNDP 2019). In part, this was done by linking SGP projects with full- and medium-size projects.

The SGP defines scaling-up as

the process of expanding the impact of a successful activity, program, model or approach of an SGP project, by adapting and applying it at a larger geographical scale, using larger budgets, involving more actors and reaching a greater number of beneficiaries. (Baker et al. 2016)

Reporting, however, does not normally distinguish scaling up from simple replication, which is defined as “the process of copying a successful activity, program, model or approach of an SGP project, and reapplying it in a different location” (Baker et al. 2016). An example of a case tracked under simple replication would be a technology used in one national park being adopted in one other national park.

Earlier IEO evaluations have observed that SGP projects can serve as pilots that can then be tested at a larger scale through full- and medium-size projects. For example, the IEO’s impact evaluation of GEF support to protected areas found that in Uganda, SGP projects provided the means to test collaborative management approaches between protected area management staff and adjacent communities that now are being used throughout the country (GEF IEO 2016b). Similarly, an SGP project piloted community conservation areas in wetlands, which at that time were not part of the country’s protected area system. The viability of these areas was then demonstrated in a larger area by a medium-size project, and subsequently planned to be scaled up at the national level through another GEF project.

From a review of SGP reports and publications that aimed to document experiences of broader adoption from 2016 or earlier, this evaluation identified at least 65 cases in 54 countries where some extent of scale-up had occurred. In many cases, scaling-up occurred through replication, or was indicated as happening through the leveraging of funds from the government or other donors. In some cases, replication was funded by additional SGP grants or GEF projects. Geographic expansion ranged in scale from neighboring villages within a municipality to neighboring countries within a region.

This evaluation’s framework could not be applied across the more than 65 identified cases, as information on factors and conditions contributing to

scaling up was not provided by the reports and publications at a case level. However, a 2016 SGP study of five countries commissioned by UNDP and field visits during this evaluation to three countries showed that the influencing factors and conditions are similar to those in the GEF’s larger projects and programs (Baker et al. 2016). For example, the 2016 study mentions participatory multistakeholder processes at the design stage, alignment with government priorities, and support beyond a single project as the key factors for mainstreaming. It also observes that clustering projects within the same geographical areas facilitates replication.

IEO evaluations note the SGP’s long-term and local presence as crucial to providing continuity not only in terms of financial but also technical and political support (GEF IEO 2016c). For example, SGP support for fisheries management in Mauritius has continued over at least three consecutive grants and a medium-size project. This has allowed enough time for positive results to be demonstrated through the pilot and expanded pilot stages. These results led directly to the scaling-up of a seasonal ban on octopus fishing to the national level through government funding.

Beyond individual grants, grantmakers plus funds (a specific SGP funding modality) allowed the SGP national coordinator in Mauritius to organize a venue for stakeholders to reflect on how implementation at a higher scale could be adapted to improve outcomes. The government is currently reconsidering legislation to address the gaps. Regular multistakeholder meetings ensured everyone was informed and involved, which helped coordinate awareness-raising and enforcement activities among multiple actors. The SGP projects were particularly critical, as bilateral donor funds could not be used to provide grants to the NGOs that helped implement the intervention on the ground.

In North Macedonia, the scaling of some SGP projects has become fully or partially self-sustaining

based on the design and nature of the projects. For example, SGP contributed to the population increase of autochthonic (endemic) sheep from 200 to 7,000 over 12 years by requiring that beneficiary farmers pass on the offspring to other farmers for further breeding. Projects supporting energy efficiency at the municipal level require that energy savings be used to implement energy efficient measures in additional public buildings rather than being returned to the municipal budget.

In all three countries visited for this evaluation, the SGP national coordinators had been in their positions continuously for at least 10 years, frequently interacted with community beneficiaries on the ground, and liaised with government officials at higher scales to positively influence legislation.

In each country in which it operates, the SGP builds a multistakeholder network through a national steering committee composed of high-level representatives from government, academia, civil society, and the private sector. The process of participating in project proposal review and monitoring was noted to develop a sense of ownership in committee members to a point that they continue to volunteer in project management activities after their terms have expired. These individuals in some cases have also served as champions for scaling interventions in their respective institutional capacities.

In Costa Rica, the SGP has supported the scaling-up of organic agriculture and rural community-based tourism, among others. In the case of organic agriculture, the SGP gave technical and financial support to farmers over 18 years through a national movement that created local associations. This support contributed to the development of a national law for the promotion of organic agriculture as well as corresponding regulations. However, due to a lack of resources in the Ministry of Agriculture, the initiative was not fully mainstreamed, and therefore did not continue.

The SGP cofunded microentrepreneurs of rural community-based tourism as a response to the large foreign-run hotel industry that had taken over Costa Rica's Pacific coast. The SGP-funded communities eventually scaled up to a national network of 40 microenterprises that built the capacity to negotiate with the government for more community-friendly tourism regulations, as well as self-fund trainings, product development, and marketing for its members. Unfortunately, in 2018, the network's funds were misappropriated, making its future uncertain.

In these two cases, the SGP's long-term efforts toward scaling were not sustained because of an absence of government prioritization and a lack of oversight, respectively. Costa Rica's upgraded status means that subsequent grants can no longer be allocated toward these initiatives, as all new projects can only be within priority landscapes selected by the national government.

5.4 GEF comparative advantage in the scaling-up process

The GEF's comparative advantage lies in helping generate evidence of the benefits of scaling through pilots, and providing flexible grants that allow adaptability in changing contexts during the scaling process.

Even prior to the GEF 2020 Strategy, GEF support has been used to demonstrate the benefits of pilot interventions and to help establish the enabling conditions to scale these benefits to larger contexts. In only 20 percent of cases did the GEF invest in further scaling-up; in 40 percent of cases, scaling-up initiatives—beyond pilots and the establishment of enabling conditions—were done completely without GEF support.

The GEF 2020 Strategy identifies one of the GEF’s key roles as “demonstrating innovative approaches and instruments that can be scaled up by other players” (GEF 2014a, 25). The GEF-7 Programming Directions further home in on the GEF’s role in primarily reducing risks, enhancing enabling environments, and convening different stakeholders such as the private sector to harness their ability to scale interventions rather than the GEF itself funding scaling-up activities (GEF 2018b).

Interviews revealed that the GEF’s niche in the scaling-up process is to take an intervention that has already shown some success in a limited environment, pilot it in contexts where the intervention has not yet been tested, and then expand the pilot area while simultaneously establishing the enabling conditions for further expansion (figure 5.2). Of the 20 cases assessed, the GEF tested innovations in specific contexts in 19.

GEF support for further scaling was usually within the context of programs, where long-term financing from the GEF was earmarked at the outset and multiple other donors were involved under a larger initiative—such as in the cases of Brazil ARPA and Indonesia COREMAP.

By funding interventions in contexts where benefits have not been demonstrated, the GEF helps generate evidence of benefits that motivate other stakeholders to support scaling-up. All GEF Agencies interviewed noted that GEF support has a distinct value in terms of funding interventions that

neither the public nor the private sector is willing to fund, particularly where no clear benefits or sources of revenue yet exist. This includes testing solutions where there is a risk of the losses being greater than the potential gains. As a result, GEF resources tend to “unlock” other funds for scaling-up by de-risking investments, such as those that encourage private sector participation in government programs. In the China CHUEE case, the project was credited for helping address the two main market barriers to sustainable energy financing in the Chinese banking sector: perceived market risks and technical risks.

While smaller than those provided by other financial institutions, GEF grants have the power to attract large amounts of financing from both the public and private sectors. According to an interview with a World Bank representative, \$5 million of GEF funding in Kazakhstan has catalyzed \$1 billion of climate change adaptation financing from a private Belgian insurance company. The GEF grant acted as a fallback that instilled confidence in the company in case the venture proved unprofitable.

The global partnerships interviewed for this evaluation similarly test innovative interventions to demonstrate their effectiveness in specific country contexts, but at a larger scale rather than at just a pilot site, while helping to establish enabling conditions for further scaling. This approach is particularly evident in the two climate change partnerships. For example, the CIF fills the financing gap for “first mover” or “early stage” renewable

Figure 5.2 Stages in the scaling-up process where GEF support has most commonly been used



energy and energy efficiency projects that make it easier and more cost-effective for investors to continue with follow-on projects.

The GEF attracts support for scale-up by providing flexible grants that adapt to stakeholder needs and changing contexts. Some Agency representatives mentioned that governments give more importance to GEF support because of its flexibility to align with the national agenda; in turn, this allows the GEF to influence the national agenda toward generating global environmental benefits. Previous IEO evaluations have found that this flexibility, coupled with the nature of GEF support as a grant rather than a loan, has motivated governments to allocate more of their budget toward biodiversity-related interventions that would also yield economic benefits (GEF IEO 2016a).

In this way, GEF funds can be strategically used for filling in spatial, temporal, or institutional gaps. In a later phase of an IFAD project on dryland management, GEF funds were used to establish a national monitoring system that no other donor had funded, and implement interventions in critical ecosystems where it is hard for the government or private sector to obtain financial returns. Small grants can keep the momentum going even when contextual conditions are not favorable so impact can eventually be scaled when the timing is right.

Having interventions aligned with national priorities creates greater ownership—which, as previously mentioned, makes the government more likely to invest in scaling-up. Agency interviewees mentioned that the option of implementing multi-focal area projects also adds to flexibility in the types of interventions that can be designed, therefore making them more attractive for scale-up.

Of the cases assessed, 12 out of 20 made use of the flexibility of GEF grants to reallocate resources as needed to adapt to changing circumstances and ensure that scaling objectives continued to be met.

For example, in the Uruguay Wind Energy case, the project was able to cancel the acquisition of measurement towers upon realizing that their value added was minimal; it instead reoriented the funds toward institutional strengthening.

5.5 Scaling-up approaches in other institutions

The GEF's strategic orientation is more explicitly focused on scaling than are many other international development institutions. Other global partnerships differ from the GEF mainly in the way they mainstream their investments into domestic financing and use performance-based financing to provide incentives for scaling up.

Looking at previous assessments of scaling-up experiences and approaches in GEF Agencies such as IFAD, UNDP, the World Bank, the Asian Development Bank, the African Development Bank, and other international development institutions, the GEF's strategy and programmatic orientation appears to be focused more explicitly on scaling than are many other international development finance institutions. However, to some extent, the GEF falls short—like most others—in translating its strategic scaling focus into systematic institutional practice. This shortcoming is being addressed through the Impact Programs, but it is too early to evaluate the outcomes. While the evaluation's purposive sampling approach highlights several successful examples of scaling up in the GEF, it cannot assess the extent to which the GEF has or has not achieved its intended scaling-up objectives in the absence of a systematic approach.

Among the key takeaways from the operational experience of other development agencies to date is that the greatest challenges arise in moving from high-level mission and strategy statements focused on scaling to the practical and operational implementation of a scaling approach. Over the last

decade, interest in addressing the scaling agenda has increased in the development assistance community. An increasing number of organizations have incorporated some form of scaling objective—as indicated by terms such as “transformational,” “system changing,” “catalytic”— in their mission or strategy statements. The main questions that remain to be addressed by all institutions are as follows:

- How to move from a predominant focus on innovation to a balanced focus on innovation with impact at scale
- How to put scaling into practice
- How to mainstream scaling within institutions so they move beyond one-off interventions to a systematic scaling approach

The five global partnerships consulted in this evaluation have a systematic process for helping country stakeholders agree on the overall vision of impact at scale, linking their investments with system-wide reforms, and sustaining activities through domestic financing. For example, the Global Financing Facility connects its five-year investments with a longer-term program of **sustainable domestic financing** and supports only interventions that can be sustained by countries in the medium to long term. The Global Fund, on the other hand, used to scale up priority interventions with its own financing. Now the fund is moving to a catalytic role where it aims to mobilize domestic financing to increase country ownership and leadership and to trigger better budgeting, harmonization, and coordination among partners. Furthermore, the Global Fund advises countries on cost effectiveness and better targeting of allocations to support key populations.

The two interviewed climate partnerships provide **large-scale financing**, relative to their respective country markets. By making available a large and predictable resource envelope, CIF programs aim to change perceptions of risk among investors

and policy makers, lower technology costs through economies of scale, and help transform markets.

Three of the global partnerships (the Global Fund, the GFF, and the GPE) use their financing to incentivize countries to **increase domestic resource allocation** to the target sectors and harmonize donor financing. GFF financing is linked to the World Bank’s International Development Association and International Bank for Reconstruction and Development financing to improve a country’s budget allocation to the health system. The Global Fund uses conditional financing to increase domestic allocations for priority diseases. Through one of its grant modalities, GPE provides incentives to countries to either maintain expenditure on education above 20 percent of total public expenditure or commit to progressively increase it toward this target. Like the GEF’s cofinancing ambition of 7:1, the GPE also provides incentives to low- and middle-income countries to leverage additional financing from other sources.

Three partnerships (the Global Fund, the GFF, and the GPE) use **performance-based financing** as an incentive for countries to achieve agreed-upon targets. Many GFF countries use facility-level performance-based financing to increase the uptake of health services. In the Global Fund, the approval of all follow-up funding is linked to a principal recipient’s performance evaluation. This approach creates a strong incentive for stakeholders to improve performance (Chandy et al. 2013). In education, the GPE has recently introduced results-based financing by withholding the last 30 percent of one of its grant modalities, contingent on the achievement of selected national targets.

Conclusions and recommendations

6.1 Conclusions

Conclusion 1: The GEF 2020 Strategy and GEF programming directions set a clear vision and goal to scale up global environmental benefits. This has translated into a shift for the IAPs and Impact Programs to achieve impacts at scale, but operational guidance is not consistently clear across all programs and projects.

Both the GEF 2020 Strategy and the GEF-6 and GEF-7 Programming Directions set a clear vision and goal to scale up global environmental benefits. The GEF's focus on scaling is more explicit compared to many other international development institutions, and clearly indicates support for the enabling conditions necessary for impacts to be scaled up. But as with other institutions, the GEF's vision for scaling-up is not consistently clear in its operational guidance across all programs and the portfolio.

During project and program design, guidelines are lacking on how interventions are expected to scale up outcomes. While technically sound, almost half of the approved GEF-7 projects do not clearly articulate concrete links between their activities, outcomes, the scaling-up process, and resulting

impacts, even though they have a long-term scaling outlook.

Conclusion 2: In cases where the GEF has supported scaling-up, it uses multiple modes, such as replication, mainstreaming, and linking, to scale interventions that generate global environmental benefits, drawing on the comparative advantages of the members of the GEF partnership.

The GEF contributes to scaling-up efforts by helping replicate, mainstream, and link interventions that generate global environmental benefits. Replication refers to implementation of the same intervention multiple times by an increasing number of stakeholders and/or by covering larger areas, typically by leveraging finance, knowledge, and policy. Mainstreaming involves integrating an intervention within an institution's regular operations, usually through a policy or legal framework. Linking refers to the implementation of different types of interventions across multiple geographic locations, administrative levels, or sectors and institutions that comprise the different components of an ecological, economic, or governance system. All three scale-up modes are often interdependent processes that may take place through one or more projects—whether in parallel or in sequence—that

all contribute to generating a specific impact at a target scale.

Multilateral development banks such as the World Bank provide larger amounts of funding through loans, and typically scale up through replication. Other GEF Agencies with more limited funding, such as UN entities and international NGOs, are shifting more toward linking by building partnerships across multiple sectors to leverage the comparative advantages of other institutions. All GEF Agencies contribute to scaling up through mainstreaming.

Conclusion 3: The extent of GEF support to scale-up and the rate at which outcomes are scaled up vary across focal areas, but typically take place over more than five years, and generate higher outcomes per GEF dollar per year during the scale-up stage compared to the pilot stage. Indicators used between the pilot and scale-up stages have not always been consistent, limiting the ability to track progress.

GEF support for scaling-up processes ranged from grants of less than \$1 million to grants over \$100 million, with the period of GEF support extending from less than 5 to over 25 years. Typically, GEF support for scaling was provided for more than five years, or through more than one project, and was delivered through a variety of modalities including enabling activities, SGP projects, and medium- and full-size projects.

In cases where GEF support for piloting and scale-up stages could clearly be distinguished in the project documents, measurable outcomes per dollar per year during the scale-up stage were between 1.1 to 74.5 times larger than during the pilot stage; this indicates greater cost effectiveness and higher cofinancing being leveraged for scaling activities per GEF dollar. Outcomes were derived from project evaluations, and do not reflect scaled-up outcomes catalyzed by GEF support,

such as in at least 40 percent of the cases where scaling-up activities have been continued by other donors and institutions.

The GEF's results framework provides corporate targets for global environmental benefits for the current replenishment period. These targets are not set or tracked relative to the specific spatial and temporal scales of the environmental issue that needs to be addressed, but to the amount of funding available for a project, program, or replenishment period. This factor limits the GEF's ability to assess its progress relative to the full magnitude and scope of the environmental problems it aims to address. Some linked projects that contribute to the same scaling-up target have no common indicators or even units of measurement to track progress toward their shared environmental targets. The core indicators address this to some extent, but projects often track other indicators for specific environmental outcomes and these are not always consistent across linked projects.

Conclusion 4: The GEF has supported scaling-up by establishing enabling conditions, choosing the appropriate influencers and institutions to work with, and leveraging contextual conditions at the right time.

GEF funding was found to support eight types of enabling conditions that contribute to the scaling-up process:

- Knowledge and information dissemination
- Participatory processes
- Incentives and disincentives
- Institutional and individual capacities
- Policy frameworks and operating guidelines
- Sustainable financing
- Multistakeholder interactions and partnerships
- Systematic learning mechanisms

These enabling conditions strengthen the three actions necessary for scaling-up to take place: adoption of interventions that generate impact, sustained support for scaling-up processes, and learning for adaptability and cost effectiveness in the face of changing contextual conditions.

GEF support has most commonly been used to support incentives and knowledge and information initiatives. These enabling conditions increase the willingness of stakeholders to adopt interventions that generate global environmental benefits and help gain the support of influential persons and institutions in making scaling a political priority. In all cases assessed, GEF support was also used to strengthen institutional and individual capacities for scaling up interventions. Both support for capacities and sustainable funding sources allowed scaling-up activities to be sustained beyond GEF funding in the observed cases. However, these sustainable funding sources are subject to risks from changes in political and economic conditions.

The GEF has also contributed to scaling up by choosing the right influencers and institutions to work with, such as technically competent champions; individuals, government agencies, and donor organizations with political and economic traction and a long-term scaling outlook; and long-term structures with wide geographic reach and implementation experience, continuity of staff, and opportunities for frequent local and global interaction. In some cases, GEF support has facilitated scale-up by leveraging contextual conditions—such as existing legal obligations and political priorities, external events, and shifts in the political landscape—at the right time to align with scaling-up objectives.

Conclusion 5: GEF support has catalyzed the scaling-up process de-risking innovations and demonstrating project benefits at the pilot stage. Systematic learning mechanisms for scale-up were not supported by the GEF in most of its

earlier, now closed, projects, but about half of the approved GEF-7 projects address learning more systematically.

GEF support contributes to scaling-up by demonstrating the benefits of effective interventions in specific contexts and helping establish the enabling conditions to scale up these benefits in larger contexts. GEF and other institutions' support for scaling was frequently contingent on the positive results of the pilot stage, indicative of a long-term scaling outlook anchored on adaptive learning.

According to interviews, the GEF's comparative advantage lies in de-risking investments by piloting interventions that neither the public nor the private sector is willing to fund and where no clear benefits have yet been demonstrated. Another comparative advantage is the GEF's flexible grants, which attract funding from government and other donors for scaling activities.

Systematic learning allows projects and programs to leverage the right contextual conditions at the right time to align with scaling objectives. GEF funding was found to be least frequently used to establish systematic learning mechanisms in completed projects, where learning was on a more ad hoc basis. On the other hand, slightly more than half of GEF-7 projects include a budget and details on systematic learning mechanisms, which can provide timely guidance on scaling-up progress.

6.2 Recommendation

Recommendation 1: The GEF partnership needs to ensure that factors influencing scaling-up are identified and taken into account in program and project design and implementation, and their impact assessed at midterm and terminal evaluations.

A program or project should identify its contributions to the scaling-up process, such as through

its support for appropriate enabling conditions, particularly systematic learning mechanisms, and addressing contextual factors that affect scaling-up. While this evaluation found successful cases of scaling-up in the absence of guidelines, developing such guidance may systematically increase the likelihood of outcomes being scaled up during and beyond project or program implementation in line with the GEF's vision. The expectation is not for all GEF projects to achieve impact at scale, but to clearly articulate how each project contributes to the long-term vision for achieving results at a larger scale.

Projects and programs implemented in parallel or in sequence that are explicitly linked by design must have at least one common environmental indicator that use the same unit of measurement to allow outcomes to be aggregated and progress to be tracked. The GEF's current results framework provides common indicators which makes this possible at the portfolio level; however, projects and programs that are linked must use common units of measurement and indicators to track progress of more specific outcomes that may not be tracked by the GEF's corporate-level core indicators and subindicators.

Bibliography

- Agapitova, N., and J. Linn. 2016. "[Scaling Up Social Enterprise Innovations: Approaches and Lessons.](#)" Global Working Paper 95. Brookings Institution, Washington, DC.
- Baker, D., E. Drazen, R. Metzler, S. Tolbert, and A. Walton. 2016. "Understanding the Factors of Scalable Success: Broader Adoption of Small Grants Programme Projects in Five Countries." Yale School of Forestry and Environmental Studies.
- Barker, P., A. Reid, and M.W. Schall. 2016. "[A Framework for Scaling up Health Interventions: Lessons from Large-Scale Improvement Initiatives in Africa.](#)" *Implementation Science* (2016) 11:12. DOI 10.1186/s13012-016-0374-x
- Bartczak, L. 2014. "Leveraging a Movement Moment." *Smarter Philanthropy for Greater Impact: Rethinking How Grantmakers Support Scale.* Supplement for *Stanford Social Innovation Review* February: 22–23.
- Begovic, M., J. Linn, and R. Vrbensky. 2017. "[Scaling up the Impact of Development Interventions. Lessons from a Review of UNDP Country Programs. Global Economy and Development.](#)" Working Paper 101. Brookings Institution, Washington, DC.
- Bezanson, K., P. Isenman, and A. Shakov. 2012. "[Scaling up in Agriculture, Rural Development, and Nutrition. Learning from the Experience of Vertical Funds.](#)" IFPRI Focus 19, Brief 18. International Food Policy Research Institute.
- Bradach, J., and A. Grindle. 2014. "[Transformative Scale: The Future of Growing What Works. Nine Strategies to Deliver Impact at Scale That Truly Meets Needs.](#)" *Smarter Philanthropy for Greater Impact: Rethinking How Grantmakers Support Scale.* Supplement for *Stanford Social Innovation Review* February: 7–10.
- Chandy, L., A. Hosono, H. Kharas, and J. Linn, eds. 2013. *Getting to Scale: How to Bring Development Solutions to Millions of Poor People.* Washington, DC: Brookings Institution.
- CIF (Climate Investment Funds). 2019. [Transformational Change in the Climate Investment Funds. Summary of Findings from an Independent Evaluation and Evidence Synthesis.](#) CIF.
- Cooley, L. 2016. [Scaling Up—From Visions to Large-Scale Change. A Management Framework for Practitioners. Third Edition.](#) Arlington, VA: Management Systems International.
- Cooley, L., and R. Kohl. 2006. *Scaling Up—From Vision to Large-Scale Change. A Management Framework for Practitioners.* Washington, DC: Management Systems International.
- Cooley, L., and J. Linn. 2014. "[Taking Innovations to Scale: Methods, Applications and Lessons.](#)" Results for Development Institute (R4D), Management Systems International, Washington, DC.
- Cooley, L., and R. Ved. 2012. *Scaling Up—From Vision to Large-Scale Change. A Management Framework for Practitioners. Second Edition.* Washington, DC: Management Systems International.

- Enright, K.P. 2014. "What Would It Take?" *Smarter Philanthropy for Greater Impact: Rethinking How Grantmakers Support Scale*. Supplement for *Stanford Social Innovation Review* February: 3–6.
- FAO (Food and Agriculture Organization of the United Nations). 2016. [Informing Future Interventions for Scaling-up Sustainable Land Management: Lessons Learned for Decision Makers from a Review of Experiences of the TerrAfrica Strategic Investment Programme on SLM in Sub-Saharan Africa \(SIP\) under the NEPAD-TerrAfrica Partnership Framework](#). Washington, DC: FAO, World Bank, and NEPAD.
- . 2018. [Scaling Up Agroecology Initiative. Transforming Food and Agricultural Systems in Support of the SDGs. A Proposal Prepared for the International Symposium on Agroecology](#). April 3–5, 2018.
- GCF (Green Climate Fund). 2017. [Operational Framework on Complementarity and Coherence](#). GCF/B.17/08. Decision B.17/04. Songdo, Incheon, Republic of Korea.
- . 2018. [Annual Update on Complementarity and Coherence](#). GCF/B.20/05. Songdo, Incheon, Republic of Korea.
- GEF (Global Environment Facility). 2008. [From Projects to Programs: Clarifying the Programmatic Approach to the GEF Portfolio](#). GEF/C.33/6. GEF, Washington, DC.
- . 2009. [Small Grants Programme: Execution Arrangements and Upgrading Policy for GEF-5](#). GEF/C.36/4. GEF, Washington, DC.
- . 2014a. [GEF 2020: Strategy for the GEF](#). Washington, DC: GEF.
- . 2014b. [GEF-6 Programming Directions](#). Extract from GEF/A.5/07/Rev.01. GEF, Washington, DC.
- . 2015a. "Program Framework Document: Fostering Sustainability and Resilience for Food Security in Sub-Saharan Africa: An Integrated Approach." GEF ID 9070. GEF, Washington, DC.
- . 2015b. "Program Framework Document: Sustainable Cities Integrated Approach Pilot." GEF ID 9077. GEF, Washington, DC.
- . 2015c. "Program Framework Document: Taking Deforestation out of Commodity Supply Chains." GEF ID 9072. GEF, Washington, DC.
- . 2017a. [Guidelines for GEF Agencies in Conducting Terminal Evaluation of Full-Sized Projects](#). GEF, Washington, DC.
- . 2017b. "Guidelines on the Project and Program Cycle Policy." GEF/C.52/Inf.06/Rev.01. GEF, Washington, DC.
- . 2018a. [GEF-7 Policy Recommendations](#). GEF/R.7/18. GEF, Washington, DC.
- . 2018b. [GEF-7 Replenishment Programming Directions](#). GEF/R.7/19. GEF, Washington, DC.
- . 2018c. [Guidelines on Core Indicators and Sub-Indicators](#). ME/GN/02. GEF, Washington, DC.
- . 2018d. [Project and Program Cycle Policy](#). OP/PL/01. GEF, Washington, DC.
- GEF-UNDP-IMO GloBallast Partnerships Programme. [The GloBallast Story: Reflections from a Global Family. GEF-UNDP-IMO GloBallast Partnerships Programme](#). GloBallast Monograph No. 25. London: GloBallast Partnerships Project Coordination Unit.
- GEF IEO (Global Environment Facility Independent Evaluation Office; formerly GEF Evaluation Office). 2010. [GEF Monitoring and Evaluation Policy](#). Evaluation Document No. 4. Washington, DC: GEF IEO.
- . 2014a. [Climate Change Mitigation. GEF Support to Market Change in China, India, Mexico, and Russia](#). Evaluation Report No. 90. Washington, DC: GEF IEO.
- . 2014b. [Fifth Overall Performance Study of the GEF: At the Crossroads for Higher Impact](#). Evaluation Report No. 86. Washington, DC: GEF IEO.
- . 2016a. [Evaluation of the Multiple Benefits of GEF Support through Its Multifocal Area Portfolio](#). Evaluation Report No. 124. Washington, DC: GEF IEO.
- . 2016b. [Impact Evaluation of GEF Support to Protected Areas and Protected Area Systems](#). Evaluation Report No. 104. Washington, DC: GEF IEO.
- . 2016c. [Joint GEF-UNDP Evaluation of the Small Grants Programme](#). Evaluation Report No. 97. Washington, DC: GEF IEO.
- . 2018a. [An Evaluative Approach to Assessing GEF's Additionality](#). GEF/ME/C.55/inf.01. GEF IEO, Washington, DC.
- . 2018b. [Evaluation of GEF Support for Transformational Change](#). Evaluation Report No. 122. Washington, DC: GEF IEO.
- . 2018c. [Evaluation of the GEF's System for Transparent Allocation of Resources](#). Evaluation Report No. 130. Washington, DC: GEF IEO.
- . 2018d. [Formative Review of the Integrated Approach Pilot Programs](#). Evaluation Report No. 126. Washington, DC: GEF IEO.

- . 2018e. [Impact of GEF Support on National Environment Laws and Policies](#). Evaluation Report No. 129. Washington, DC: GEF IEO.
- . 2018f. [International Waters Focal Area Study](#). Evaluation Report No. 114. Washington, DC: GEF IEO.
- . 2018g. [Sixth Comprehensive Evaluation of the GEF: The GEF in the Changing Environmental Finance Landscape](#). Evaluation Report 110. GEF IEO, Washington, DC.
- GEF OME (Global Environment Facility Office of Monitoring and Evaluation). 2005. [Third Overall Performance Study of the Global Environment Facility \(OPS3\): Progressing toward Environmental Results](#). Washington, DC: GEF OME.
- GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit). 2014. "Corporate evaluation: German Agency for International Cooperation. Corporate Strategy Evaluation on Scaling up and Broad Impact." GIZ, Bonn.
- Global Fund (Global Fund to Fight AIDS, Tuberculosis and Malaria). 2017. [The Global Fund Strategy 2017–2022. Investing to End Epidemics](#). Global Fund, Geneva.
- . 2018. [The Global Fund Results Report 2018](#). Geneva: Global Fund.
- GPE (Global Partnership for Education). 2018. [GPE Results Report 2018](#). Washington, DC: Global Partnership for Education.
- GTZ (Deutsche Gesellschaft für Technische Zusammenarbeit). 2011. [Scaling up In Development Cooperation. Practical Guidelines](#). Eschborn: GTZ.
- Gündel, S., J. Hancock, and S. Anderson. 2001. [Scaling up Strategies for Research in Natural Resources Management: A Comparative Review](#). Natural Resources Institute, Chatham, UK.
- Hancock, J., 2003. [Scaling up the Impact of Good Practices in Rural Development](#). Report No. 26031. World Bank, Washington, DC.
- Hartmann, A., and J. Linn. 2008. [Scaling Up: A Framework and Lessons for Development Effectiveness from Literature and Practice](#). Wolfensohn Center for Development. Working Paper 5. Brookings Institution, Washington, DC.
- IDCOL (Infrastructure Development Company Limited). 2017. [Annual Report 2017. Highway to Progression](#). Dhaka, Bangladesh.
- IEG (Independent Evaluation Group). 2010a. "Assessing the Impact of IFC's China Utility-Based Energy Efficiency Finance Program. Energy Efficiency Finance." IEG Study Series. World Bank, Washington, DC.
- . 2010b. [Climate Change and the World Bank Group. Phase II: The Challenge of Low-Carbon Development](#). IEG Study Series. World Bank, Washington, DC.
- . 2011. [The World Bank's Involvement in Global and Regional Partnership Programs: An Independent Assessment](#). Washington, DC: World Bank.
- . 2014. "Rural Electrification and Renewable Energy Development Project (IDA-36790 IDA-46430 IDA-50130 TF-51301). Power Sector Development Technical Assistance Project (IDA-39130 IDA-H0920). Power Sector Development Policy Credit (IDA-44360). Project Performance Assessment Report. The Peoples' Republic of Bangladesh." Report No. 88546. World Bank, Washington, DC.
- . 2016. "Supporting Transformational Change for Poverty Reduction and Shared Prosperity. Lessons from World Bank Group Experience." World Bank, Washington, DC.
- . 2017. [Renewable Energy Scale-Up Program: Phase One. Project Performance Assessment Report](#). World Bank, Washington, DC.
- IFAD (International Fund for Agricultural Development). 2015a. [Climate-Resilient Agricultural Development. Scaling up Note](#). IFAD, Rome.
- . 2015b. [IFAD's Operational Framework for Scaling Up Results](#). IFAD, Rome.
- IFAD IOE (International Fund for Agricultural Development Independent Office of Evaluation). 2017. [IFAD's Support to Scaling Up of Results. Evaluation Synthesis](#). Report No. 4407. IFAD, Rome.
- IIRR (International Institute for Rural Reconstruction). 2000. "Going to Scale: Can We Bring More Benefits to More People More Quickly?" CGIAR-NGO Committee and the Global Forum for Agricultural Research, Silang, Cavite, Philippines.
- Indig, D., K. Lee, A. Grunseit, A. Milat, and A. Bauman. 2018. [Pathways for Scaling Up Public Health Interventions](#). *BMC Public Health* 18: 68.
- Itad. 2019. [Evaluation of Transformational Change in the Climate Investment Funds](#).

- Jonasova, M., and S. Cooke. 2012. "Thinking Systematically about Scaling Up: Developing Guidance for Scaling Up World Bank-Supported Agriculture and Rural Development Organization. The Case of Competitive Grant Schemes for Agriculture and Rural Development Operations." World Bank, Washington, DC.
- Kato, T., J. Ellis, P. Pauw, and R. Caruso. 2014. "[Scaling up and Replicating Effective Climate Finance Interventions](#)." Paper No. 2014 (1). OECD Publishing, Paris.
- Linn, J. 2011. "Scaling Up with Aid: The Institutional Dimension." In: H. Kharas, K.I. Makino, and W. Jung (eds.), *Catalyzing Development: A New Vision for Aid*, 202–32. Washington, DC: Brookings Institution.
- . 2015. "Scaling up in the Country Program Strategies of the International Aid Agencies: An Assessment of the African Development Bank's Country Strategy Papers." *Global Journal of Emerging Market Economies* 7 (3): 236–56.
- OECD (Organisation for Economic Co-operation and Development). 2013. [Scaling up Finance Mechanisms for Biodiversity](#). OECD Publishing.
- Pachico, D., and S. Fujisaka, eds. 2004. "Scaling up and out: Achieving Widespread Impact through Agricultural Research." Publication No. 340. Centro Internacional de Agricultura Tropical, Cali, Colombia.
- Tengberg, A., F. Radstake, K. Zhang, and B. Dunn. 2014. "Scaling up of Sustainable Land Management in the Western People's Republic of China: Evaluation of a 10-Year Partnership." *Land Degradation & Development* 27 (2): 124–44.
- UNDP (United Nations Development Programme). 2013. "[Scaling Up Development Programmes. Guidance Note](#)." UNDP, New York, NY.
- . 2016. "[Scaling Up Community Actions for International Waters Management. Experiences from the GEF Small Grants Programme](#)." UNDP, New York.
- . 2017a. "[Community Approaches to Sustainable Land Management and Agroecology Practices](#)." UNDP, New York.
- . 2017b. "[Community-based Chemicals and Waste Management: Experiences from GEF Small Grants Programme](#)." UNDP, New York.
- . 2017c. "[Making Waves: Community Solutions, Sustainable Oceans](#)." UNDP, New York.
- . 2017d. "[South-South Community Innovation Exchange Platform: The Experience of the Global Environment Facility Small Grants Programme](#)." UNDP, New York.
- . 2018. "[Annual Monitoring Report. July 2016—June 2017. GEF Small Grants Program](#)." UNDP, New York.
- . 2019. "[The GEF Small Grants Programme Results Report 2017–2018](#)." UNDP, New York.
- UNDP and GEF (United Nations Development Programme and Global Environment Facility). 2012a. "[Catalyzing Ocean Finance. Volume I. Transforming Markets to Restore and Protect the Global Ocean](#)." UNDP, New York.
- . 2012b. "[Catalyzing Ocean Finance. Volume II. Methodologies and Case Studies](#)." UNDP, New York.
- . 2015. "[Chemicals and Waste Management for Sustainable Development. Results from UNDP's Work to Protect Human Health and the Environment from POPs](#)." UNDP, New York.
- . 2016. "Mercury Management for Sustainable Development." UNDP, New York.
- Uvin, P. 1995. "[Fighting Hunger at the Grassroots: Paths to Scaling Up](#)." *World Development* 23 (6): 927–39.
- Uvin, P., P.S. Jain, and L.D. Brown. 2000. "[Think Large and Act Small: Toward a New Paradigm for NGO Scaling Up](#)." *World Development* 28 (8): 1409–19.
- WHO (World Health Organization). 2007. [Scaling up Health Service Delivery: from Pilot Initiatives to Policies and Programmes](#). Geneva: WHO.
- . 2010. [Nine Steps for Developing a Scaling up Strategy](#). Geneva: WHO.
- . 2011. "[Beginning with the End in Mind: Planning Pilot Projects and Other Programmatic Research for Successful Scaling Up](#)." World Health Organization, Geneva.
- World Bank. 2005. [Reducing Poverty on a Global Scale. Learning and Innovating for Development. Findings from the Shanghai Global Learning Initiative](#). Washington, DC: World Bank Group.
- . 2006. "Scaling Up Marine Management: The Role of Marine Protected Areas." World Bank Group, Washington, DC.
- . 2012. "Lessons from Scaling Up. Lessons and Recommendations for Agricultural Practitioners. Agriculture and Rural Development Joint Notes." Issue 59. World Bank Group, Washington, DC.

- . 2018. "[Bangladesh—Second Rural Electrification and Renewable Energy Development Project: Additional Financing](#)." Report Number PAD 2636. World Bank Group, Washington, DC.
- World Bank and Global Financing Facility (GFF). 2018. [Country-Powered Investments. For Every Woman, Every Child, and Every Adolescent. 2017-2018 Annual Report](#). Washington, DC: World Bank Group.
- WRI (World Resources Institute). 2015. "[Scaling Success. Lessons from Adaptation Pilots in the Rainfed Regions of India](#)." World Resources Institute, Washington, DC.
- WWF (World Wildlife Fund). 2017. "Developing Strategies to Achieve Transformational and Sustainable Change." In: [WWF Standards of Conservation Project and Programme Management \[PPMS\]](#).



The Independent Evaluation Office 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 that involve a set of projects and programs implemented by more than one GEF Agency. These evaluations are typically at the strategic level, on focal areas, or on cross-cutting themes. We also undertake institutional evaluations, such as assessing the GEF resource allocation mechanism or GEF governance.

Within the GEF, the Office facilitates cooperation on evaluation issues with professional evaluation networks; this includes adopting evaluation guidelines and processes consistent with international good practices. 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 100 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  [/gefio_tweets](https://twitter.com/gefio_tweets)  [/gefio](https://www.youtube.com/gefio)