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GLOBAL ENVIRONMENT FACILITY

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Foreword

The Global Environment Facility (GEF) has been experimenting with programmatic approaches since its establishment. As early as 1999, the GEF Council supported the evolution of GEF support to countries through programs to better address the long-term, multifaceted nature of environmental problems as well as of potential solutions. In 2008, the objectives, basic principles, and detailed procedures for designing programs were endorsed by the GEF Council. Before that, phased programs—which were de facto projects funded across GEF replenishment periods with subsequent correlated financing tranches—had been an important part of GEF operations. The formal introduction of the program financing modality in 2008 led to an increase in the submission of programs to the Council and a change in their nature from phased to clustered ones. These included a set of "child projects" designed to contribute to the overall objective of the parent program. Further reforms were aimed at disbursing large-scale resources effectively and efficiently to countries/regions through programs.

For the first time, the Independent Evaluation Office (IEO) has taken a systematic look at GEF programmatic approaches, a financing support modality the GEF has been using increasingly in recent years. As of July 2017, the share of programs was 31 percent in GEF-6, an increase of 19 percent over GEF-5. While the evaluation looked at the overall historical evolution of program support in the GEF since 1999, it focused on the period May 2008 to the present. It assessed the mechanisms and conditions by which GEF programs have delivered broader-scale and longer-term results by comparing them to stand-alone projects. It focused on the extent to which GEF programs have addressed drivers of environmental degradation, and reviewed performance issues such as program-to-project coherence, country ownership, coordination, knowledge management, and monitoring and evaluation. The evaluation was based on evidence from a wide array of sources, analyzed with a mixed-methods approach.

The evaluation approach paper was approved in March 2016. Documentation review, data gathering, portfolio and geospatial analyses, interviews, an online survey, and several field visits to case study countries were conducted from April 2016 to April 2017. A Reference Group consisting of members from the GEF Secretariat, GEF Agencies, and the GEF Scientific and Technical Advisory Panel was convened at key stages to provide expert opinion and information, as well as technical feedback and verification. The evaluation was presented to the GEF Council at its May 2017 meeting, as part of IEO's Semi-Annual Evaluation Report. The Council took note of the evaluation's conclusions and endorsed its recommendations, taking into account the GEF Secretariat's management response. Final responsibility for this report remains firmly with the Office.

Juha I. Uitto
Director, GEF Independent Evaluation Office

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This evaluation was led by Carlo Carugi, Senior Evaluation Officer with the Independent Evaluation Office (IEO) of the Global Environment Facility (GEF), with oversight from the Chief Evaluation Officer, Geeta Batra, and the Director, Juha Uitto. Core evaluation team members were David M. Todd and Sara El Choufi. Anupam Anand provided technical guidance to the various geospatial analyses and participated in the India case study mission. Jeneen Garcia contributed to the development of the theory of change for the evaluation and participated in the China case study mission. Peixuan Zhou provided research assistance support for the development of the approach paper and participated in the China mission as well. A team from AidData, a research laboratory from William and Mary College led by Daniel Runfola, provided the portfolio-level geospatial analysis. Min Feng conducted the geospatial analysis for the case studies. Joana Talafre provided a comparative literature review of GEF versus other bilateral and multilateral donor programs. Deeba Yavrom, Hayley Gillooly, and Divya Kapoor served as research assistants for the portfolio analyses. Andy Rowe provided methodological guidance to the design and participated in the conduct of the rapid impact evaluation (RIE) case study missions to the United Nations Industrial Development Organization in Vienna as well as to Indonesia and Vietnam. Ngo Thi To Nhien served as RIE national technical adviser in Vietnam, while Susy Simarangkir was the RIE technical adviser for Indonesia. Neal Elliot, Paul Scheihing, Jigar Shah, and Amit Bando contributed as RIE global panel experts. Michael D. Wells provided quality assurance for the approach paper, together with Hemamala Hettige, and for the draft report. Administrative support was provided by Evelyn Chihuguyu, Malac Kabir, Marie-Constance Manuella Koukoui, and Juan Jose Portillo.

The GEF Secretariat as well as all the GEF Agencies involved in the programs and child projects that were part of this evaluation provided information, data, and insights during interviews and meetings. Country stakeholders responded to a global online survey and provided additional information and insights via an open-ended form. Critical logistical support and information were provided during the case study missions by the GEF focal points; national and local government staff; GEF Agencies; civil society organizations; communities; and other stakeholders in China, India, Indonesia, Jordan, Morocco, Tunisia, and Vietnam.

The GEF IEO is deeply grateful to all these individuals and institutions for their contributions, which were critical to the success of the evaluation.

Abbreviations

ADB	Asian Development Bank
APR	annual performance report
CEO	Chief Executive Officer
GEF	Global Environment Facility
IAP	integrated approach pilot
IEO	Independent Evaluation Office
M&E	monitoring and evaluation
MDB	multilateral development bank
MENA-DELP	Middle East and North Africa Desert Ecosystems and Livelihoods Program
NDVI	normalized difference vegetation index
OFP	operational focal point
OPS5	Fifth Overall Performance Study
PFD	program framework document
PIF	project identification form
POP	persistent organic pollutant
RAF	Resource Allocation Framework
RIE	rapid impact evaluation
STAP	Scientific and Technical Advisory Panel
STAR	System of Transparent Allocation of Resources
SWAp	sectorwide approach
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization

The GEF replenishment periods are as follows: pilot phase: 1991–94; GEF-1 1995–98; GEF-2: 1999–2002; GEF-3: 2003–06; GEF-4: 2006–10; GEF-5: 2010–14; GEF-6: 2014–18; GEF-7: 2018–22.

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

Executive summary

Programmatic approaches, formalized in 2008, are particularly relevant to the Global Environment Facility (GEF), given the long-term nature of the environmental problems the GEF addresses. This evaluation assessed the mechanisms and conditions by which GEF programs have delivered broader-scale and longer-term results by comparing them to stand-alone projects. It focused on the extent to which GEF programs addressed drivers of environmental change; performance issues such as coherence, ownership, efficiency, and monitoring and evaluation (M&E) have also been evaluated. The evaluation is based on evidence from a wide array of sources, analyzed with a mixed-methods approach. In this evaluation, complexity is a function of the degree of homogeneity of a program's child projects and whether they belong to one or multiple countries, Agencies, and/or focal areas. The evaluation covers a total of 38 programs and their related 301 child projects, 63 of which are completed. The ratings evidence is based on 42 project terminal evaluations of which 29 are categorized as belonging to simple and 13 to relatively more complex programs.

Following are the key findings of the evaluation:

- **Child projects under programmatic approaches performed better than stand-alone projects that are not part of programs.** Child projects, implemented as part of programs, performed better than stand-alone projects on all dimensions. In addition, in terms of vegetation density and forest cover, child projects have improved local environmental conditions compared with no GEF interventions, and single focal biodiversity projects provided more benefits than their stand-alone comparators.
- **Complexity matters for outcomes.** A simple regression analysis on 42 completed projects suggests that complexity, as measured by multicountry, multifocal, and multi-Agency dimensions and project heterogeneity, is negatively correlated with outcomes. Based on the sample of closed child projects in complex programs (n = 13), these projects underperformed relative to those in simpler programs (n = 29), or stand-alone projects on 5 dimensions, including outcomes, M&E implementation, execution quality, effectiveness, and efficiency, and outperformed these comparators on implementation, sustainability, and M&E design.
- **Program design for broader adoption has improved substantially over time across focal areas, but actions were limited.** International water programs are the only exception, and have shown well-designed programmatic thinking from the early GEF phases. Data as to whether improved design for broader adoption has translated into better performance is not yet available. The available data from

terminal evaluations indicate that while child projects rated higher than stand-alone projects on the design for broader adoption, they demonstrated less concrete action for broader adoption during implementation.

- **Programs represent a shift toward a more integrated systemic approach to address drivers.** GEF programs have evolved from a narrow approach focused on mitigating the negative effects of food and energy production on biodiversity loss, land degradation, and climate change to applying a systemic integrated approach encompassing a wider set of drivers such as food and energy production and consumption, buildings and infrastructure construction, and transportation.
- **Program ownership at the country level is highly linked to the degree of alignment with national priorities.** With the notable exception of programs addressing transboundary issues (i.e., international waters), GEF programs progressively shifted over time from a country to a multi country focus. System of Transparent Allocation of Resources funds are a substantial share of total program resources regardless of the geographic scope of the program. Central- and country-level stakeholders stated that country programs have stronger ownership than regional/global ones, as they tend to be closely aligned with national priorities. Country-focused programs typically employ more of their System of Transparent Allocation of Resources allocations and tend to receive higher cofinancing from national budgets. Regional/global programs rely heavily on set-asides.
- **Program/child project coherence has improved in recent programs.** Program objectives are better defined; child projects have improved in design and are better linked to the overall program. This improved coherence of programs and the associated child projects is notable in the design of increasingly complex programs, under which projects more specifically address the outcomes of their programs.
- **Cost-effectiveness and efficiency decline as programs become more multidimensional.** Overall, based on the terminal evaluations, child projects scored higher on efficiency and leveraged higher cofinancing, but efficiency ratings decline with increased complexity. Child projects do not differ much from stand-alone projects in terms of project cycles. GEF Agencies consider simple programs, particularly those composed of homogeneous child projects, as having lower transaction costs and being easier to manage. Most programs involve more than one GEF Agency, but child projects tend to be implemented by a single Agency. Due to their diversity in mandates and operational approaches, GEF Agencies often find it challenging to work together. The increased costs in coordinating large complex programs in terms of resource and coordination requirements are increasingly being addressed through better design and are being resourced to improve knowledge management and coordination.
- **M&E has improved in the design of recent programs, but still faces challenges.** Child projects achieved higher M&E design ratings compared with stand-alone projects, indicating that child projects tend to be more cognizant in designing their M&E frameworks. However, these projects show weaker implementation of M&E than their stand-alone counterparts. More complex programs have similar M&E ratings to simpler ones, but again their ratings drop from design to implementation. M&E is mainly undertaken at the project level. Little evidence of program-level M&E has been

found. When present, it is most likely because of individual GEF Agency requirements. Early evidence from the integrated approach pilots suggests more attention to M&E design, but the systems have yet to be implemented.

- **The roles for partners in program design have evolved with changing focus on global programs and IAPs.** While this was not a concrete objective within the scope of this evaluation, partners expressed a need for greater clarity on roles in program formulation.

Based on the above findings, the evaluation has reached five main conclusions:

- **Conclusion 1.** GEF programmatic approaches have promoted projects that are better designed to produce broader and more sustainable results than stand-alone ones do.
- **Conclusion 2.** The multidimensional nature of programs has generated a greater need for coordination and management, with implications for efficiency, results, and performance.
- **Conclusion 3.** Alignment of program support with country priorities has generated strong program ownership.
- **Conclusion 4.** Program design has improved, but M&E systems have not adapted to measure and demonstrate program-level results and additionality.
- **Conclusion 5.** Decision making on program design needs to reflect greater transparency and clear roles for all players in the partnership.

Following are the three main recommendations of the evaluation:

- **Recommendation 1.** The GEF should continue with appropriate programmatic interventions, addressing issues that are likely to impede outcomes and performance, efficiency, and management, as they become multidimensional.
- **Recommendation 2.** The GEF should continue ensuring that programs are relevant to the national environmental priorities of the participating countries while meeting the requirements of the Conventions.
- **Recommendation 3.** M&E should be implemented at the program level, with a clear demonstration of the additionality of the program over projects.

1: Introduction

1.1 Background and objectives

Programmatic approaches (herein after referred to as programs) are particularly relevant to the Global Environment Facility (GEF), given the long-term nature of the environmental problems the GEF was tasked to address. Although the most common form of GEF support to recipient countries historically has been and still is provided through projects, programs have been part of the GEF since its establishment. As early as in 1999, the GEF Council supported the evolution of GEF support to recipient countries through a programmatic approach (GEF 1999). Shortly after, in 2001 the Council clarified that programs should "secure larger and sustained impact on the global environment through integrating and mainstreaming global environmental objectives into a country's national strategies and plans through partnership with the country" (GEF 2001, 3).

The shift to a more strategic partnership between the countries and the GEF was also discussed during the third GEF replenishment, where parties proposed a performance-based resource allocation system. This led to the introduction of the Resource Allocation Framework (RAF) in 2006, replaced by the System of Transparent Allocation of Resources (STAR) in 2009. These reforms influenced the way programs—particularly regional and global ones—were to be financed, i.e., either from the RAF/STAR or from ad hoc "set-aside" funds.[1]

In May 2008, the Council endorsed the objectives and basic principles for programmatic approaches. For the first time, detailed procedures for designing programs were approved, including the requirement of preparing a program framework document (PFD) when submitting a financing proposal to the GEF Council for approval. Through this major reform the program support modality was formally introduced in the GEF. This reform resulted in an increase in the submission of programs to the Council, and a change in their nature from phased activities to clustered ones.

Before the formal introduction of the program support modality in May 2008, the GEF allocated $868.29 million to 34 phased/tranched programs and other country, regional, and/or global programs without PFDs, corresponding to 5 percent of the total GEF grants to that date. Post-May 2008 program funding amounts to $1,486 million for 38 programs, corresponding to 8.7 percent of the total GEF funding as of this evaluation's cut-off date (April 2016).

This evaluation assesses the mechanisms and conditions by which GEF programs

[1] In the GEF, "set-aside" funds are targeted toward reinforcing the focal area mandate through investments that complement country activities under the STAR.

have attempted to deliver broader scale and longer-term results by comparing them to stand-alone projects. Annex A presents the evaluation's approach paper. The evaluation aims at contributing to the further development of GEF programs in the context of the GEF's strategic move toward multifocal and integrated solutions to environmental challenges proposed in the GEF2020 Strategy (GEF 2014a).

1.2 Approach and methodology

The evaluation was conducted by applying a mixed methods approach that encompassed both quantitative and qualitative data gathering and analyses. A limited number of key questions guided the evaluation. These included two main effectiveness questions, focusing on: (1) the extent to which the different typologies of GEF programs delivered broader scale and longer-term environmental outcomes and impacts compared with stand-alone projects, and (2) the extent to which GEF programs addressed the main drivers of environmental degradation. The latter question was approached retrospectively, taking into consideration that many GEF programs covered under the scope of this evaluation were not explicitly designed to address the drivers of environmental change currently recognized by the GEF. The performance with regard to drivers was therefore analyzed with a formative approach. Other key evaluation questions focused on: (3) the factors having influenced program ownership by participating countries and in turn the relevance of those programs to national environment and development needs and priorities; (4) the program coherence, assessed in terms of the degree of integration between project and program-level objectives; (7) GEF project cycle efficiency and program cost-effectiveness issues; (6) governance, management arrangements, and coordination issues; and (8) monitoring and evaluation (M&E).

While the evaluation looked back at the overall historical evolution of program support in the GEF since 1999 to date, it covers the period from May 2008 to the present in particular detail, with a focus on the 38 programs designed after the introduction of the PFD requirement. These 38 programs encompass a total of 301 child projects. Thirty-three programs comprising 175 projects implemented prior to May 2008 were the subject of an in-depth retrospective meta-analysis encompassing 88 terminal evaluations.[2] The meta-analysis only focused on the first two questions, on program effectiveness and drivers.

Several other tools and methods were used to gather and analyze data. These included:

1. A portfolio analysis covering 34 out of the 38 post-2008 programs and their related child projects (n = 237).[3]
2. A broader adoption analysis based on the GEF generic theory of change framework (GEF IEO 2014), conducted using the available 52 terminal evaluations of child projects. These projects are part of 15 out of the total of 38 programs covered by this evaluation.[4]
3. A geospatial analysis conducted on 105 child projects belonging to 13 programs and encompassing observations on 653 project sites. The

[2] Of the 34 pre-2008 programs, one had to be dropped from the meta-analysis as it had no terminal evaluation.

[3] Two programs comprised of projects at the project identification form stage were excluded from this analysis as documentation for those was limited or nonexistent. The analysis also excluded two umbrella programs (namely the Biosafety program and the Technology Transfer program), as these have been conceived more as administrative arrangements than explicit programmatic approaches.

[4] For a detailed explanation of the broader adoption analysis approach, see GEF IEO (2013c).

selection of these programs was based on their maturity, expressed in terms of implementation status of their child projects. The evaluation considers programs mature that have either more than 60 percent of their child projects under implementation for more than two years (i.e., have been under implementation before April 1, 2014), or have been completed, or both. Mature programs are expected to have produced results that can be geospatially observed in terms of vegetation productivity, expressed through the normalized difference vegetation index (NDVI), and forest cover, expressed in km2 of avoided forest loss.

4. A global online survey administered to country and regional stakeholders (n = 684) involved in GEF programs, which obtained a 27 percent response rate. The survey focused on assessing country stakeholder opinions on their experienced incentives and disincentives in being part of a program, broader adoption, knowledge sharing and M&E, and potential for leveraging cofinancing and coordination issues.

5. Central-level interviews conducted with program stakeholders (n = 26) in the GEF Secretariat, the Scientific and Technical Advisory Panel (STAP) and a broad spectrum of GEF Agencies involved in GEF programs—i.e., United Nations [UN] agencies, funds and programs; multilateral development banks [MDBs]; and international nongovernmental organizations.

6. Four program case studies, encompassing country visits in China, India, Jordan, Tunisia, Morocco, Vietnam, and Indonesia. The four selected programs represent the following combinations: (1) two single and two multicountry programs; (2) two single and two multi-Agency programs; and (3) two single and two multifocal area programs. Two programs were homogeneous, i.e., composed of highly similar child projects, implemented in different regions in a country or in different countries, and two were not. This allowed the evaluation to observe how different levels of program complexity affected performance and results. In this evaluation, complexity is a function of the degree of homogeneity of the programs' child projects and whether they belong to multiple or single country, Agency, and/or focal area programs. Box 1.1 presents the main definitions used in this report.

Case study data were collected during the country visits through interviews and focus group meetings, documentation review, geolocation information data gathering, and field observations in selected project sites. The programs assessed in the four case studies are described in box 1.2. Detailed program case study reports are available in a separate technical document in volume 2 of this report. Volume 2 also includes a detailed study report of the geospatial analysis conducted on 13 mature programs.

Different cohorts of stand-alone projects have been used for programmatic/nonprogrammatic comparisons. Each cohort gives a different perspective in the analysis of programmatic versus stand-alone implementations. These stand-alone project cohorts included:

1. **Database of terminal evaluations from the Independent Evaluation Office's (IEO's) annual performance report (APR).** This database includes the terminal evaluations of 1184 completed projects, 308 of which were approved in or after May 2008. These include 258 stand-alone project terminal evaluations, 50 child projects under programmatic approaches. Eight more projects belonging to

BOX 1.1 Definitions used in this report

Program. Programmatic approach approved under the post-2008 programmatic approach modality, composed of a parent program and a variable number of child projects, designed to contribute to the overall program objective. Programs conform to the requirement of having a PFD.

Child project. Project belonging to and approved under a post-May 2008 program.

Pre-2008 programs. Large projects approved prior to formalizing programmatic approaches at the GEF by introducing the PFD requirement. These were often implemented as a set of consecutive phased projects.

Program scope. Global, regional, or country coverage of the programmatic intervention.

Homogeneous program. A program whose projects are similar in structure and outcomes, and are executed at multiple locations within a country (for country programs) or region (for multicountry programs).

Program complexity. Degree of homogeneity or difference among child projects, as well as whether they belong to multiple or single country, Agency, and/or focal area programs:

- **Low-complexity programs**, with two or less of the following attributes: homogeneity, scope, Agency, and focal area.
- **High-complexity programs**, with three or all of the following attributes: homogeneity, scope, Agency, and focal area.

the GEF Biosafety program were also excluded.[5] The child projects sample used for this comparison (n = 42) represents 14 percent of the total of child projects belonging to the 38 programs under analysis (n = 301), similar to the 14 percent representing stand-alone project terminal evaluations (n = 258) out of the total number of projects approved between May 2008 and April 2016 (n = 1795).

2. **Database of terminal evaluations analyzed for the broader adoption analysis conducted for the GEF Fifth Overall Performance Study (OPS5).** This cohort includes 447 pre-May 2008 stand-alone projects. The use of this cohort in the comparative analysis allows an assessment on whether broader adoption increased as a result of the introduction of the program modality.
3. **Database of multifocal stand-alone projects.** This cohort is currently being analyzed in the context of the Evaluation of Multiple Benefits of GEF Support (GEF IEO 2016a). It includes a total of 68 completed projects, 18 of which are post-May 2008. This multifocal cohort enables the comparison of programmatic versus stand-alone projects focusing on one of the four complexity dimensions used in this evaluation.
4. **Database of biodiversity projects.** This cohort was analyzed in a recent IEO impact evaluation (GEF IEO 2016b). It includes 553 projects and 3096 project sites.
5. **Database of land degradation projects.** This cohort was analyzed for the Value for Money Analysis for the Land Degradation Projects of the GEF recently conducted by the IEO (GEF IEO 2016c). It includes 202 projects and 1047 project sites.

The last three databases were used for comparisons with the programmatic projects cohort (n = 105 projects, 653 project sites) in the context of the geospatial analysis mentioned above).

[5] See footnote 3.

BOX 1.2 Program case studies

China-GEF Partnership on Land Degradation in Dryland Ecosystems, China, GEF ID 3482. China and the GEF set up in 2003 the China-GEF Partnership on Land Degradation in Dryland Ecosystems Program, initially in the form of a Country Programming Framework for land degradation. It was originally composed of only one project, the Capacity Building to Combat Land Degradation (GEF ID 956), under GEF Operational Program 12 (OP12).

India-GEF Coastal and Marine Program (IGCMP), GEF ID 3661. The main objective of this 4-year program is to demonstrate multisectoral approaches to mainstreaming biodiversity conservation objectives into economic activities in two marine ecoregions of the country. Conservation and Sustainable Use of the Gulf of Mannar Biosphere Reserve's Coastal Biodiversity (GEF ID 634) was selected as a counterfactual for this program.

Middle East and North Africa Desert Ecosystems and Livelihoods Program (MENA-DELP), GEF ID 4620. The goal of MENA-DELP is to contribute to the enhancement of livelihoods in desert ecosystems by harnessing their value in an environmentally and socially sustainable manner so that the flow of desert goods and services can be optimized. According to the project appraisal document (PAD), "GEF financing leveraged through the MENA-DELP will enable interested countries in the region to operationalize their existing or planned investments in desert ecosystems".

Reducing Industry's Carbon Footprint in South East Asia, GEF ID 3756. The program has two main objectives: (1) controlling the growth of greenhouse gas emissions attributable to rapid industrialization in the countries of the South East Asia region; and (2) helping these industries reduce their costs of fuel and electricity which continue to rise due to the recent steep increases in oil price. The program has been implemented through child projects in five South East Asian countries: Indonesia, Thailand, Vietnam, Philippines, and Malaysia. Vietnam and Indonesia were selected for case study missions. This case study was conducted using rapid impact evaluation (Rowe 2014).

1.3 Limitations

This evaluation had an ambitious design, justified by the multifaceted nature of the issues that had to be covered. The main constraint related to the fact that despite the long time-span covered by the evaluation, only 2 of the 38 programs included in the scope of this evaluation had all their child projects fully completed and evaluated. One of these was composed by only one child project. Overall, availability of child projects terminal evaluations for each program varied. The 52 available terminal evaluations belong to half of the 38 programs covered by this evaluation. Of them, two had at least half of their projects fully closed and evaluated. Program evaluations were virtually inexistent. Only the China-GEF Drylands partnership program underwent a program review commissioned by Asian Development Bank (ADB), the lead Agency.

These limitations on the overall body of evidence were compensated for by adjusting the existing evaluation data gathering and analysis activities, deep diving in the case studies and in the geospatial impact analysis, and adding new cost- and time-effective analyses. One such addition was the global online survey mentioned in section 1.2, which could be conducted using to the exhaustive lists of country stakeholders provided in a timely fashion by the GEF Agencies involved in the GEF programs under study.

2: Context

2.1 Program evolution, typologies, and definitions

Most of pre-2008 programs were phased/tranched ones,[1] implemented during the GEF pilot phase, GEF-1, and GEF-2, with a few single focal area programs with a country focus. A notable exception to this trend is observed in the case of the international waters focal area.[2] Phased/tranched programs tended to be discontinued by the end of GEF-3, when a new generation of programs was introduced. These were composed of a parent program and a variable number of child projects, designed to contribute to the overall program objective. Single focal area programs were the norm up to GEF-3. From the end of GEF-3 onwards, programs increasingly became multifocal and programs with a regional/global focus gained prominence in the portfolio.

In May 2008, the Council formally approved the GEF program support modality. The Council document "From Projects to Programs: Clarifying the Programmatic Approach in the GEF Portfolio" (GEF 2008a) clarifies the scope, approval procedures, and value added of programmatic approaches compared with the predominant project-based approach. This reform marked the official start of programs at the GEF. Since then, programs and child project project identification forms (PIFs) began constituting a substantial volume of Council work programs. The majority of programs covered by this evaluation were approved in the last two years of GEF-4. Early post-2008 programs tended to be designed and implemented through several child projects brought together under an objectives' framework that aimed at securing a larger-scale and sustained impact on the global environment. During GEF-5, program design started to become increasingly complex: compared with earlier programs, the GEF-5 shows a greater range of nonhomogeneous, multifocal, multi-Agency, and/or regional/global programs.

For much of GEF history, program definitions evolved as a function of their operational and financial features. The GEF had to accommodate for the diversity of: (1) programs' financial, administrative, and operational categorizations; (2) characteristics of GEF Agencies, with the main distinction between the international financial institutions and UN Agencies; and (3) topics of interest. This changed in October 2014, when the GEF Council approved a revised programmatic approach modality defined in terms

[1] Pre-2008 long-term programmatic interventions could only be implemented as subsequent phases of large projects, funded through discrete financing tranches. A detailed description of the evolution, typologies, and definitions of programs is provided in the evaluation approach paper (annex A).

[2] For example, the Black Sea and Danube Basin initiative evolved from being a phased project prior to May 2008 to a program with parent and child projects afterwards.

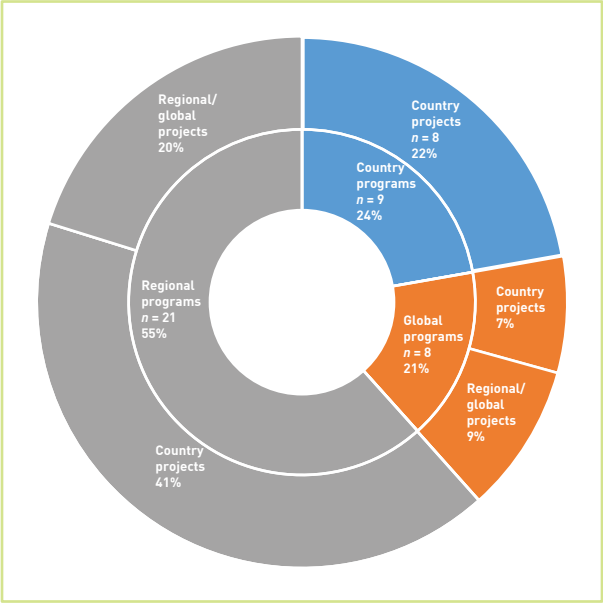
of the program scope: (1) thematic—the program addresses an emerging issue (e.g., a driver of environmental degradation); and (2) geographic—the program addresses an established need to secure a large-scale and sustained impact for the environment and development in a particular geography (landscape, ecosystem, district, provinces, country, region, among others) (GEF 2014b). In GEF-6 the GEF introduced the integrated approach pilots (IAPs). These programs align with the GEF2020 Strategy, which emphasizes the need to support transformational change and achieve impacts on a broader scale, and calls for the GEF to focus on the drivers of environmental degradation by supporting broad coalitions of committed stakeholders and innovative and scalable activities.

2.2 Portfolio

The post-2008 portfolio covered by this evaluation is diverse in type, scope, focal area, and implementation arrangements of programs and their respective child projects.[3] Nine country programs account for $269 million of GEF grant financing (18 percent of the total program financing). Twenty-one regional programs account for $892 million (60 percent), and eight global programs for $325 million (22 percent). Child project financing shows comparable shares (figure 2.1).

Most child projects are implemented in a single country: 230 projects, accounting for $856 million (71 percent of the total child project financing). The remaining 71 ($347 million, 29 percent) are regional or global projects. As for the regional distribution, Asia is predominant, with 127 projects ($520 million, 35 percent), followed by Africa with 111 projects ($310 million, 21 percent).

FIGURE 2.1 **Program and child project geographic scope by share of GEF grant**



A total of 171 child projects (57 percent) are currently under implementation, while 63 (21 percent) have been completed. GEF-4 country and regional programs are mostly multifocal, regarding biodiversity and climate change. Multifocal programs became increasingly predominant in GEF-5 and 6 (table 2.1).

The large majority of child projects are delivered through multifocal programs (figures 2.2 and 2.3).

Twenty-four out of 38 are multi-Agency programs, accounting for $1,079 million (73 percent of the total program financing). However, the projects themselves tend to be implemented by a single Agency (figure 2.4): 191 projects under multi-Agency programs (61 percent of the total program financing) are implemented by a single Agency. Overall, the majority of child projects are implemented by the World Bank ($384 million, 32 percent), followed by the United Nations Development Programme (UNDP; $325 million, 27 percent) and the United Nations Environment

[3] A detailed description of the portfolio is provided in annex C.

TABLE 2.1 Post-2008 programs by geographic scope and focal area

Focal area	GEF-4			GEF-5			GEF-6		
	No.	GEF grant (million $)	Cofinancing (million $)	No.	GEF grant (million $)	Cofinancing (million $)	No.	GEF grant (million $)	Cofinancing (million $)
Country	7	215	2,337	2	54	453			
Biodiversity	2	53	775	1	26	143			
Climate change	2	101	875	0	0	0			
Multifocal	3	62	687	1	28	310			
Global	4	125	554	1	51	223	3	149	770
Biodiversity	1	41	48	0	0	0	0	0	0
Climate change	2	79	501	0	0	0	1	12	56
Multifocal	0	0	0	1	51	223	2	138	715
POPs	1	4	5	0	0	0	0	0	0
Regional	9	366	1,760	11	402	5,009	1	124	683
Biodiversity	1	34	128	0	0	0	0	0	0
Climate change	2	55	544	3	38	1,103	0	0	0
Int'l waters	1	34	133	2	49	479	0	0	0
Multifocal	4	225	934	6	315	3,427	1	124	683
POPs	1	18	21	0	0	0	0	0	0
Total	20	706	4,651	14	507	5,685	4	273	1,453

FIGURE 2.2 Program/project focal area (number)

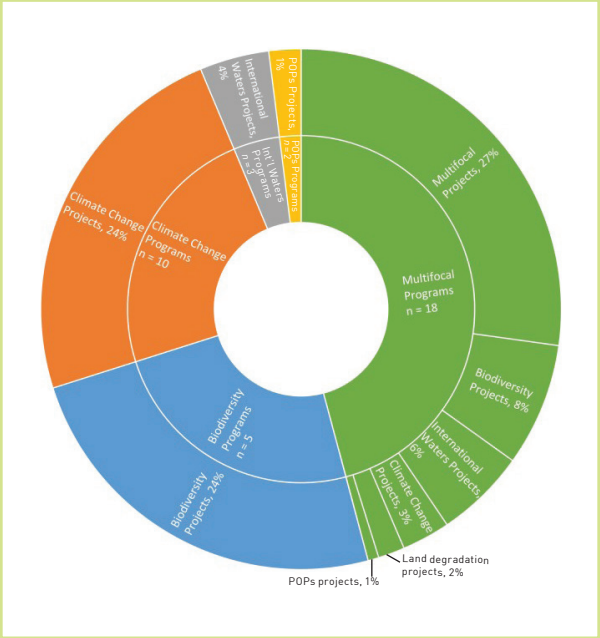


FIGURE 2.3 Program/project focal area (% GEF grant)

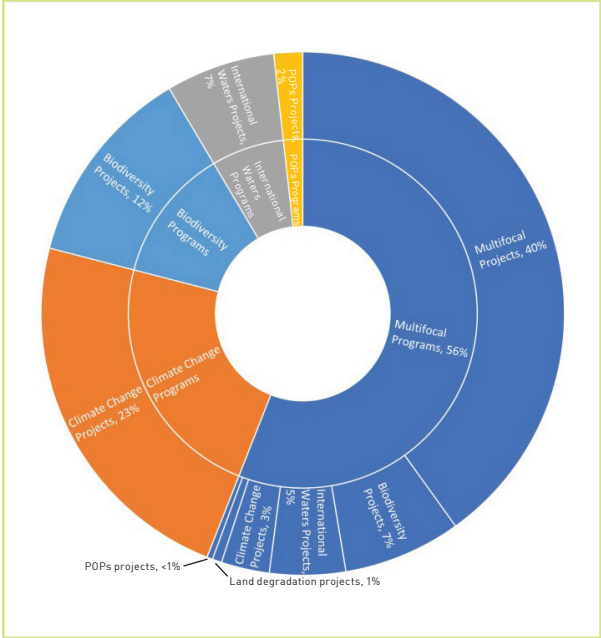
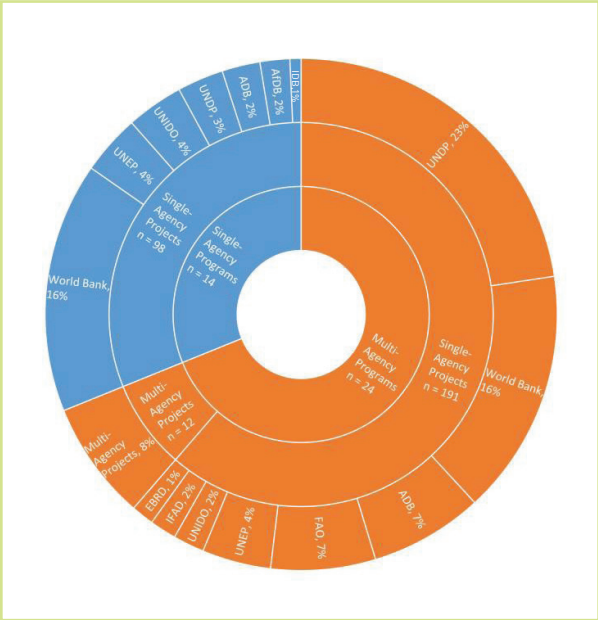


FIGURE 2.4 **Program/project Agency by GEF grant**



Programme (UNEP; $119 million, 10 percent).[4] Together, these three Agencies comprise 69 percent of the total project financing.

2.3 GEF versus comparable donor-based programs: similarities and differences

Over the years, the GEF financed programs that were collections of individual projects (country-based or otherwise), programs that represented long-term strategic sectoral engagement, multicountry programs, and sequenced interventions. Discussions held with central-level stakeholders during the development of the approach paper for this evaluation suggested that the GEF's conceptual framework for programs is unique. In the introductory chapter, the approach paper of this evaluation uses a definition of program from the Organisation for Economic Co-operation and Development (OECD), which is not fully applicable to the GEF.[5] For this reason, a comparative study has been conducted as a component of this evaluation, with the objective of highlighting differences and similarities in conceptual frameworks and practices of GEF and other donor-based program approaches. The main findings of this study, presented as a separate technical document in volume 2 of this evaluation, are summarized hereafter.

The idea of programs in the development cooperation context emerged in the late 1980s in response to slow progress in achieving tangible impacts in developing countries through the project support modality. Notably, there was concern among the donor community that the project-based approach was unsustainable and inefficient in creating economic growth and self-reliance. Among the factors considered as causing the absence of sustained results was the lack of ownership of the development process by recipient countries, and the dispersion of efforts into many discrete projects that were neither related to nor coordinated with one another or with national policies.

During the 1990s, various new aid delivery mechanisms emerged in line with the program approach. Among them was the sector investment program, designed as an investment mechanism to channel funding toward covering expenditures of a given sector in the country economy; the sectorwide approaches (SWAp), under which funds contribute directly to a country-defined sector policy; and the program-based approaches, a generic program approach based

[4] These percentages include all single and multi-Agency child projects, be these under a single or a multi-Agency program.

[5] The OECD defines program-based approaches as "a way of engaging in development cooperation based on the principle of coordinated support for a locally owned program of development" (OECD DAC 2008, 2).

on comprehensive and coordinated planning in a given sector, thematic area, or under the aegis of a national poverty reduction strategy. The pressures to increase coordination, maximize impact, and reduce transaction costs while increasing national ownership continued to increase during the second half of the 1990s and the early 2000s. This led to a series of major international policy responses, including the 2000 Millennium Development Goals, the 2002 Monterrey Consensus, the 2003 Rome Declaration on Aid Harmonization, and the 2005 Paris Declaration on Aid Effectiveness, the latter followed by the Accra Agenda for Action in 2008 and the Busan High Level Forum on Aid Effectiveness in 2011, among others. These major policies aimed at delivering more coordinated development support, increasing national ownership, and streamlining the development cooperation efforts for increased impacts.

Programs in the GEF have evolved differently than those in the broader development context, with their own definitions and set of procedures. While the GEF policy documents do make reference to most of the same principles invoked in the various program-based approaches highlighted above (e.g., country ownership, coordination, among others), not all of these principles have applied to GEF programs.

Among the earliest GEF programs, Country Program Partnerships were designed to provide long-term and large-scale focus on a set of specific issues within a single country. Regional programs, regrouping countries intending to work together to achieve an environmental impact in a given shared geographic unit, were constituted by highly interdependent child projects. Multicountry programs grouped countries, co-located or not, to work separately to achieve similar objectives under a common overarching goal, sometimes using similar approaches. Public-private partnerships (PPPs), added to the programmatic portfolio in GEF-5, involved the setting up of investment funds to be disbursed according to specific rules in one or more countries, toward a set objective. Table 2.2 provides an overview of the main characteristics of the most common types of programs from the broader development context, highlighting the main differences and similarities to those that have been implemented with GEF support to date. These typologies do not intend to be exhaustive, nor are they mutually exclusive.

In summary, this brief comparative overview indicates that although GEF programs are designed with most of the same internationally agreed principles of coordination, harmonization, country ownership, and higher efficiency and effectiveness, they differ mainly in terms of the degree of flexibility that they allow in their operationalization. GEF programs mostly fall in the category of multiproject programs, essentially because the main operational tool for channeling GEF resources remains the project. Even the most recent group of GEF-6 programs, including the IAPs, is operationalized through individual projects, with clear time and resource limits and a strong attention placed on individual project results.

The fact that the GEF is replenished on a voluntary basis every four years does not favor its ability to engage in long-term partnerships. Unsurprisingly, GEF programs tend to be narrower in scope than those implemented by development cooperation agencies, be they bilateral or multilateral. Multiproject programs have so far provided the most appropriate program approach through which the GEF can strive to channel more strategic and programmatic assistance to countries for environmental issues, which fit with the operational requirements of periodical replenishments and the principles of incremental financing (e.g., country ownership, coordination, among others), not all of these principles have applied to GEF programs.

TABLE 2.2 **Comparing GEF programs with major program typologies**

Typology	Key characteristics	Comparison with GEF programs
Sector investment programs	▪ Channel large-scale, long-term investment into specific economic sectors by targeting themes and topics that go beyond traditional economic sectors ▪ Direct funding to cover all expenditures, including recurrent and investment ones of a given sector ▪ Have to be based in national strategy and policy framework ▪ Government or private sector has to manage the expenditure and policies ▪ Promote use of local capacity ▪ Use multidonor and multistakeholder approach ▪ Are at least partially loan-financed	▪ Similar to some of the earlier GEF-sequenced programs, allowing for channeling long-term funding (e.g., international waters) ▪ GEF Agencies could participate as cofinancers into a sector investment program, but would likely have to submit a project through GEF Council for operationalization, highlighting the incremental costs covered ▪ GEF grants cannot cover recurring or investment costs
Sectorwide approaches	▪ Funds are used for a sector-specific defined policy under the government leadership ▪ Usually a framework setting a direction of change ▪ Coordinate multiple sources and types of financing under the umbrella of a sector policy or plan ▪ Use multidonor and multistakeholder approach ▪ Use national systems for expenditures monitoring ▪ Target social sectors in highly dependent and low-income countries ▪ Contribute to facilitate the dialogue between donors and government and so strengthen the government leadership and coordination	▪ Environment SWAps exist but have experienced mitigated success; the GEF has been involved in a few of them as a funding partner ▪ The GEF cannot initiate or lead a SWAp, even in the environment and natural resources sector; certain types of costs have to be financed from other sources; the lack of institutional weight that often characterizes environmental ministries makes environmental SWAps difficult to operationalize, and the cross-sectoral nature of some environmental issues does not lend itself well to SWAp-like arrangements
Program-based approaches	▪ Focus more on the national policy objectives (multisectoral, sectoral, or subsectoral) and support locally owned development programs ▪ High degree of institutional flexibility ▪ More suited to environmental issues	▪ By design, all GEF projects and programs are to be based on a national policy priority ▪ GEF planning horizons and time limits on fund availability exclude long-term recurring costs of program-based approaches from GEF processes
Multiproject programs	▪ Most widely used type of programmatic approach ▪ Make no assumptions about the degree of donor coordination or country ownership ▪ Use of multidonor and multistakeholder approach and multiple types of financing ▪ Comprise projects that must be linked by some kind of unifying principle ▪ Offer flexibility, allow for higher-level impact monitoring, and provide the possibility for donors to channel larger amount of financial assistance in a smaller number of transactions	▪ Frequently found in GEF programming ▪ Lend themselves well to GEF cofinancing as they encourage multidonor approaches, with blended types of financing ▪ GEF multiproject programs have sought to create internal coherence and consistency through various means (integrative projects, shared methodologies, and approaches) ▪ Reflect the intention of more effective means of channeling funds, higher-level impacts, and smaller number of transactions

3: Findings

In this chapter, we first examine the evidence base assembled from the full range of quantitative and qualitative methods employed (see section 1.2) on each of the key evaluation issues and then present the findings derived from this process. These findings assemble evidence on the key areas addressed by the evaluation questions on effectiveness, relevance, and efficiency. While the over-arching comparison is between programmatic and project approaches, the analysis builds upon a variety of data sets including pre- and post-2008 stand-alone and child project cohorts, as well as single focal and multifocal area projects.

3.1 Programmatic projects compared with stand-alone projects

Child projects under programmatic approaches performed better than stand-alone projects that are not part of programs; complexity matters for outcomes. Child projects performed better than stand-alone projects on all dimensions, especially on execution quality, sustainability, and M&E design. Attention to synergies and longer-term results at the program design stage has been mentioned by stakeholders as a contributing factor. However, child projects in complex programs underperformed relative to those in simpler programs or stand-alone projects, except for implementation quality, sustainability, and M&E design. In terms of vegetation density and forest cover, child projects have improved local environmental conditions compared with the null case, and single focal biodiversity projects provided more benefits than their stand-alone comparators.

An analysis of ratings from the IEO's 2016 APR database of post-2008 project terminal evaluations shows that post-2008 child projects were rated higher than stand-alone projects in the APR database on all counts (figure 3.1).[1] Eighty-six percent of child projects had moderately satisfactory and above outcome ratings compared to 84 percent of stand-alone projects. The most pronounced differences are on execution quality, sustainability, and M&E design. Stakeholders interviewed[2] mentioned attention to synergetic and longer-term results at the program design stage as a contributing factor.

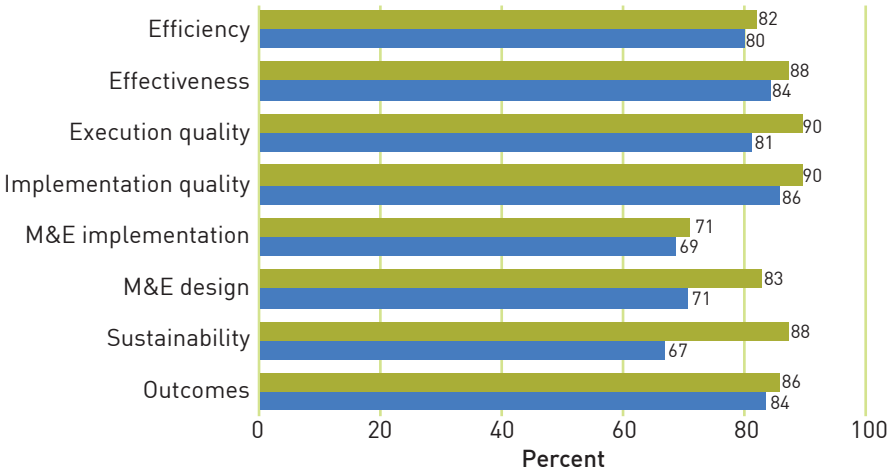
Other trends emerge when programs are classified according to their complexity.[3] Splitting the limited number of available terminal evaluations of completed projects into two subcohorts of projects, namely those belonging to low- and those to

[1] For effectiveness and efficiency, GEF Agency ratings were used when available; otherwise supplemented by IEO ratings.

[2] Stakeholders from headquarters of GEF Agencies and the GEF Secretariat.

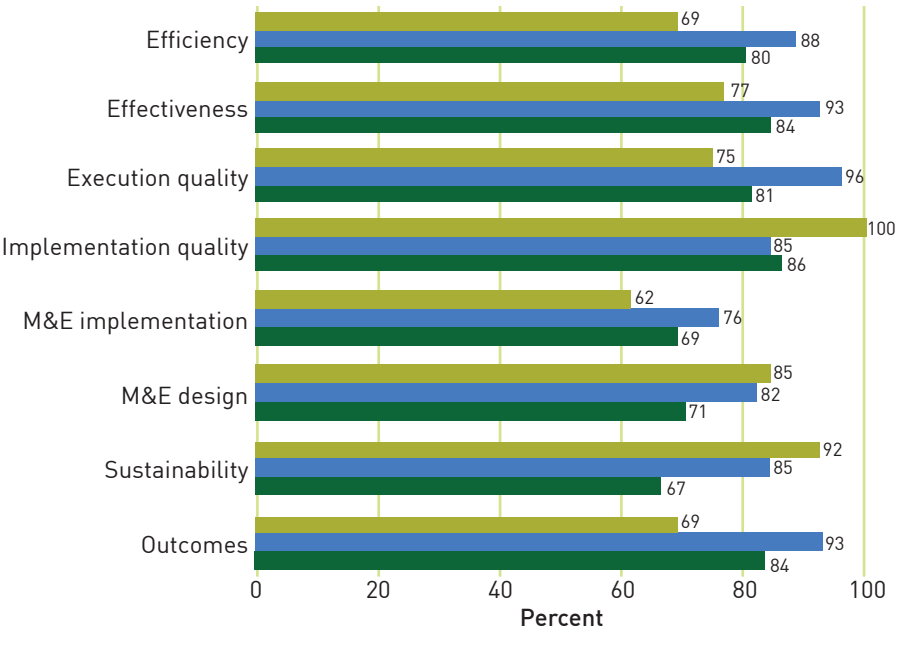
[3] For these comparisons, programs have been classified as low- and high-complexity programs, as explained in box 1.1.

FIGURE 3.1 APR ratings for post-2008 child versus stand-alone projects



high-complexity programs, further reduces the number of observations available for comparison. However, tested for statistical significance, the relationship between APR outcome ratings from available terminal evaluations and the four complexity factors described in box 1.1 shows that complexity is a good predictor of outcomes (both at program and at child project levels) at p = 0.05, and is inversely related to the APR outcomes: the higher the complexity, the lower the outcomes. As shown in figure 3.2, child projects under low-complexity programs rate significantly higher than

FIGURE 3.2 APR ratings for post-2008 child versus stand-alone projects, by program complexity



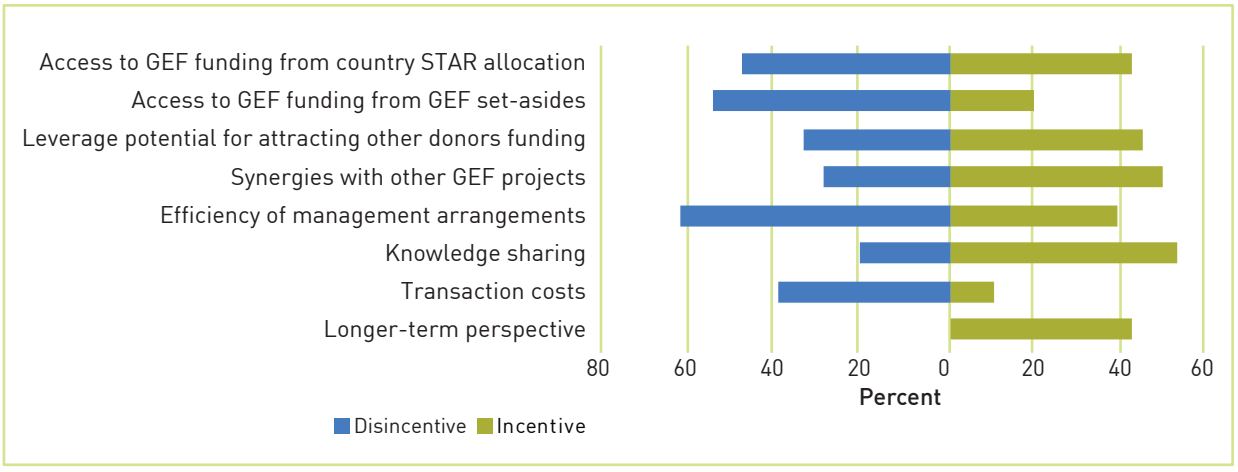
those under high-complexity programs on five out of eight parameters. Exceptions are M&E design, sustainability, and implementation quality, where projects under more complex programs perform better. All child projects in high-complexity programs were rated in the satisfactory range concerning quality of implementation by GEF Agencies. Interviews reported that the design process for complex programs stimulates discussions within and among GEF Agencies, preparing the ground for better project implementation. A comparison between child projects of low-complexity programs and stand-alone projects shows that the child projects score higher on all dimensions of performance except for implementation quality, where the two cohorts are very similar. Sustainability and M&E design of these child projects are substantially better than in stand-alone projects.

This evidence clearly shows that while complex programs may have longer-term sustainability and better M&E design, they are substantially more difficult to deliver than simple ones. While the programmatic approach has led to a broad range of improvements in performance and results, these have not yet been consistently attained by more complex programs. The substantially higher sustainability and M&E design ratings of child projects compared with stand-alone projects suggest that programs are designed with a long-term perspective, which is reflected in their child projects. Analysis of program complexity along the lines followed here has been applied to the full cohort of child projects throughout this report.

Country stakeholders responding to an online survey conducted by this evaluation indicated that improved knowledge sharing and the potential for synergies with other GEF projects that are part of the same program are the greatest incentives for joining it (figure 3.3). Against these perceived advantages, transaction costs are perceived to be high in programs, while there are greater challenges to managing them efficiently. These stakeholders also highlighted that designing for the long term is an important factor contributing to better program results.

Of the GEF focal areas, biodiversity and land degradation offer a strong opportunity to biophysically measure results, since they have indicators that can be assessed across large scopes and a substantial body of programs and projects. The

FIGURE 3.3 **Incentives and disincentives to join a program**



NOTE: *n* = 155.

analysis, conducted to measure geospatially observed physical changes in terms of vegetation productivity (NDVI) and forest cover, indicates that at the global scale, child projects (whether biodiversity or land degradation) have resulted in improvements in local environmental conditions (as compared with the null case counterfactual) at a statistically significant level, which enables them to be attributed to the project. Of the different cohorts used for programmatic versus stand-alone comparisons, single programmatic biodiversity projects provided more benefits than their stand-alone comparators at a statistically significant level.[4] Other findings from this analysis, which are discussed in the paragraphs below, are context sensitive.

Figure 3.4 summarizes findings on differences among projects in GEF-4 and GEF-5 cohorts, in each case choosing the best available counterfactual set. For example, multifocal child projects with land degradation components are contrasted to stand-alone projects with a similar multifocal component. The blue areas (•) in these figures indicate those aspects in which child projects underperformed compared with stand-alone ones, while green areas (•) indicate the contrary. Also in the figures, the green labels of the dimensions analyzed indicate standard confidence, akin to traditional significance testing: this descriptor is used if either the traditional, linear parametric model or the causal tree indicates significance or robustness (respectively), and the models agree on the findings. Lower confidence, in black labels, indicates cases where the models agree in findings, but neither model ascribes clear significance or robustness. As an example of these illustrations, while it was found that, on average, child projects provided more benefits in the context of single focal biodiversity projects, mixed results were found for multifocal child projects with a biodiversity component; these figures summarize the dimensions along which all programmatic biodiversity implementations varied in their success relative to stand-alone projects.

As the figures illustrate, for projects in GEF-4 and GEF-5 there was considerable heterogeneity in the conditions under which child projects gave more benefits than stand-alone ones. The only subset of child projects with biodiversity components that clearly related to improved vegetation were those operating in areas that already had relatively good initial vegetation productivity (figure 3.4a).

In terms of avoided forest loss there were very few dimensions along which child projects with biodiversity components outperformed the stand-alone projects (figure 3.4b). The greatest additional positive contribution was evident in those areas where the initial state of forest cover was poor.

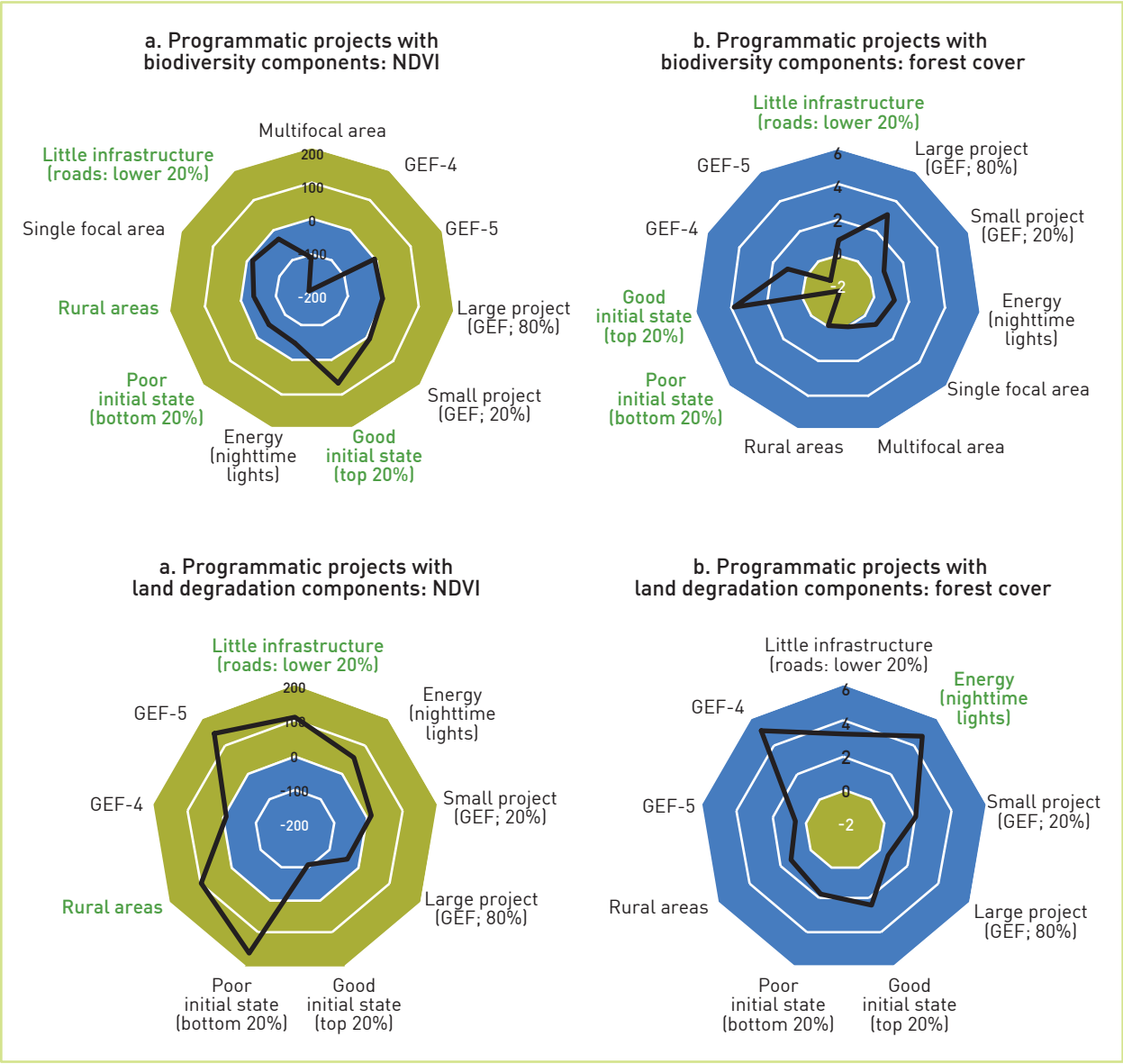
With regard to vegetation cover, land degradation components in child projects outperformed comparable stand-alone projects on several dimensions (figure 3.4c). Substantial additional results were found in rural areas, those with little infrastructure, and where the initial state of degradation was poorest.

Unlike the situation with regard to vegetation productivity, forest cover effects of child projects with land degradation components are slightly worse than those of stand-alone ones for all dimensions (figure 3.4d). In other words, being part of a program does not seem to bring better results than being in a stand-alone project.

Except in the case of comparisons with the null case counterfactual, these findings based on the comparison of remotely observed physical indicators present a challenging picture to interpret due

[4] In this case, the models used in this analysis provided standard confidence that improved environmental outcomes are attributable to child contrasted to stand-alone projects.

FIGURE 3.4 Heterogeneity in remote sensing findings along relevant dimensions



NOTE: NDVI = 0–10,000 units; forest cover = km^2 of avoided loss. Labels in green = standard confidence; black = lower confidence.

to their heterogeneity. At the global scale, considerable complexity exists when seeking to identify where programmatic implementations may be favorable in contrast to stand-alone projects. The type of child project (multifocal as contrasted to single focal), geographic location, monetary size of the child projects, and targeted outcome of interest all contribute to the relative value-add of programs.

However, a global trend emerged suggesting that additional program complexity can mediate observed results in negative ways. Two pieces of consistent evidence support this finding.[5] First, attributable evidence from separate causally identified studies suggest that the average single focal

[5] See figure 3.2 and related discussion in the geospatial impact analysis in TD2, volume 2.

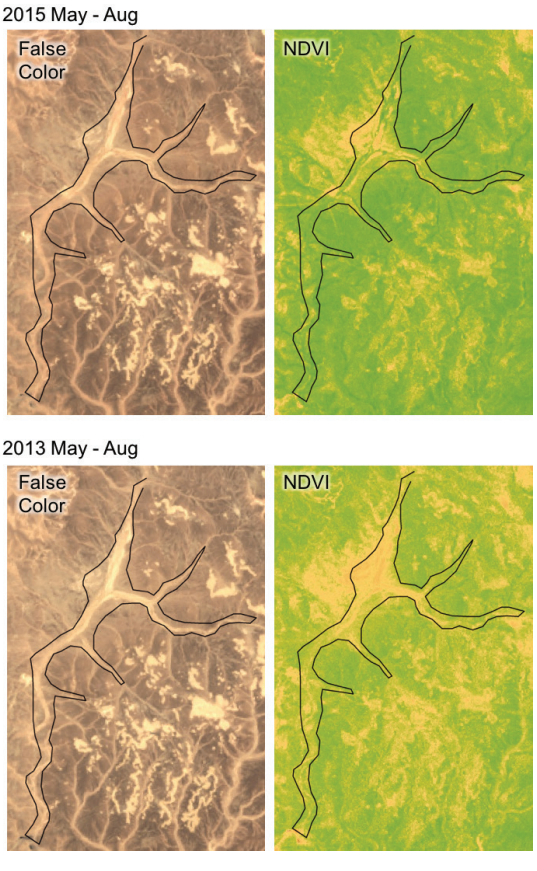
biodiversity project implemented under a program tended to outperform those not under a program; this was not true for multifocal biodiversity projects. Second, descriptive evidence suggests that as a project scale increases, the attributable effect of GEF projects does not increase in a linear fashion (and, in fact, larger funding does not necessarily result in more positive outcomes along the outcomes analyzed here). This is consistent with a much broader finding emerging from this evaluation, namely that the challenges to program performance and results posed by additional forms of complexity have not yet been overcome by GEF implementing and executing partners—which require detailed strategies for improvement, if future intentions to expand programmatic approaches are to deliver the expected enhanced global environmental benefits.

To delve deeper, the evaluation examined the same parameters in three of the four case studies. The results confirmed the global trends described above. In the child project areas of case studies in India, China, and Jordan, vegetation productivity improved compared with the null case; in India, where the program analyzed is a single biodiversity focal area one, it also improved against a counterfactual project.[6] In India, the vegetation in the Coringa Wildlife Sanctuary reached a higher level for the project period 2011–15 compared with the preproject period 2007–09. Compared with 2009, inside the India project site the vegetation condition for 2015 shows an improvement (figure 3.5). In Jordan, Al Huseinieh Reserve shows a significant increase in vegetation cover since 2013 (figure 3.6). More details are provided in the case study reports in volume 2.

[6] In the cases of the China-GEF Partnership on Land Degradation and the MENA-DELP program, no suitable counterfactual projects could be identified, so the comparison could only be made against the "without project" scenario.

Figure 3.5 Spatial distribution of the NDVI around India's Coringa Wildlife Sanctuary, 2015

Figure 3.6 Comparing the average May-Aug NDVI in the Al Huseinieh Reserve, Jordan (2013–15)



3.2 Broader and longer-term programmatic results

Program design for broader adoption has improved substantially over time across focal areas, but actions were limited. International waters are the only exception, having shown well-designed programmatic thinking from the early GEF phases. Data as to whether this improved design has translated into broader results are not yet available. While child projects rated higher than stand-alone projects on design for broader adoption, they demonstrated less concrete action for achieving broader adoption of outcomes during implementation.

Broader adoption in the GEF is said to have taken place when stakeholders adopt, expand, and build on the initiatives that GEF funds, during the project period or afterwards, as a result of initial project successes. Broader adoption takes place mainly through five transformational mechanisms, namely mainstreaming, replication, scaling-up, sustaining, and market change, leading to progress along the path from outcomes to environmental impact (box 3.1).[7]

Broader adoption is a central concept in GEF programs. One of the anticipated advantages of programmatic approaches, as expressed in the Council document "The GEF Programmatic Approach: Current Understandings" (GEF 2001), is that they will deliver results that are both broader and longer term than those obtained from stand-alone projects. This was confirmed by the expectations expressed by stakeholders interviewed. To help assess the extent to which this has been achieved, comparisons were conducted between the OPS5 cohort of terminal evaluations of stand-alone projects used for broader adoption analysis (pre-2008), terminal evaluations of post-2008 child projects, and a post-2008 multifocal project terminal evaluations cohort.[8] These show differences in the extent to which projects were designed to achieve broader adoption as well as in the amount of concrete action taken for this purpose, as reported in their respective terminal evaluations.

Box 3.1 Mechanisms for broader adoption of project outcomes

Mainstreaming. When information, lessons, or specific aspects of a GEF initiative become part of a stakeholder's own initiatives, such as laws, policies, regulations, and programs. This may occur through governments and/or through development organizations and other sectors.

Replication. When a GEF-supported intervention is copied at a similar scale, often in other locations.

Scaling-up. When a GEF-supported intervention is implemented at a larger geographical scale, often expanded to include more political, administrative, economic, or ecological components. This allows concerns that cannot be resolved at lower scales to be addressed, and promotes the spread of GEF contributions to areas contiguous to the original project site.

Sustaining. When a GEF-supported intervention or outcome is continued by the original beneficiaries without GEF support so that they can keep reaping the benefits.

Market change. When a GEF-supported intervention influences economic demand and supply shift to more environment-friendly products and services.

[7] For a detailed description of the GEF generic theory of change framework, see section 7.3 of GEF IEO (2014b).

[8] See section I.2 for a description of these cohorts of comparators.

On design for broader adoption, recent child projects scored higher than both earlier (pre-2008) projects analyzed for OPS5 and recent (post-2008) stand-alone projects. However, they showed less concrete action for broader adoption during implementation than their stand-alone counterparts. As shown in figure 3.7, 31 percent of child projects intended to promote broader adoption, but only 13 percent took some concrete actions toward this and 6 percent implemented elements of broader adoption. The inverse is true for pre-2008 OPS5 stand-alone and the post-2008 multifocal cohorts, in both of which projects have taken more concrete action for broader adoption than have the recent child projects. In the cases where actions for broader adoption were taken, it was related in most cases to management approaches and knowledge management initiatives that were already foreseen at the design stage. It is noteworthy that the terminal evaluations of 44 percent of child projects and 39 percent of multifocal projects did not mention environmental change beyond project outcomes. No judgment could therefore be made on the extent to which broader adoption has been achieved.

Compared with the empirical position revealed by examination of terminal evaluations, stakeholders indicated a highly optimistic perception of the contribution of child projects toward sustainability and broader adoption of program results (figure 3.8).

While child projects under both the low- and high-complexity cohorts showed comparable results, those in highly complex programs had more mention and planning for broader adoption, while those in simpler programs had more concrete action on this dimension (figure 3.9).

This indicates an intention of a long-term perspective as complexity increases, while actual implementation reduces.

The most frequently observed mechanisms of broader adoption were mainstreaming, mentioned in one third of the terminal evaluations analyzed and replication, reported in 21 percent of the cases. Scaling-up was lower, at 6 percent, and market change was virtually absent. It is too early to say more on achieved programmatic broader adoption, except for acknowledging that it takes

FIGURE 3.7 **Broader adoption of project outcomes**

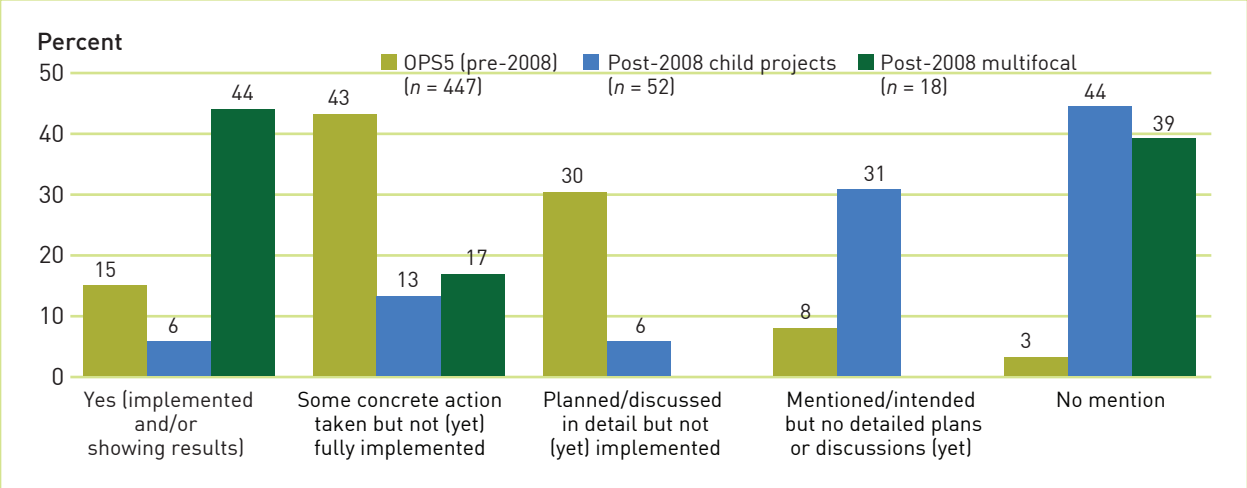
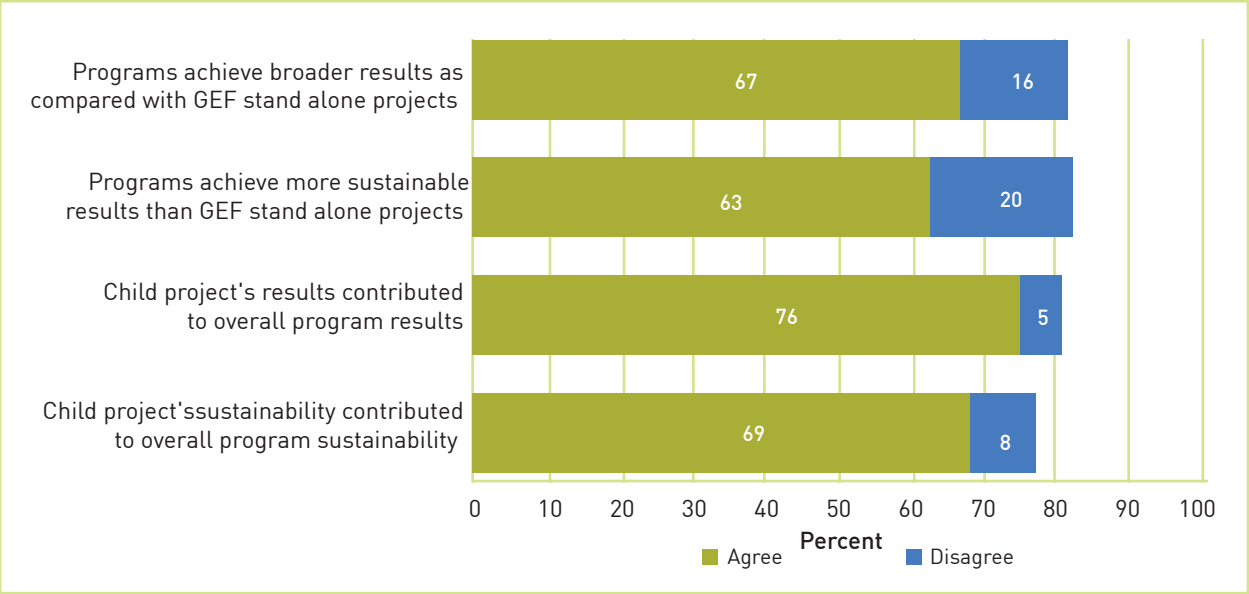
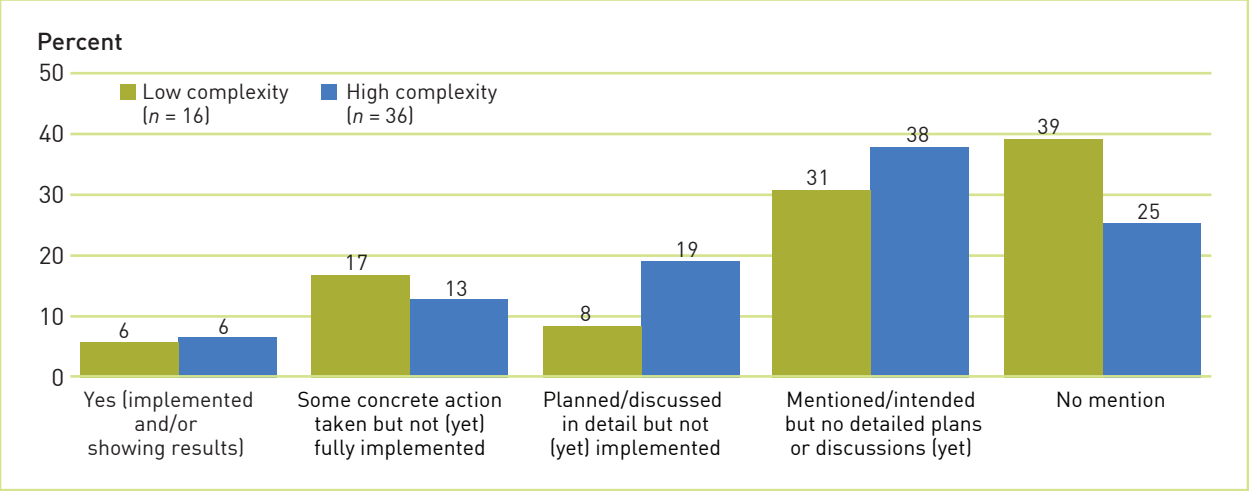


FIGURE 3.8 Country stakeholder perceptions on broader adoption



NOTE: *n* = 155.

FIGURE 3.9 Broader adoption of project outcomes by program complexity



NOTE: *n* = 36.

longer to operationalize a complex set of issues than more simple approaches.

Detailed case studies of specific programs provided examples where mainstreaming has occurred. The India Coastal and Marine Program and the China-GEF Partnership on Land Degradation in Dryland Ecosystems in China showed substantial progress in mainstreaming new approaches toward environmental management, particularly at system and institutional levels (box 3.2).

BOX 3.2: Evidence of mainstreaming in two country programs

The India Coastal and Marine Program. In terms of delivering broader scale and longer-term environmental outcomes compared with stand-alone projects, both child projects have made progress toward stronger institutional and systemic frameworks for environmental management, whereas the stand-alone project did not. In Godavari, the East Godavari River Estuary, Andhra Pradesh, or EGREE Foundation (which the project established), has had substantial success in bringing private sector bodies into the environmental protection arena; while in Maharashtra the Coastal and Marine Biodiversity Foundation is less advanced, but expects to target similar stakeholders. In the counterfactual project area, the Gulf of Mannar Biosphere Reserve Trust was established, but has not played a strong role in environmental management and has been largely ineffective since project closure. Both the child and stand-alone projects have devoted much of their attention to strengthening community-level livelihoods, but the counterfactual project has not gone far beyond this while both child projects have focused on a much broader range of stakeholders in the production landscape.

Both child projects have informed national policy actions. The Godavari project promoted the inclusion of a chapter on coastal and marine protected area conservation in the national Wildlife Action Plan (2016–2030), while the Malvan project influenced changes in the Marine Protected Area Law. This ability to influence national-level instruments is attributed to the ability to escalate knowledge of project approaches and results through influential members of the National Steering Committee.

Partnership on Land Degradation in Dryland Ecosystems, China. GEF Agencies' staff in Beijing confirmed the partnership achievements in mainstreaming of Integrated Ecosystem Management in provincial-level policies and plans. After an International Fund for Agricultural Development–led child project ended, Integrated Ecosystem Management was integrated in 26 more counties in Gansu, and 6 more National Nature Reserves in other provinces. Another implementing Agency, Asian Development Bank noted that through the partnership, for the first time an integrated ecosystem approach was introduced in China, pointing to the IEM feature of involving technical and financial resources from different sectors and government ministries and departments at national and local level. Under IEM, a set of principles was developed to involve local stakeholders (local governments, local research institution, and universities) to build capacity to combat land degradation through a bottom-up approach. IEM was mainstreamed into the five-year plans in four out of the six provinces involved in ADB projects. The World Bank also confirmed that participatory natural resource planning and management was introduced and adopted in other projects.

These cases showed lower achievements with regard to replication and scaling-up. The rapid impact evaluation case study found that the South East Asia energy efficiency program is leading to substantial energy saving gains in both Vietnam and Indonesia and that these gains are attributable to the United Nations Industrial Development Organization (UNIDO) program, set in the context of national legislation, ISO 50001, and other factors.[9] However, replication of these direct effects to other high-energy consuming enterprises was not yet certain, according to the assessments of a global panel of energy efficiency experts. This suggests that the UNIDO approach is relevant for enterprises directly engaging in applying Energy Management Systems as a result of taking the UNIDO training,

[9] See the rapid impact evaluation case study report in TD4, volume 2.

but weak in generating replication beyond these enterprises. The limited progress in terms of scaling-up highlighted earlier in the quantitative broader adoption analysis is illustrated by field-based evidence from the MENA-DELP case study (box 3.3).

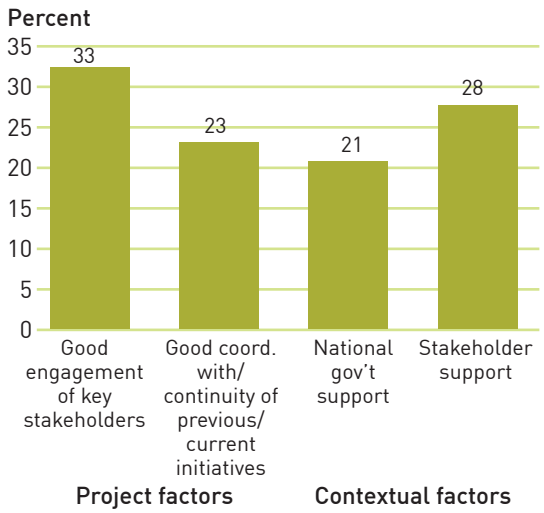
Whether project environmental outcomes are achieved or intermediate outcomes are broadly adopted is dependent on both project- and context-related factors. The most prominent factor affecting outcomes is strong national ownership, promoted by good engagement with, and support of, key stakeholders such as national governments, civil society organizations, and the private sector (figure 3.10).

BOX 3.3 Absence of scaled-up results of the MENA-DELP

The MENA-DELP is a collection of individual national projects, loosely related to each other through a regional umbrella project. Their coherence in the program in terms of environmental objectives is very generic—they are all attempting to harness an arid or semi-arid landscape for environmentally sustainable development. There is no evidence that there are any multiplicative benefits from their participation in the regional program. The outcomes and potential impacts of MENA-DELP are therefore not different from those of the national projects, apart from some aggregate M&E data and experience sharing and lesson learning among the program participants.

Overall, the results of MENA-DELP are not demonstrably broader scale or longer term than they would have been through the implementation of a set of stand-alone projects.

FIGURE 3.10 Factors contributing to broader adoption of project outcomes



NOTE: *n* = 52.

3.3 Addressing drivers of environmental degradation through programs.

Programs represent a shift toward a more integrated systemic approach to address drivers. Programs have evolved from a narrow approach, largely focused on mitigating the negative effects of food and energy production on biodiversity loss, land degradation, and climate change toward applying an integrated approach encompassing a wider set of drivers such as food and energy production and consumption, buildings and infrastructure, construction, and transportation.

The meta-analysis conducted on pre-2008 programs (see section 1.2) indicates that 39 percent of those programs addressed food production as the driver of environmental degradation. Addressing food production as a driver significantly increased to 69 percent of (36) post-2008 programs (encompassing 282 projects). This cohort also shows a move toward addressing other drivers besides food production, in particular energy production,

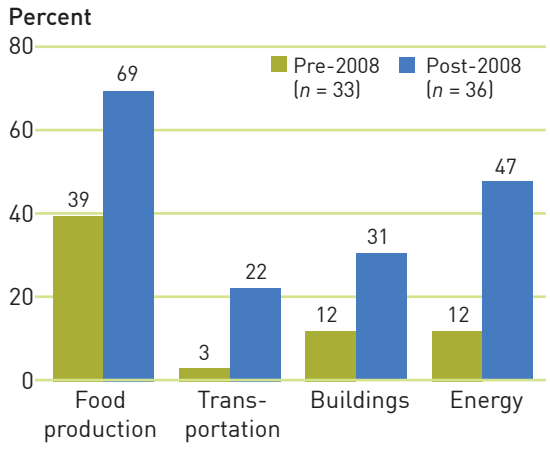
which was dealt with in 47 percent of the cases, and to a lesser extent buildings and infrastructure (31 percent) and transportation (22 percent) (figure 3.11). This analysis indicates that while addressing drivers as a specific concept has been newly and explicitly articulated in the GEF2020 Strategy, historically GEF interventions have attempted to do this to some extent. However, they did so without an explicit analysis of this dimension in their project documents.

Central-level stakeholders from the STAP and the Secretariat highlighted the need for a comprehensive theory of change to address global drivers. To them, bigger investments are in principle more likely to address drivers, whereas projects tend to address symptoms. Drivers tend to cut across national boundaries, which explains why regional and global programs are necessary.

Case study programs in India and MENA-DELP showed a clear focus on drivers of environmental degradation (box 3.4).

In summary, pre-2008 programs focused mostly on environmental degradation caused by food production activities, although there were also substantial areas of intervention related to energy. This somewhat narrow approach changed in post-2008 programs, which focused on mitigating the negative effects of both food and energy production on biodiversity loss, land degradation, and climate change. A new emphasis on drivers was introduced with the GEF2020 Strategy. GEF-6 programs, including the three IAPs, apply a system approach that potentially encompasses a wider set of drivers such as food and energy production and consumption, buildings and infrastructure construction, and transportation.

FIGURE 3.11 Typologies of drivers addressed by pre-2008 and post-2008 programs



BOX 3.4 Tackling drivers of environmental degradation in the India and MENA-DELP programs

Both child projects targeted key drivers of environmental degradation directly. Godavari had a particular focus on private sector industry (energy and agriculture related), while Malvan targeted agriculture, fisheries, and tourism. The counterfactual project targeted community-level food and energy production activities, but did not interact with the important industrial-level stakeholders in these sectors.

Insofar as the MENA-DELP addresses drivers, only the food production sector is a major focus. In Morocco, environmental effects of olive and cactus production are addressed through a value chain approach in the Solidarity-Based Integrated Agriculture in Morocco (ASIMA) project. Tunisia has some focus on food production and by-products through the Oasis project, while the Jordan Badia project targets benefits for the livestock sector through better water management. Both Jordan and Tunisia have an ecotourism focus, although it is not clear where this fits in the GEF classification of drivers. In terms of child project design, the drivers addressed are those recognized as most urgent in each country and/or those which are regarded as inadequately addressed to date.

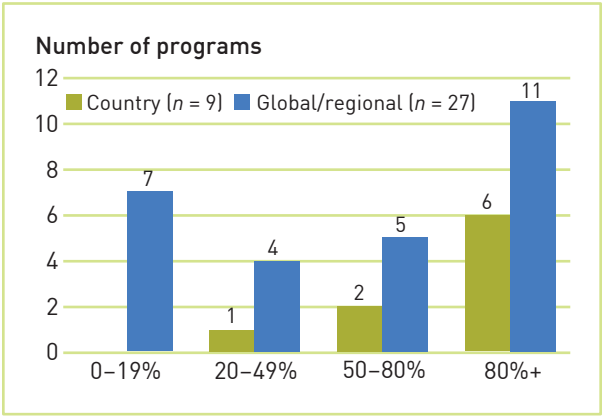
3.4 Ownership

Program ownership at the country level is highly linked to the degree of alignment with national priorities.[10] With the notable exception of programs addressing transboundary issues (notably International Waters), GEF programs have progressively shifted over time from a country to a multicountry focus.33 STAR funds are a substantial share of total program resources, regardless of geographic scope. In general, the smaller the country's STAR funds, the higher the share of its total STAR allocation is given to a program. Central- and country-level stakeholders noted that country programs have stronger ownership than regional/global ones, as they tend to be more closely aligned with national priorities.

The evaluation measured the use of program grant amounts coming from country STAR allocations as a quantitative approach to assess program ownership by participating countries. In this analysis, the use of STAR funds in programs is expressed in two ways: (1) in terms of percentage of total program costs financed through STAR by program geographic scope; and (2) share of individual country STAR allocation used for programs and their respective child projects.

The large majority of country programs use a substantial amount of STAR funds: for six out of the total of nine country programs in the post-2008 cohort, over 80 percent of the total program cost was funded from STAR allocations (figure 3.12), suggesting a high level of national ownership. Regional/global programs tend to have a lower proportion of total program costs

Figure 3.12 **Share of total program costs funded from country STAR allocation, by program's geographic scope**



from the STAR allocation than do country ones. These programs relied on set-asides and seven of them were funded exclusively from that funding source. Two of the seven were persistent organic pollutants (POPs) and three were international waters programs; neither of which focal areas have STAR allocations.

Another two were climate change regional programs (Asia, Africa).

Country programs, in both GEF-4 and GEF-5, are in countries with large STAR allocations, of over $100 million (figures 3.13 and 3.14), with one exception.[11]

Figure 3.15 depicts the share of the total country STAR allocations used for programs. In GEF-5, of the total of 38 countries involved in GEF programs (whether country or regional/global ones), those with a small STAR allocation tended to use the majority of it for those programs. The larger the STAR envelope, the lower the share of STAR funds used by countries toward programs. The same

[10] In GEF-4, 7 out of 20 were country programs. Those programs progressively decreased in GEF-5 (2 out of 14) and GEF-6 (none). At the same time, regional and global programs increased from 13 out of 20 in GEF-4 to 12 out of 14 in GEF-5. All GEF-6 programs are either regional or global (table 2.1).

[11] A GEF-4 country program in Vietnam with a STAR allocation of $20.5 million (figure 3.13).

Figure 3.13 GEF-4: Program use versus country STAR allocation (million $)

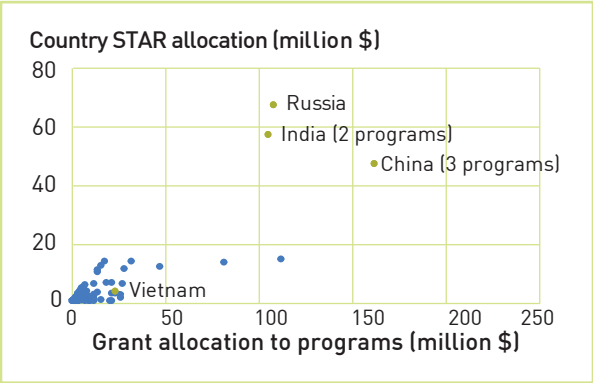
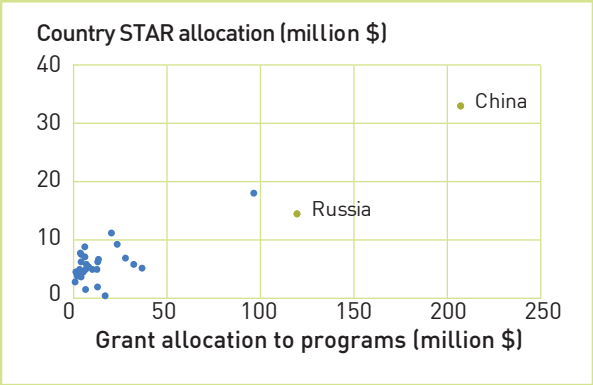


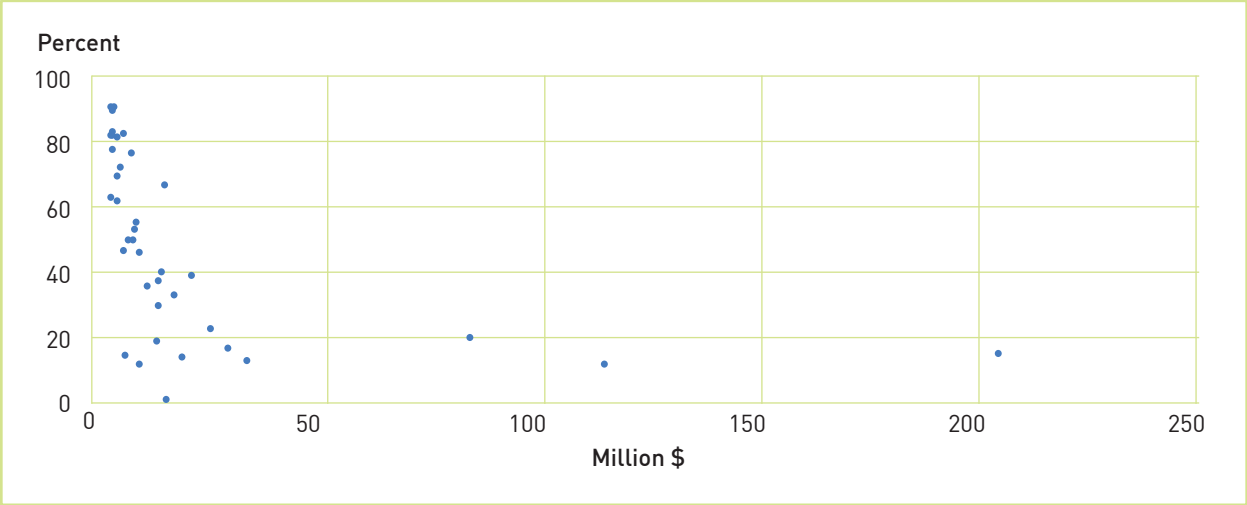
Figure 3.14 GEF-5: Program use versus country STAR allocation (million $)



trend is observed in GEF-4 (108 countries). When small countries agree to commit most of their STAR funds to a regional/global program, they do so toward a child project. Their ownership relates more to that particular project than to the program of which it forms a part.

Country programs have stronger ownership than regional/global ones. This was confirmed by interviews conducted with national stakeholders during country case studies, who consistently indicated that alignment with country priorities is the most important factor for agreeing to participate in a program. This interpretation was supported by stakeholders in the GEF Secretariat, the STAP, and the GEF Agencies, particularly the MDBs. Country stakeholders interviewed also highlighted that, when compared with standalone projects, GEF programs bring about a broadening of ownership within the countries from one body (often where the operational focal point [OFP] is located) to a range of government ministries and/or departments and often also to private sector institutions. For example, the China-GEF Partnership for Land Degradation case study showed an increased scope of

Figure 3.15 GEF-5: Share of STAR allocation alloted by countries to programs



NOTE: *n* = 38.

ownership of programs both at the national and provincial level. Government and GEF Agency country-level stakeholders in China also stated that ownership of programs is incentivized by a longer-term perspective than is available with stand-alone projects and by synergies among components, in addition to the potential of leveraging a high level of additional funding. In this case, program ownership is demonstrated by the substantial amount of provincial cofinancing committed and by the widespread replication to other provinces of the integrated ecosystem management approach, which the program introduced. By contrast, in the case of MENA-DELP, program ownership by participating countries is limited to the respective child projects. The varying experience of ownership in national and regional programs is explored in box 3.5.

In summary, program ownership in countries tends to be closely related to the degree of alignment with national priorities. Furthermore, the more a program is country focused, the more STAR allocations are used. Country programs are reported to bring about a broadening of national ownership from central control through the OFP, usually in the environment ministry/department, to a broader range of government and sometimes private sector institutions. It has also been noted that GEF funding is often not accounted for in national budgets, which is likely to weaken its place in national planning processes.

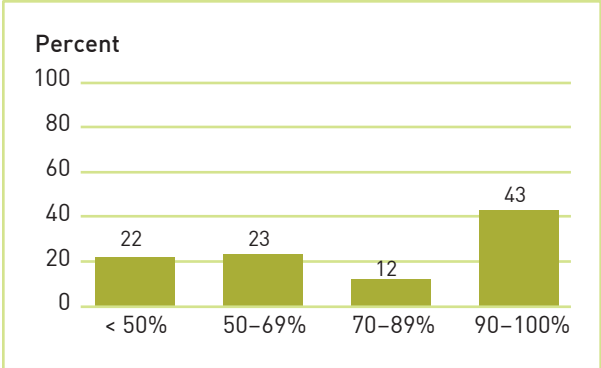
3.5 Coherence

Program/child project coherence has improved in recent programs. Program objectives are now better defined than in earlier GEF funding periods; child projects have improved in design and are now better linked to the overall program. This improved coherence of programs and the associated child projects is notable in the design of highly complex programs, under which projects more specifically address program outcomes.

Analysis of post-2008 child projects shows that 89 percent of them indicate clear linkages with their respective programs at the design stage. This high level of coherence is confirmed by the fact that 43 percent of child projects address through their activities all of the program components (figure 3.16). Figure 3.17 shows that projects under higher complexity programs tend to address more of the program components than those in less complex programs.

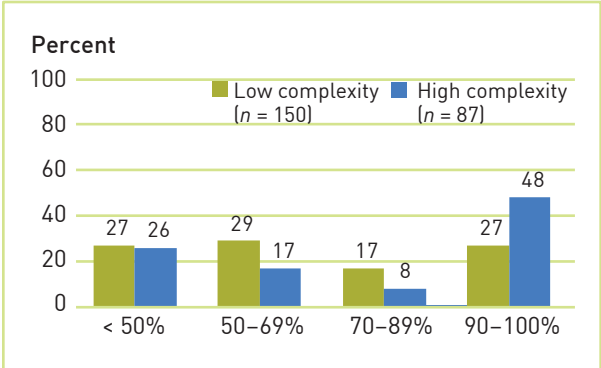
For 53 percent of the total of 237 child projects there is no clear indication as to how project

Figure 3.16 Program components addressed through child projects



NOTE: *n* = 237.

Figure 3.17 Program components addressed through child projects by complexity



Box 3.5 Country ownership in national and regional programs

The Godavari Child project of the India Coastal and Marine program has realized several important gains from being part of this national program. The Program National Steering Committee has key government stakeholders on it, who feed its experiences into high-level policy discussions. These have even covered India's international obligations, for example with regard to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Similarly, The Malvan Coast Project has demonstrated good country ownership, since National, State, and local governments are all engaged with it. The Project design is in line with national priorities, notably addressing one of the five most important marine and coastal areas in the country. The Minutes of the national- and state-level Steering Committees clearly demonstrate that the Project is nationally owned and in line with countrywide and local priorities. The Counterfactual project in the Gulf of Mannar involved several organizations and many communities, which brought a strong level of ownership from these stakeholders. However, the government of Tamil Nadu altered the project's focus to fit its own ideas of what was needed. Its terminal evaluation review (P64) emphasized "the livelihood and protection aspects at the expense of the higher-level policy and institutional changes that were necessary and expected, and the management actions that could have encouraged the sustained use of marine resources have been largely overlooked".

The national steering committees for the program's child projects have not only linked them up to national-level institutions and policies, but have also given them greater visibility at the district level. This has been instrumental in generating support from key officials, such as District Collectors. Ownership has therefore been strong at several key levels. For the Gulf of Mannar counterfactual, the state government established ownership, but did so by focusing on livelihood benefits to the virtual exclusion of the project's environmental objectives.

In contrast to States participating in the national project in India, MENA-DELP participating countries have only a modest degree of ownership of the program. They claim benefits from such aspects as participating in international workshops (particularly on M&E, tracking tools of the GEF system, and income-generating approaches in participant countries) and from shared experiences generated by study tours. Although the child projects are relevant to national needs, this derives from their original design processes as national projects, rather than from any direction generated by the program. In the case of Jordan, for example, the Badia project was already designed as part of a much larger government program and was later fitted into the MENA-DELP on request of the World Bank.

GEF strategies in China are strongly aligned with those of the country. Environment protection is included in the 13th China Five-Year Plan. The Integrated Environmental Management concept has been integrated into policies and laws at different levels, from provincial to national. The GEF OFP noted that participation in the program has helped different national agencies work together. This collaboration is not limited to partnership activities, but spreads more widely. A recent example is the collaboration between the Ministry of Agriculture, State Forest Administration, and the International Commerce Department on GEF-6 projects concerning alien species quarantine. The strong relevance to the national policies and plans for combating desertification in Western China contributes to strong ownership of the partnership.

indicators are intended to contribute to program reporting.[12] For the remaining 47 percent, the higher the program complexity, the more likely it is that a clear explanation of how project indicators will contribute to program reporting will be provided in the documentation. Projects under high-complexity programs are therefore better designed to address how they will contribute to the program outcomes: 63 percent of projects under high-complexity programs had a clear indication of how project indicators would contribute to reporting on program objectives, compared with 37 percent of projects under low-complexity programs. Importantly, the majority of highly complex programs have been approved toward the end of GEF-4; in GEF-5 and in GEF-6, improved reporting systems suggest learning from experience on this dimension. These findings are further highlighted in the geospatial impact analysis (figure 3.4). In three of these four cases, evidence suggests that the attributable value-add of GEF programmatic approaches relative to stand-alone approaches increased between GEF-4 and GEF-5.

As seen in the previous paragraph, coherence has significantly improved over time. Homogeneous programs, in which the project objective and outcomes are by definition coherent with those of the overall program, tend to perform better as a program, as observed in this evaluation's country case studies in the Energy Efficiency Program in South East Asia and the India Coastal Marine Program.

The appearance of program/child project coherence in GEF-4 and some subsequent programs was facilitated by vague criteria and a tendency toward excessively broad objectives in program design, which made it easy to fit in a diverse set of very loosely interrelated child projects. This is evidenced by the India Coastal Marine, MENA-DELP, and China-GEF Partnership in Land Degradation programs (box 3.6).

Box 3.6 Coherence between GEF programs and their child projects

The India Coastal Marine Program aimed to mainstream coastal and marine biodiversity conservation at three levels: systems, institutions, and community. Overall, both of the program's child projects had objectives which were coherent with the overall program direction. The earlier counterfactual project had similar objectives and provided some inputs relevant to the later program design.

The MENA-DELP program outcome-level objectives are broad and comprehensive, including the following: (1) improved agricultural management; (2) sustained flow of services in agro-ecosystems; (3) increased investments in sustainable land management; (4) increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation; (5) promoting investment in renewable energy technologies; and (6) reducing vulnerability to climate change in development sectors. It has therefore been possible to integrate objectives of the child projects into those of the program in a coherent manner.

Interviews with GEF Agencies in Beijing broadly confirmed the alignment and coherence between the PFD and its child projects, explaining that it was a specific requirement at the design stage. In describing how the idea of the partnership came about in 2002, ADB notes that the programmatic concept is very much embedded at the design stage. However, after several years of implementation, projects were largely implemented as stand-alone. Collaboration among GEF Agencies involved in the partnership is not strong, not programmatic, and is limited to rare round-table meetings.

[12] Program-level M&E is discussed in section 3.7.

These findings on coherence can be placed in perspective by those already discussed under results and broader adoption. While programs are becoming more complex and have increasingly explicit connections between program and child project objectives at design stages, they have so far been delivered less well and with less concrete actions promoting broader adoption than earlier and simpler child projects. This indicates that implementation practices and supervision have not been able to keep pace with the challenges posed by managing and coordinating increasingly complex interventions.

The complexity of design documents varies considerably between program types. A broad range of interviewed stakeholders involved in design processes suggested that IAPs have greater design coherence than previous types of programs, which were often just a set of projects bundled together. Similarly, other GEF 6 programs have explicit design systems to filter for coherence of child projects. For example, the China National Protected Area System Program (GEF ID 4646) is said to be more complex than previous major GEF investments in the country, since provinces drove these with no national framework or procedures for a coherent national protected area system. Under the new approach, coherence is ensured through a more detailed approach to design, which explicitly relates child projects to the broader program objectives.

A program PFD should set out its overall objectives and how the program will contribute to meeting them, including the specific contribution of its child projects. GEF Secretariat stakeholders reported that, when programs are under development, there is often incoherence between child and program objectives, which leads to much back and forth between Agencies and the GEF. There have even been occasions when Council has had to get involved. However, MDBs see this issue from a different perspective, under which the GEF Secretariat sometimes applies a narrower lens on coherence than they do. For example, for one GEF-6 programmatic approach proposal, the MDB involved as the GEF Agency wanted to mainstream chemicals and persistent organic pollutants into its broader development activities, but the GEF Secretariat did not accept the linkages. This led to a 1.5-year delay and may have lost the opportunity to blend GEF activities with the cofinancing brought from the concessional loans provided by the MDB in question, which had to follow its own internal financing cycle. It therefore appears that any design complexity experienced as a result of program participation is mainly felt by the GEF Agency or Agencies involved, rather than at the country level.

According to a variety of stakeholders, when child projects are designed by a diverse set of Agencies, there can be substantial challenges to develop a coherent program. In such cases, complexity may arise at the program level, since it is difficult to draw interrelationships between projects, which have no common design basis and which are expected to fit within the management systems of different implementers. These aspects are discussed in detail in the following sections.

3.6 Cost-effectiveness, efficiency, and coordination issues

Cost-effectiveness and efficiency decline as programs become more multidimensional. Child projects do not differ much from stand-alone projects in terms of project cycles. Overall, child projects scored higher on effectiveness and efficiency, and leveraged higher cofinancing than stand-alone projects, but efficiency ratings declined with increased complexity. Due to their diversity in terms of mandates and operational

approaches, GEF Agencies often struggle to work together in the way envisaged by the GEF. Program coordination is an added cost that increases with complexity.

The GEF defines cost-effectiveness in GEF (2005), which formally addresses the requirement for cost-effectiveness analysis in GEF projects at design. The paper indicates that:

> In GEF project preparation and review, cost-effective analysis requires that a range of alternative paths to achieve a stated objective are considered and evaluated, with the most effective and least-cost approach being selected. Such work requires knowledge of lessons learned through past programming experience. (GEF 2005, 2)

This evaluation took a more holistic approach in addressing cost-effectiveness analysis, by looking at three factors: (1) program and child project approval times as per GEF project cycle; (2) program financing and cofinancing; and (3) program effectiveness and efficiency, expressed by the APR ratings.[13] In this approach to cost-effectiveness analysis, program-level results simply represent the sum of project-level results. If the costs of a program are less than the alternative (stand-alone project/cluster of projects), then the program is still more cost-effective. While the ideal cost-effectiveness comparison between programmatic and stand-alone projects would look specifically at the relationship between costs and results, much of the available data focuses on either one or the other. The evaluation has therefore analyzed data sets on costs and on results separately, but also considered the relationship between the two on the basis of its own fieldwork and interviews in several countries and on telephone interviews with a range of stakeholders in the GEF Secretariat, the STAP, and the GEF Agencies.

The GEF Project and Program Cycle Policy indicates that programs and related child projects follow a similar approval process to that of full-size projects. The difference is that project concepts are submitted as part of the PFD, eliminating the need to submit a PIF for each individual project. This process consists of two main steps: "(i) Council Approval of a Work Program that includes a Program Framework Document (PFD) together with any Child Project titles or concepts; and (ii) CEO endorsement/approval of Child Projects under the Program" (GEF 2008b). Removal of the requirement to submit detailed child project PIFs separately to the Council may have offset some of the additional time required for the PFD. Otherwise, child and stand-alone projects show similar timelines to clear GEF processes (table 3.1).

This evaluation extracted and analyzed project milestone data for the entire post-2008 cohort of full-size stand-alone projects (n = 1748) and compared it with the post-2008 programmatic cohort (n = 301). This analysis shows no major differences between child and stand-alone projects. Sixty-five percent of post-2008 stand-alone full-size projects fail to meet the GEF standards for moving from Council approval to Chief Executive Officer (CEO) endorsement, and 31 percent fail to meet the same standards from CEO endorsement to project start-up. In the case of programs, 67 percent of full-size child projects—which are the large majority in the programmatic cohort—fail to meet the standards from Council approval to CEO endorsement, while 36 percent fail to meet the standards for moving from CEO endorsement to project start up. According to interviewed stakeholders, under some programs, child projects have been delayed as GEF Agencies waited for all of the child projects to be ready for CEO

[13] See section 3.1.

Table 3.1 Program and child projects document requirement versus stand-alone projects

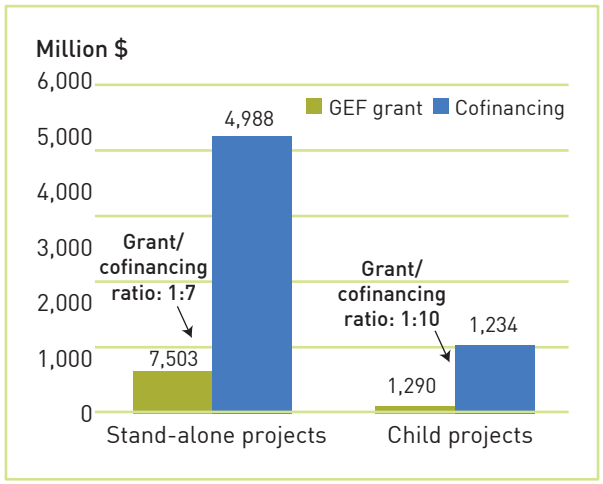
Document	Program/child project	Stand-alone project
PFD	Submitted by Agency/coordinating Agency to be included in the work program	Not applicable
Endorsement letter from the GEF OFP	Required from all countries included in the program	Required from all countries included in the project
Full-size project—PIF	Child project titles/concepts submitted with program for work program inclusion	Submitted for work program inclusion
Medium-size project— PIF	Not required	Not required (unless for two-step medium-size project)
Full-size project—final project document	Fully prepared document submitted for Chief Executive Officer (CEO) endorsement	Fully prepared document submitted for CEO endorsement and circulated to Council for comments; four-week web posting period
Medium-size project—final project document	Fully prepared document submitted for CEO approval	Fully prepared document submitted for CEO approval
Resource commitment by trustee	Trustee sets aside entire amount of resources for each child project	Trustee sets aside entire amount of stand-alone project

endorsement and start implementation at the same time.

From May 2008 to date, the GEF has allocated one-sixth of all GEF grants to programs and their child projects. Programs, like GEF stand-alone projects, also have an Agency fee for the services they provide. This fee is marginally less for programs at 8–9 percent of program total grant, than for stand-alone projects at 9–9.5 percent (GEF 2012). This fee reduction is linked to the removal of the requirement for programs to submit detailed child project PIFs separately to The Council. Higher program cost-effectiveness is also evidenced by the potential for leveraging additional cofinancing. In fact, cofinancing ratios for child projects are higher than for stand-alone comparators, at 1:10 versus 1:7 (figure 3.18).

Cofinancing either comes from governments or from GEF Agencies as grants or concessional lending by MDBs, suggesting increasing ownership and adoption of long-term program perspectives (figure 3.19).

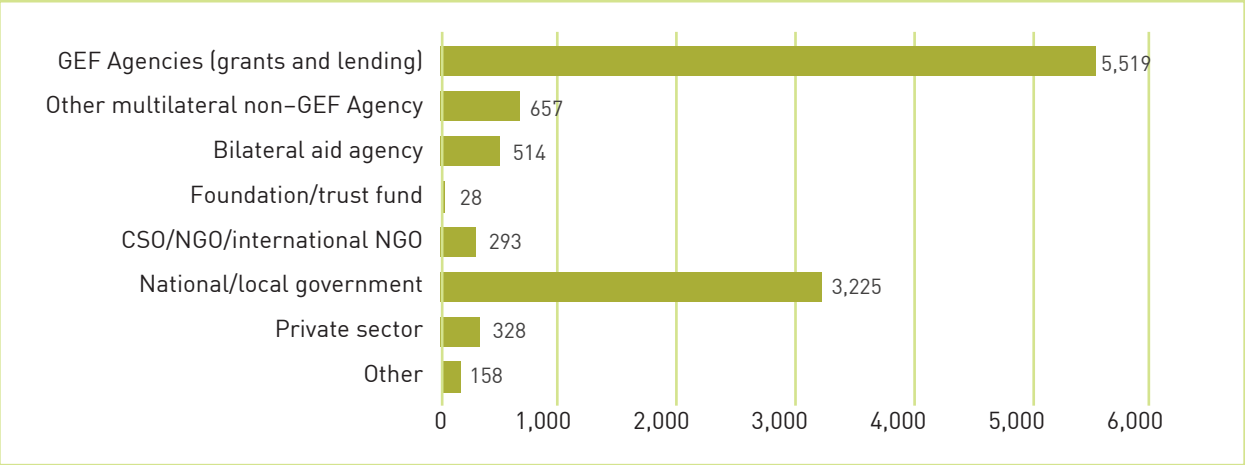
Figure 3.18 Stand-alone and child projects GEF grants and cofinancing



NOTE: $1,290 million is the total grant amount for programmatic approaches excluding project preparation grants (PPGs) and GEF Agency fees; total GEF grant amount including PPGs and Agency fees is $1,486 million as indicated in the introduction of this report.

As seen in section 3.1, post-2008 child projects were rated higher on overall efficiency than stand-alone projects in the APR database. However, the effectiveness and efficiency ratings of child projects decreased with increased program

Figure 3.19 Cofinancing for child projects by source



NOTE: *n* = 237.

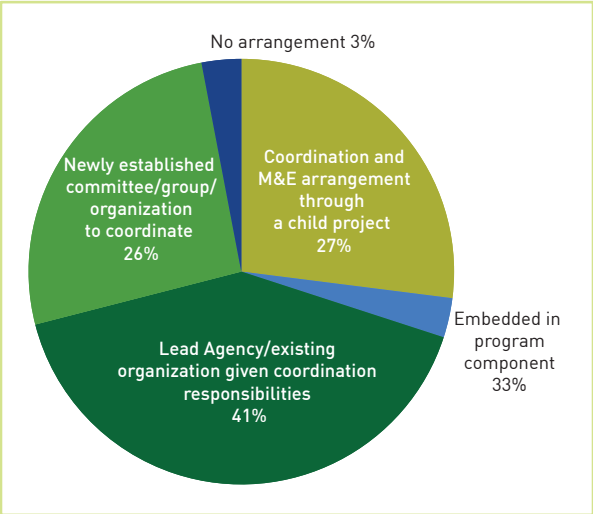
complexity. GEF Agencies consider more simple programs—especially the homogeneous ones—as having lower transaction costs and being easier to manage than more complex ones. According to them, country programs are the most manageable; but only those countries with large STAR allocations are able to handle such programs. Most of the post-2008 programs involve more than one GEF Agency. As reported earlier, due to their diversity in mandates and operational approaches, GEF Agencies often find it difficult to work together. However, child projects tend to be implemented by one Agency, removing this obstacle at the field level.

As seen at initial approval stages, programs and stand-alone projects require similar documentation and processing times (table 3.1). A program, however, would have less initial costs and its child projects tend to leverage higher amounts of cofinancing than stand-alone projects. Assuming the same results, any given amount of money spent under a program should therefore be more cost-effective than the same amount spent through stand-alone projects. However, this does not take into account program coordination costs associated with executing a program. On average, coordination costs are a little over $1 million per program and coordination budgets increase with program size and complexity. Program coordination and institutional and management arrangements are discussed in detail in the following paragraphs.

While all but one program out of the 38 included in the programmatic approach cohort have some form of coordination, only eight of them have a dedicated coordination budget allocated from the program itself. Only two have specified coordination arrangements embedded in the program, with an allocated budget as part of the program cost. Half of the programs are coordinated through efforts by the lead GEF Agency (figure 3.20).

Regardless of the type of coordination arrangement, seven of the 38 had plans for program coordination meetings, and 25 of them had national and/or local governments involved in program coordination. Nine of the 34 programs analyzed had coordination and M&E funded through a child project. Those child projects

Figure 3.20 Types of program coordination mechanisms



NOTE: *n* = 38.

(often referred to as "glue projects") were originally mainly of medium-size, with a budget of up to $1 million. In GEF-5, two full-size "glue projects" were endorsed with a value of $4.6 million and $5.5 million, respectively. In GEF-6, the glue project for the Wildlife Program (GEF ID 9071) has a $7 million budget. The Amazon Sustainable Landscapes Program (GEF ID 9272) has a glue project with a total budget of $5 million, and the one for the Leapfrogging Markets to High Efficiency Products Program (GEF ID 9083) has a $3.1 million budget.[14] The three GEF-6 IAPs also have large budgets for their so-called "hub projects," demonstrating that program designers have become aware of the high costs of effective coordination of programs. In cost-effectiveness terms, these newer programs will therefore have to deliver substantially improved results in order to justify these high costs. This counteracts one of the original expectations of programs, namely that they would lead to decreased management costs.

Successful program coordination depends on various factors, including, as we have seen, the availability of funding specified for this purpose. Regional programs, often based on a homogeneous model, attach less importance to coordination, reflecting what are often substantial budget constraints in this area. Other factors besides the availability of coordination funding are relevant here, and the evaluation has seen cases in the field of both strong (India Coastal and Marine Program) and weak (China-GEF Drylands Partnership for Land Degradation, China) national program coordination. Some of these differences among case study programs are illustrated in box 3.7.

Some of the programs developed under GEF-6 (including the IAPs) have substantial resources and attempt to address major issues, including those that are global in scope. Although their funding for hub activities may look large, it is often quite small in the context of the number of countries and issues involved. Furthermore, in the case of large programs such as Global Wildlife, it is difficult to envisage a set of stand-alone projects, which could attempt to address the same issue. Therefore, management costs cannot necessarily be demonstrated to be less than those for stand-alone projects on the grounds that: (1) there could not be a set of stand-alone projects addressing the same issue; and (2) the major programs are delivering a different range of benefits, such as those addressing global value chains at several different points.

For such large-scale programs, the GEF Secretariat often initially takes a long time to sort out the governance structures. It may meet all the

[14] "Glue projects" for the Amazon Sustainable Landscapes Program and Leapfrogging Markets to High Efficiency Products Program are still at the PIF stage (i.e., they are not CEO endorsed yet). Their indicative budgets are extracted from their respective PFD.

Box 3.7 Coordination between child projects and programs

Overall, child projects under the India GEF Coastal and Marine Program have performed substantially better in terms of meeting their environmental objectives than did the counterfactual project. The most important factor in this has been the attention and coordination between high-level National Steering Committees, which have helped the projects to stay on track and have linked their successes to national-level arenas, including policy and strategy formulation. In comparison, the counterfactual project was taken over by state government and was effectively reoriented to become a livelihoods project with minimal environmental linkages or results. It can also be observed that the presence of these national committees has raised the importance of the projects with the GEF Implementing Agency, compared with the counterfactual project that (according to its terminal evaluation) received inadequate Agency supervision, which allowed it to divert away from its GEF objective and outcomes, contributing toward its overall poor performance in terms of the original environment objectives that attracted GEF funding.

The MENA-DELP program has a Steering Committee with representatives from each of the national implementing institutions. There is relatively little need for operational coordination, since the child projects are nationally managed and have no specific relationship to each other. Furthermore, there are no regional program funds, which might need coordinated management. The program is almost entirely a collection of very loosely related national projects and performance is therefore managed at the country level. In terms of performance delivery, there is little role for management at the program level, while routine management is ensured through the World Bank project management system.

GEF Agencies in China have a shared perception that program coordination is heavy. The International Fund for Agricultural Development goes further and indicates that the partnership was designed more to share the available financial envelope, than to coordinate projects. The State Forestry Administration was quite active in coordinating with other government ministries and departments the projects that fall under its responsibility. For other projects, the Ministry of Finance was more active. As for the partnership, as a whole, there was no formal arrangement of coordination, but a few meetings were organized by the government. The Asian Development Bank confirmed that the partnership had no funds specifically earmarked for coordination.

Agency stakeholders several times, which has been shown to avoid management issues down the line. Once the roles are set, programs seem to settle down well. Where institutions have already worked together outside of the GEF, things tend to work more smoothly. These programs often have substantial development costs for Agencies concerned, which may not be directly recoverable and some Agencies expressed a reluctance to participate in such interventions in the future, unless there is some way of meeting these costs.

At the country level, challenges were noted as a result of including nationally designed projects in broader regional programs. For example, one nongovernmental organization-implementing partner in the MENA-DELP program reported considerable confusion over how its engagement would work. It initially believed that it would have a direct funding link to the World Bank to implement the activities outlined in its proposal to participate. The organization was later told that its proposal was included in a broader national project, which was in turn part of a regional program. As a result, one year of the nongovernmental organization's four-year project was lost to the confusing development, approval, and start-up process,

and the organization was told that there could be no extension to allow this time to be replaced, although it was not in any way responsible.

The GEF Secretariat is aware that programs with many partners have faced significant liaison and coordination problems, both between GEF Agencies and among in-country stakeholders. These problems are perceived to have weakened ownership to projects. Since the new generation of programs tends to be even more complex and rich in partnerships, this will be a major challenge to overcome.

Some Agencies still prefer homogeneous programs, since they find these easier and more cost-effective to manage than major multifocal or multi-Agency programs. In these programs, the management costs may be relatively low, since child projects are similar and can be essentially self-managed. As seen, coordination funds are usually limited to the "glue project."

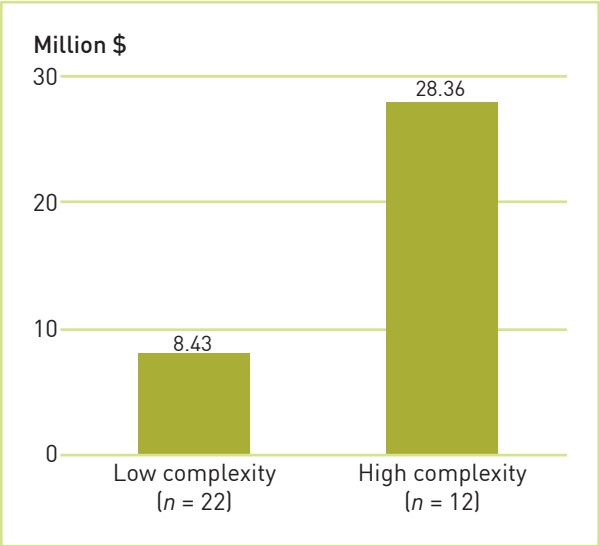
One approach emerges as the preference of several of the GEF's development bank partners. This is for an initial concept note followed by a flexible investment program developed over time. These partners do not favor forcing countries into programs with a blueprint design (as in many aggregation programs), which cannot easily be modified. However, the MDBs see the GEF becoming increasingly prescriptive, pushing for early design of child projects, even in countries that have had no prior commitment in the area. MDBs prefer to slowly build on prior national activities and commitments, to give a stronger platform for bigger and more sustainable results.

GEF Agencies perceive that in program design and implementation, a balance must be struck between being too open and allowing controlled flexibility. This is important because each country is different and needs to take its own approaches to reach the program objectives. For example, with the Food Security IAP, one country may focus on agricultural extension while another does something completely different. This needs a good program design with flexible entry points per country and generic options for national participation, which can be shared and discussed through hub services.

Knowledge management and adaptive learning, both of which are key aspects in program coordination, provide the basis for decisions on what should be replicated and what should not. The concept of knowledge sharing has received a greater importance within programs. However, there is broad skepticism among stakeholders that this is largely because funds are available, while there is no historical evidence of results or sustainability in this area and there is, so far, no clear indication of how programs will be better in this respect than stand-alone projects. The MENA-DELP is a typical example of the "glue project" approach to knowledge sharing and M&E. Its regional medium-size project has a $1 million budget, with $800,000 for knowledge sharing, $100,000 for M&E, and $100,000 to cover management costs. The difficulty of such an approach is that the funds for program M&Es are so small that there will be little credible information for knowledge sharing.

Interviews in case study countries revealed a perception that funding for coordination is underresourced. Desk analysis showed that more complex programs tend to have better designed and resourced knowledge management and coordination systems than simpler ones. However, 45 percent of projects under low-complexity programs had M&E allocations, compared to only 26 percent for those under highly complex programs. At the program level, 5 out of the 12 high-complexity programs had a coordination budget, as against only 2 of the 22 low-complexity ones (figure 3.21). This suggests that while

Figure 3.21 **Total coordination budget by program complexity**



high-complexity programs tend not to have a specific M&E allocation for their projects, cost is likely to be covered under their larger budget for overall program coordination. M&E is discussed in more detail in the following section.

3.7 Monitoring and evaluation

M&E has improved in design of recent programs, but still faces challenges. Child projects achieved higher ratings for M&E design compared with stand-alone projects, indicating that child projects tend to be more cognizant in designing their M&E frameworks. However, these projects also show weaker implementation of M&E than their stand-alone counterparts. Highly complex programs have similar M&E ratings to simpler ones, but their ratings drop from design to implementation stages. When present, program M&E and results-based management (RBM) strategies are coherent with those of their respective child projects. Little evidence of program M&E has been found. When present, it is most likely because of individual GEF Agency requirements. Early evidence from the Food Security IAP suggests a strong attention to M&E design, but the systems have yet to be implemented.[15]

M&E is mainly undertaken for projects and is performed reasonably well at that level. On both M&E design and implementation, post-2008 child projects were rated higher than stand-alone projects in the APR database (figure 3.1). Projects under high-complexity programs show the largest drop in ratings from M&E design to M&E implementation, suggesting that their designs are unrealistic in the light of resources devoted to this activity (figures 3.22 and 3.23).

For each project under a program, the evaluation assessed if program documents indicate how that project's M&E and RBM strategies and indicators will contribute to those of the overall program, whether the two approaches were coherent, and at what level. Overall, the analysis shows that approximately half of the M&E strategies of projects are intended to contribute to program M&E. There was no variation between low- and high-complexity programs on this count. With regard to RBM, 61 percent of low-complexity programs indicate how the project-level system will contribute to that at program level, while 43 percent of high-complexity programs covered this factor in their design.

An M&E strategy was presented for 71 percent of programs analyzed. Figure 3.24 shows that over 78 percent of those with an M&E strategy showed coherence and alignment between program and project levels, with no variation between low- and high-complexity programs. However, this finding does not hold true when looking at M&E indicators. High-complexity programs showed a higher level of coherence and alignment between project and program M&E indicators than the

[15] M&E is currently being systematically assessed in the ongoing reviews of the three IAPs.

Figure 3.22 M&E design ratings for post-2008 child projects by program complexity and APR database stand-alone projects

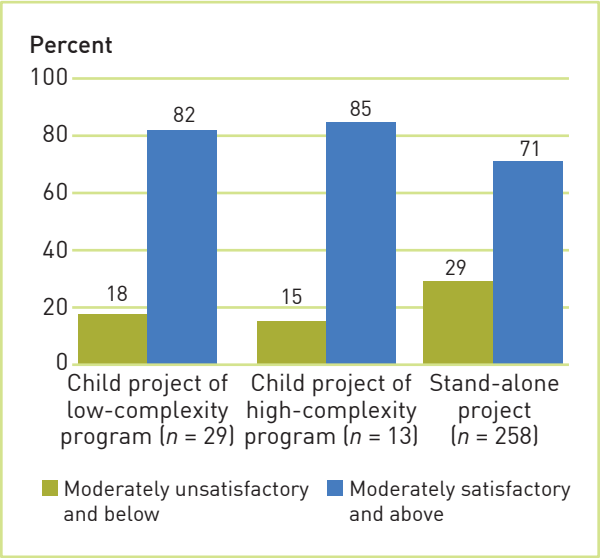


Figure 3.23 M&E implementation ratings for post-2008 child projects by program complexity and APR database stand-alone projects

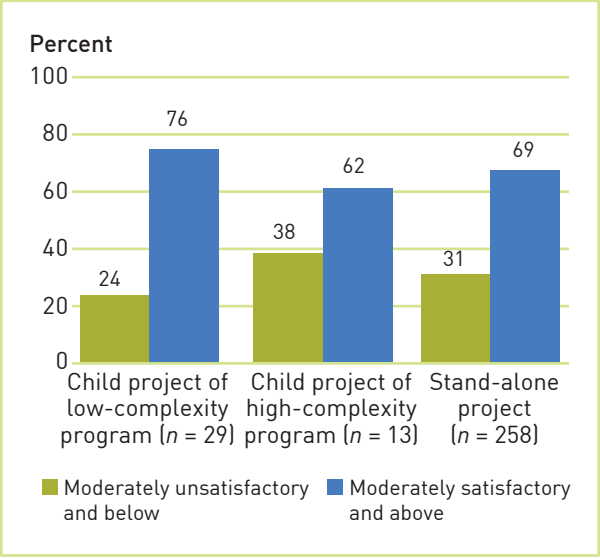
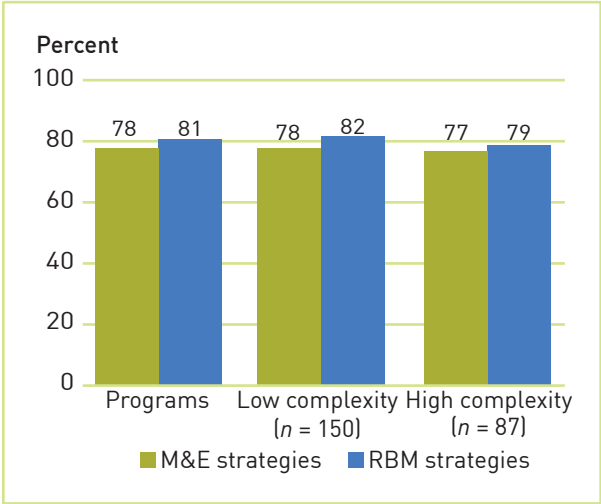


Figure 3.24 Coherence of project and program M&E and RBM



low-complexity ones. Only two programs have a specific budget allocation for program-level M&E.

The coherence of program and project RBM could only be assessed for the 17 programs with an RBM framework. The results are similar to those for the M&E strategy. Figure 3.24 shows that for the 17 programs with an RBM strategy, 81 percent of these showed coherence with project strategies. This proportion decreased to 35 percent when looking specifically at coherence among indicators. Here, no variation was observed between programs with different degrees of complexity.

Despite the presence of program-level M&E strategies, implementation of program-level M&E is extremely rare. When it is present, this is probably because of individual GEF Agency requirements. For example, the lead Agency of the China-GEF Drylands Partnership for Land Degradation in China, ADB, commissioned an independent program-level evaluation. To note, in response to a specific Council request, the GEF Secretariat is assembling a compendium of existing and new guidelines on various GEF

project- and program cycle-related policies. The draft version of this document is silent on responsibilities for compliance with the third minimum requirement of the GEF M&E Policy (GEF IEO 2010a), titled Project and program evaluation. Also, the RBM section of the draft guidance document is not specific on how to aggregate program-level M&E up from the child project-level M&E.

This evaluation found evidence of some cases of successful project-level adaptive management, responding to M&E inputs. The M&E undertaken by case study child projects (box 3.8) supports the broader data, suggesting that program-level M&E is rarely a systematic activity, which is well-supported by child projects and the fact that attention to M&E activities is most effective at the level of individual projects.

The GEF Secretariat has indicated that M&E poses a very important challenge for programs, requiring the development of new types of results frameworks and tracking tools, to trace different types of outcomes and impacts over an extended time. This is new for the GEF and its Agencies as well as for countries. GEF-6 IAPs explicitly address these challenges by building program M&E into a specific program component, the operationalization of which has proved challenging to date. For example, the applicability of the multifocal tracking tool of the Food Security IAP being developed by the GEF Secretariat is still being questioned by GEF Agencies and countries alike, delaying its operationalization.

Challenges in M&E have been present since the early generations of programs. The evaluation has found that for the majority of GEF-4 programs, the common approaches to M&E, if any, were superimposed on top of the project-specific systems, which are considered more important by the projects and countries. Rather than reducing variation, they pull out some comparable elements and enable a low level of programwide reporting.

Therefore, M&E poses a very important challenge for the development of programs. This is not just a question of M&E, but requires the development of new types of results frameworks, which need to track and aggregate different types of outcomes and impacts over an extended time. This is new for the GEF, Agencies, and countries. The M&E systems from early programs rarely look at the contribution of projects to the program, or vice versa. These programs were largely developed to secure GEF grants and speed up funding flows, but there was usually no deep commitment to program-level results as opposed to those of the child projects.

Any set of projects can yield a thematic evaluation, so the consideration now is how programs can have a bigger impact than projects have. What is the biggest narrative that can be reported? GEF-6 has not resolved how to address the challenge of program M&E.

Another important aspect concerning M&E is that this is conducted very differently by various GEF Agencies. In some cases, program evaluation is independent. In others, the implementers hire the evaluators. This can cause substantial disagreements, since staff who commission evaluations say that these will affect their performance ratings, with associated reduction of independence. In the case of large multi-Agency programs, M&E so far tends to be parceled out to one Agency. This may not be the best approach, since the way this Agency approaches M&E may not be compatible with how the other Agencies work in this field.

One emerging approach holds that GEF needs to promote large-scale hypotheses to address the global and regional forces driving the types of environmental degradation, which it seeks to

Box 3.8 Monitoring and evaluation at the program and child project-levels

For the India child projects, monitoring and evaluation information is reported to the National Steering Committees, which have played an important role in keeping them on track. It appears that progress and results of activities are considered in terms of their contribution toward broad project objectives, rather than through consistent use of the project logframes or documents. The counterfactual project was governed at the state level through a project board, which paid little attention to either the original project document or to the midterm review. As a result, the project deviated substantially from its original intentions and did not deliver its environmental objectives.

In the MENA-DELP program, projects have largely used M&E for their own internal management purposes. Although they have also sent data to the "glue" project office, they claim not to know whether or how these data have been used and there has been no useful feedback from the evidence provided. So, from the perspective of child project participants, it is not clear the program has made any flexible use of M&E outputs to better achieve its outcomes and impacts. Indeed, it is not clear to the child projects that there are any tangible program-level outcomes.

There is no evidence of systematic use of M&E for management purposes at the program level. Project M&E systems are focused on reporting to national systems and to the World Bank/GEF as individual projects. The regional project has devised a program M&E system to which the individual projects should contribute. To date, there has been little enthusiasm from projects to regularly input data into this system; and it is not clear how aggregation of data from a limited set of small projects around a vast region will generate information that could be useful for management purposes. Projects are subject to regular World Bank management missions and reporting, including midterm reviews and eventually GEF Final Evaluations. However, review of documents to date shows that each project is assessed as an individual entity and that there is no monitoring or reporting on how it has contributed to the program or vice versa. There appears to be no provision in the standard World Bank progress reporting terms of reference to assess the role of projects in programs.

Regarding the China partnership program, GEF Agencies expressed doubts as to whether results would have been different if the same funding was executed through stand-alone projects. However, they recognize that an important value addition brought in by the partnership is knowledge exchange. While the only information exchange between GEF Agencies happens at the design stage and concerns funding and geographic targeting, the actual knowledge exchange on lessons learned happens at the local level, between counties. The partnership has been evaluated both at the program (by ADB and the State Forest Administration) and at the child project level (by ADB, the International Fund for Agricultural Development, and the World Bank). However, as seen earlier, no program-level aggregation of child project M&E data was conducted in the State Forestry Administration Assessment Report. At the child project level, several completion reports, ICRs, and evaluations point at the weaknesses in land degradation monitoring and assessment.

address. For example, reducing deforestation in Brazil needs a hypothesis and a theory of change, which can encompass the working of the global soya market. In such programs, lesson learning is complex and should be based on the progress of different program elements contributing toward the objective defined in the theory of change.

3.8 Governance

The roles for partners in program design have evolved with the changing focus on global programs and IAPs. Recently, the development of the IAPs and other global programs is being actively managed by the GEF Secretariat with a view to pilot new initiatives and include the newer GEF Agencies. However, this increased role of the GEF Secretariat in program design is being perceived by a number of stakeholders in the partnership as a shift in responsibilities from what was typically under the purview of the Agencies toward the Secretariat.

The *Instrument for the Establishment of the Restructured Global Environment Facility* (GEF 2015) delineates in paragraph 21 the main functions of the GEF Secretariat. On the specific role the GEF Secretariat should play in program formulation, the Instrument is rather open: point (b) generically refers to an overall coordination and oversight role: "coordinate the formulation and oversee the implementation of program activities pursuant to the joint work program…" In its efforts to promote programmatic approaches that are innovative and inclusive of those GEF Agencies that have joined the partnership only recently, the GEF Secretariat has somehow taken a more proactive role in program formulation.

A number of the interviewed representatives of GEF Agencies expressed concerns on the increased role of the GEF Secretariat in program design.[16] Some have noticed this increasing engagement materialize through centrally conceived programs. They made the point that the GEF Secretariat is promoting the programmatic approach to Agencies with insufficient evidence that this is the best approach to address the relevant issue. To them, this reduces the role of GEF Agencies.

According to others, in the last generation of GEF programs the GEF Secretariat has increasingly stepped into Agency roles. For example, the Secretariat is actively participating in the selection of countries to be included in a program. Some Agencies do not consider this as the GEF Secretariat's role. Although they are aware of GEF's discussions with countries, they are often not part of these meetings and hence consider the processes to be nontransparent. As a result, they question the impartiality of the Secretariat in deciding whether to advance programs to Council, given its involvement in their design and in the selection of program partners.

[16] Five out of the 11 GEF Agencies involved in post-2008 programs. A stronger role of the GEF Secretariat in indicating how much STAR was to contribute to programs was also mentioned by the OFP in one of the seven countries visited during this evaluation. The OFP also stressed the importance of the alignment of programs to national priorities. In another country, the OFP said that the GEF is supposed to be country-driven. While for stand-alone projects this is easily done, it is difficult for countries to be involved in program design. Decision making at that level needs to take into account national priorities.

4: Conclusions and recommendations

The evidence and findings presented in the previous chapters allowed the evaluation to reach five conclusions and to formulate three recommendations.

4.1 Conclusions

Conclusion 1: GEF programmatic approaches have promoted projects that are better designed to produce broader and more sustainable results than stand-alone ones. At the project level, the evaluation findings indicate that the GEF program support modality in general provides better and larger scale results than project support. Programs provide a long-term perspective and enable through their projects integrated solutions to the environmental challenges the GEF has been tasked to address.

There are several implementation challenges that need to be overcome before such results can be consistently (or at all) delivered. Importantly, program complexity has increased over time and has been associated with improved design. However, better designed and more coherent programs have also required longer times to produce results, which may not be measurable by project closure.

Conclusion 2: The multidimensional nature of programs has generated a greater need for coordination and management, with implications for efficiency, results, and performance.

The evaluation clearly shows that complexity is the most significant challenge to program performance. Simpler programs show better results. Furthermore, complex programs require much larger resources to coordinate and manage. Although designs have progressively improved, management and supervision systems have not kept pace with the increasing demands and remain focused at the level of individual projects.

In particular, multi-Agency programs face major obstacles, posed by their different mandates, operating practices, and M&E systems. Unless management and supervision systems for programs are substantially improved and more appropriately resourced, program implementations are unlikely to perform as anticipated.

Conclusion 3: Alignment of program support with country priorities has generated strong program ownership. The evidence indicates that regardless whether a program is country, regional, or global in its geographic scope, the more it is aligned with country priorities, and the more STAR as well as other national and subnational financial resources are committed to it. This increases the likelihood of improving performance and producing better programmatic results that are sustained in-country.

Although there has been a progressive shift in GEF programs from the country toward the global and regional levels, national ownership has remained stronger for country programs.

This has been overcome in situations where wider programs are strongly aligned with national priorities. In such circumstances, ownership often shows a broadening from one government department or ministry to several and, in some cases, even to private and nongovernmental bodies

The earlier tendency to bundle sets of loosely related country-level projects into regional programs typical on the GEF-4 period has not generated strong ownership of programmatic results, even though child projects were well-implemented. This approach is widely understood as a mechanism for financial convenience, rather than being truly programmatic and should be reduced to preserve scarce funding for more coherent programs.

Conclusion 4: Program design has improved, but M&E systems have not adapted to measure and demonstrate program-level results and additionality. While established project reporting systems are relatively strong, there is little progress toward assessing the additionality of programs to global environmental benefits.

Projects under programs are not seen differently by countries when it comes to implementation, and also M&E is performed at the project level. Although coherence of program design is improving, there is still inadequate attention to demonstrating the added value of a program over a set of projects. Program-level evaluations would help in this sense, but are currently largely absent. Initial steps to this end have been taken through the establishment of programwide theories of change in some recent IAPs and other global interventions.

Conclusion 5: Decision making on program design needs to reflect greater transparency and clear roles for all players in the partnership.

Programmatic thinking is increasingly done centrally and program designs are more and more developed in the GEF Secretariat. The development of the IAPs and other global programs is seen by a number of stakeholders as marking a trend toward centralized planning under direct management of the GEF Secretariat. They see this trend as a substantial revision of the division of responsibilities between the GEF and its Agencies, which they believe has not yet been fully articulated and assessed in terms of the requirements of the GEF Instrument.

4.2 Recommendations

The evidence collected and analyzed by this evaluation supports the following three main recommendations.[1]

Recommendation 1: The GEF should continue with appropriate programmatic interventions, addressing issues that are likely to impede outcomes and performance, efficiency, and management, as they become multidimensional. The GEF should emphasize programmatic approaches by deploying its resources catalytically to mobilize larger flows of funding that achieve impact at scale. However, the GEF is promoting increasingly complex programs, while simpler programs have shown better results. Furthermore, complex programs require much larger resources to coordinate and manage. Importantly, the GEF shows an increasing preference for multi-Agency programs, although the evidence shows that these are the most difficult to implement and evaluate.

[1] Some of the issues raised by these recommendations point in the same direction as those provided in a recent study conducted by the World Resources Institute on the future of the institutional architecture of multilateral climate finance. This study analyzed seven major environmental funds active in the international climate change arena, the GEF being one of them (WRI 2017).

Since this aspect reduces both efficiency and cost-effectiveness, program complexity will need to be better managed to ensure good results.

Recommendation 2: The GEF should continue ensuring that programs are relevant to the specific national environmental priorities of the participating countries while meeting the requirements of the Conventions. The GEF should continue to ensure that finance is being channeled to support nationally determined priorities (inclusive of broad stakeholder engagement) in line with the requirements of the multilateral environmental conventions, and strengthen national capacities to plan, coordinate, implement, and monitor environmental change actions. The GEF should continue to promote multipartner platforms in-country, provide incentives for longer-term investments, strengthen national capacities, and involve country partners early in the programming process, to ensure that it can respond effectively to country priorities. It should do so in all its programs, be these global, regional, or national in their geographic scope.

Recommendation 3: M&E should be implemented at the program levels, with a clear demonstration of the additionality of the program over projects. Program additionality over a set of projects needs to be demonstrated through a well-developed program theory of change, as well as through better information sharing on programs to enhance program monitoring, midterm reviews, and terminal evaluations, which are currently largely absent. Importantly, the four M&E Minimum Requirements in the current GEF M&E Policy (GEF IEO 2010a) already apply to both projects and programs.[2] As programs become even more prominent in the future, the GEF Secretariat should endeavor to strengthen RBM and monitoring to better capture program results over and above the aggregation of project-level results.

[2] In the GEF M&E Policy, program evaluations are defined as evaluations: "of a set of interventions to attain specific global, regional, country, or sector objectives; these include evaluations or studies of the GEF focal areas, programmatic approaches, and GEF corporate programs" (GEF IEO 2010a, 5).

Annex A: Approach paper

A.1 Background

Program approaches have been employed by a number of bilateral and multilateral development organizations and international agencies. The OECD defines program-based approaches as "a way of engaging in development cooperation based on the principle of coordinated support for a locally owned program of development" (OECD DAC 2008, 2). Programs represent an effort by the donor community to move beyond project-based aid disbursal modalities, aiming at integrated cumulative results and their sustainability, reflecting continuity and a long-term vision. The aim is also to provide a more appropriate response to the needs of countries and to the need for increased efficiency of aid disbursements under a coherent objectives framework.

The concept of a programmatic approach is particularly relevant to the GEF, considering the long-term nature of the environmental problems it was designed to address. It is not surprising that a programmatic approach was already mentioned in 1996, during the GEF pilot phase. The Secretariat Note on Operational Policy and Programmatic Analysis (GEF Secretariat 1996)—presented at the 7th Council meeting in April 1996—elaborated on the development of the first programmatic framework for the Central American forest area under the forest ecosystems operational program.

In this evaluation, the IEO of the GEF will specifically focus on the results and performance of GEF programmatic approaches (hereafter referred to as programs). This evaluation will provide evidence on the past GEF experience in designing and implementing programs. It will contribute to the further development of GEF programs in the context of the GEF's strategic move toward multifocal and integrated solutions to environmental problems proposed in the GEF2020 Strategy (GEF 2014a).

HISTORY OF PROGRAMMATIC APPROACHES IN THE GEF[1]

Although the idea of programmatic approaches has been part and parcel of GEF operations since its establishment, it was not until the 14th GEF Council meeting in December 1999 that the Council supported the evolution of GEF support to recipient countries through a more programmatic approach. The Corporate Business Plan FY01-FY03 Working Document (GEF 1999) reported that the World Bank, UNDP, UNEP, and the European Bank for Reconstruction and Development were joining in a coordinated effort to demonstrate ways to reduce nutrient discharges in the Black Sea and Danube Basin region. This program intended to leverage cofinancing,

[1] A timeline diagram showing the sequencing of major Council documents related to GEF programs is provided in appendix A.2.

increase coordination, and reduce GEF transaction costs (GEF ID 342). The Danube/Black Sea Basin Strategic Partnership was launched in 2001. The European Bank for Reconstruction and Development, the European Union, and other partners provided important coordinated support to it.

Later on, The GEF Programmatic Approach: Current Understandings (GEF 2001)—an Information Document submitted to the Council in May 2001—clarified that the overall aim of GEF programs is "to secure larger and sustained impact on the global environment through integrating and mainstreaming global environmental objectives into a country's national strategies and plans through partnership with the country." This document pointed out that a medium- to long-term programmatic approach is not a new paradigm for the GEF, and that it represents an evolution from a strategic partnership between the GEF and its Agencies to one between the country (and/or region) and the GEF.

The shift to a more strategic partnership between the countries (and/or regions) and the GEF was also being discussed during the third replenishment meetings of the GEF. In that context, replenishment parties proposed a country- and performance-based resource allocation system. The RAF took over four years to develop and was finally agreed upon in 2005. Implementation of the RAF started in 2006, and was reviewed at midterm by the IEO (GEF IEO 2009). Based on that review, in 2009 the RAF was redesigned and renamed as STAR (GEF 2009). These major reforms influenced the way programs, particularly the regional and global ones, were to be financed (i.e., either from national RAF/STAR allocations, or from ad hoc set-asides funds, outside national allocations).

Building on the developments that took place from the GEF pilot phase to GEF-3, at its meeting in May 2008, the Council endorsed the objectives and basic principles for programmatic approaches proposed in the Working Document From Projects to Programs: Clarifying the Programmatic Approach in the GEF Portfolio (GEF 2008a). This marked a turning point in the history of program development in the GEF. For the first time, detailed operational guidelines and procedures for designing specific programs using a programmatic approach were approved. Among them the requirement on designing programs using a specific template called PFD was introduced. The approval of these procedures resulted in an increase in the submission of programmatic approaches to the Council (GEF 2008c). Importantly, this working document also strengthened the concept of country ownership for programmatic approaches, by indicating that programmatic approaches are "a more strategic level interaction with the GEF" for countries especially in the context of the RAF, and that "a clear commitment to allocate RAF and domestic financial resources" by countries to programs is needed (GEF 2008a).

GEF (2008a) was followed two years later by two other reforms. First, the introduction of the Program Coordination Agency; and second, the streamlining of projects approval by delegating it to qualified GEF Agencies. These two reforms translated de facto into the emergence of two major program typologies: (1) programs led by a Qualifying GEF Agency (QGA), in which the QGA is the only GEF Agency for the program, and (2) programs led by a Program Coordination Agency, in which one or more GEF Agency can participate in the program (GEF 2010a). One of the main assumptions behind these major reforms was that by working through programs, the GEF would be able to disburse large-scale GEF resources

effectively and efficiently to countries and regions with enhanced accountability and oversight (GEF 2010b).

Until GEF-5, Council discussions about programs centered more on operational, financial, and administrative matters than on technical ones. The approved program modalities were based on their operational differences. However, at its meeting in October 2014, the GEF Council approved a revised programmatic approach modality (GEF 2014b) defined in terms of the program scope. The revised modality classifies programs in two main types (GEF 2014b):

1. *Thematic:* The program addresses an emerging issue (e.g., a driver of environmental degradation) or grabs an opportunity that is globally significant to warrant the engagement of a wide range of stakeholders.
2. *Geographic:* The program starts by identifying an established need to secure large-scale and sustained impact for the environment and development in a particular geography (landscape, ecosystem, district, provinces, country, region, among others), and may focus on particular sectors in this broader context (e.g., energy, transport, agriculture, forestry).

The introduction of the above-mentioned program typologies was also an opportunity to remove the significant disincentives to programs under the previous modalities, including: (1) the reduced fee levels for those GEF Agencies with boards—basically all the international financial institutions; (2) the complexity of processing modalities—perceived by the UN agencies; (3) the reduction in set-aside funding for programs; and (4) the structural differences between international financial institution and UN agencies limiting joint programs.

In GEF-6, the GEF introduced the IAPs. These programs align with the GEF2020 Strategy, which emphasizes the need to support transformational change and achieve impacts on a broader scale. The strategy calls for the GEF to focus on the drivers of environmental degradation, and it addresses the importance of supporting broad coalitions of committed stakeholders and innovative and scalable activities. The three introduced IAP programs focus on: (1) sustainable cities; (2) taking deforestation out of the global commodity supply chains; and (3) sustainability and resilience for food security in Sub-Saharan Africa.[2]

AVAILABLE EVALUATIVE EVIDENCE

To date, no comprehensive evaluation has been conducted specifically focusing on GEF programs as a modality of GEF support. However, efforts have been made to evaluate the GEF experience in implementing programs. Although fragmented, the available evaluative evidence, and the main conclusions and recommendations found in other evaluations conducted by the GEF IEO and others, can be useful in identifying issues to be covered by this evaluation.

A review of multicountry implementation mechanisms was conducted by the then-called GEF Monitoring and Evaluation Unit in 2000 (Ollila et al. 2000), which focused on the international waters focal area.[3] At that time, the GEF's history of multicountry programs was short and few projects were completed. Due to the complexity in multicountry programs and operations, the

[2] "Integrated Approach Pilots," https://www.thegef.org/topics/integrated-approach-pilots; accessed October 2017.

[3] Eight projects from the biodiversity focal area were also included in the review, as they focused on biodiversity protection in the context of transboundary water bodies.

review suggested that the GEF could develop from passive consultations toward proactive regional implementation and leadership under a programmatic framework. According to the review, a programmatic approach could provide a framework to harness comparative advantages of different implementing Agencies as well as promote interactions among projects.

Two additional studies conducted by the GEF Monitoring and Evaluation Unit are also worth mentioning. The GEF International Waters Program Study (2001) reviewed the experiences gained with the Geographically Based Approach, in which a set of relatively straightforward projects collectively cover complex situations and activities. This approach was being undertaken in the Danube River and Black Sea region, in the Mekong River-South China Sea region, and in the Paraná/Paraguay/Plata River basin systems and Patagonian Shelf Large Marine ecosystem. Broad consultation helped in developing a common understanding among the recipient countries and other organizations interested in the Danube River and Black Sea Region, and in facilitating joint action and collaboration while preventing duplication. The Program Study on International Waters 2005 (GEF IEO 2004) found continued shortcomings in regional cooperation between projects, particularly between GEF Agencies and between focal areas. That study recommended the incorporation of a regional-level coordination mechanism for international waters projects.

A Joint Evaluation of the GEF Activity Cycle and Modalities was conducted in May 2007. This evaluation made an effort to map the number of emerging GEF modalities based on their definitions, key outputs, characteristics, and the issues they aimed to address. Among them, the evaluation identifies the programmatic approaches, the umbrella programs with their subprojects, and the country programs as often overlapping and causing a general misunderstanding among stakeholders. Furthermore, according to this evaluation, the GEF narrowly defines programmatic approaches as a financing modality, while other donors consider programs as long-term development processes (§ 1). The evaluation also makes an important point that GEF projects under the programmatic approach were not always part of a broader national strategy, and makes a strong call for meeting the demand from countries for a long-term vision and programming that goes beyond approving individual projects (GEF IEO 2007).

In 2010, the fourth Overall Performance Study of the GEF (OPS4) reviewed 34 programmatic approaches, as identified by the GEF Secretariat, in an effort to assess program design (GEF IEO 2010b). Programs were reviewed in terms of value added, country ownership, governance and management arrangements, and M&E plans. The OPS4 review reported that almost all of the programs focused on enhancing coordination and fostering strategic levels of interactions among key stakeholders and institutions. However, the linkages between the parent program and the child projects were not always made clear. Furthermore, country ownership for regional and global programs was found to be relatively weak, and the discussion on governance and management arrangements limited. Additionally, the monitoring and evaluation plans and systems at the program level were not comprehensive, with only one-third of the program design documents including program-level indicators.

A review of the Mesoamerican Biological Corridor program was conducted by the Independent Evaluation Group (IEG) of the World Bank in 2011. The Mesoamerican Biological Corridor is a territorial planning system consisting of natural protected areas under a special regime, whereby core, buffer, multiple use, and corridor zones are organized and consolidated to provide an array of

environmental goods and products to the Central American and the global society. The Mesoamerican Biological Corridor program was implemented through a series of full-size GEF-funded national projects. The common objective of the national projects was to conserve the biological integrity of designated national biodiversity corridors to allow for regional ecological connectivity (IEG 2011). The IEG review found that the World Bank implemented national projects performed satisfactorily against their objectives. However, they were pulled in different directions, and the projects as a whole failed to achieve efficient and sustained strategic alignment at the regional level. According to the IEG review, funding for national projects was stretched between improving national administration and supporting subproject sustainable livelihood schemes at the local level. The latter was not strategically designed to achieve regional corridor connectivity (IEG 2011). Another weakness identified by the IEG review concerned monitoring and evaluation. The review found that the Mesoamerican Biological Corridor projects were not designed with indicators suited to monitoring project implementation or assessing impact. The review concluded that the "establishment of a coordinating body for regional environmental integration, separate from states' interests, is vital for implementing a biological corridor system. It is equally important to give national staff the mandate and budget resources to internalize the priorities set at the regional level" (IEG 2011, 32).

In 2012, an impact evaluation of the GEF in the South China Sea pointed at the importance of having a programmatic framework in which broader adoption and related progress to impact (P2I) at higher than project scale can take place. Thirty-four GEF projects and 150 small grants that are both relevant to international waters and specific to the South China Sea and the Gulf of Thailand were covered by this evaluation (GEF IEO 2013a).

The South China Sea evaluation pointed at a number of weaknesses. These include "the lack of an explicit indication of how different projects fit into a broader programmatic strategy, insufficient collaboration, and a failure to realize the full benefits of the complementarity intended among the various projects and distinctive competencies of the GEF Implementing Agencies" (GEF IEO 2013a, 15).

The first report of the OPS5 in 2013 recommended that the formulation of the strategies for GEF-6 should strengthen efforts toward broader adoption and focus on more programmatic multifocal area approaches, within the guidance of the conventions. In its management response, the GEF Secretariat agreed with "the conclusions and the overarching recommendation to strengthen efforts toward broader adoption and focus on more programmatic and integrated multifocal area approaches" (GEF IEO 2013b, 41). Programmatic approaches were concisely mentioned in the OPS5 final report, which made a call for including programmatic approaches addressing regional and global environmental problems in the work program (GEF IEO 2014).

Finally, the 2014 GEF APR highlighted the weak and incomplete monitoring, evaluation, and general reporting on projects implemented under a programmatic approach. GEF Agencies have been inconsistent in evaluating programmatic approaches and their child projects, leading to instances where (GEF IEO 2015b):

1. GEF Agencies have submitted evaluations of child projects approved under a programmatic approach, but not of the overall programmatic approach itself (GEF ID 2762).
2. The World Bank submitted an evaluation of a programmatic approach (GEF ID 1685), but not of the completed child project under this programmatic approach (full-size project, GEF ID 3022).

3. UNDP submitted evaluations for two out of three approved child projects, along with an evaluation of the programmatic approach (GEF ID 2439).
4. UNEP submitted an evaluation covering 15 of 36 medium-size child projects focused on implementation of National Biosafety Frameworks, under the GEF Biosafety Program (GEF ID 3654).

The APR 2014 also pointed out how the GEF Monitoring and Evaluation Policy (2010) lacked guidance on the evaluative requirements of child projects implemented under the respective programs.

PROGRAM EVOLUTION, TYPOLOGIES, AND DEFINITIONS

Earlier programs (pilot phase, GEF-1, and GEF -2) were all phased/tranched ones, with one notable exception in the international waters focal area, the Black Sea and Danube Basin initiative.4 Phased/tranched programs continued in GEF-3, when a new generation of programs was introduced. These new programs were composed of a parent program and a variable number of child projects, designed to contribute to the overall program objective. Also, earlier programs with a country focus tended to be more frequent than programs with a regional/global focus. Similarly, single focal area programs were the norm up to GEF-3, when the first multifocal area program was introduced. Table A.1 illustrates the situation prior to the introduction of the PFD requirement in 2008.

In compliance with GEF (2008a), post-2008 programs were all designed under a PFD and composed of child projects, while approval of phased/tranched programs tended to diminish. In GEF-5, no new phased/trenched programs were approved. In fact, the new program structure allowed both for the time dimension—implementing programs through phases to achieve medium- to long-term objectives—and the increased complexity—implementing programs through a series of subprojects not necessarily in sequence with one another but under a coherent objectives framework that aims at securing larger-scale and sustained impact on the global environment (table A.2).

As highlighted by the Joint Evaluation of the GEF Activity Cycle and Modalities (GEF IEO 2007), the GEF used to classify programs mostly according to their operational and financial features. This happened each time a major reform was introduced.[5] The evolution of program definitions in the GEF had to accommodate for the diversity of: (1) programs' financial, administrative, and operational categorizations; (2) characteristics of GEF Agencies, with the main distinction between the international financial institution and UN ones; and (3) topics of interest. Much of this diversity comes from the very nature of the GEF, which is an international institution regrouping many different partners—each of them with their specificities—called to act together toward the common objective of achieving global environmental benefits.

To note, an internal review—commissioned by the GEF Secretariat as an input to the formulation of the GEF programming and policy documents for

[4] As, noted above the Black Sea and Danube Basin initiative evolved from being a phased project to a program with parent and child projects.

[5] The 2006 Council document "Rules, Procedures and Objective Criteria for Project Selection, Pipeline Management, Approval of Sub-Projects, and Cancellation Policy" (GEF 2006) defines different types of GEF programs, including phased/tranched programs, country partnership programs, investment funds, strategic investment programs, programs with set-asides and programs without set-asides.

TABLE A.1 Programs without PFD

Program typology	Geographic scope	Focal area	Pilot	GEF-1	GEF-2	GEF-3	GEF-4	Total
Phased/tranched program	Global	Biodiversity			1	3		4
	Regional	Biodiversity		1	1			2
		International waters			1			1
		Land degradation				1		1
		POPs				1		1
	Country	Biodiversity	2	2	3	1	1	9
		Climate change			3			3
		Land degradation				1		1
Subtotal			2	3	9	7	1	22
Parent program with child projects	Global	Climate change				1		1
		Land degradation				1		1
	Regional	Climate change				1		1
		International waters			1	2		3
		Land degradation				1	1	2
		Multifocal				1		1
	Country	Land degradation				2		2
		Multifocal				1		1
Subtotal					1	10	1	12
Total			2	3	10	17	2	34

TABLE A.2 Programs with PFD

Program typology	Focal area coverage		GEF-4	GEF-5	GEF-6	Total
Country	Single focal area	Biodiversity	2	1		3
		Climate change	2			2
	Multifocal		3	1		4
Subtotal			7	2		9
Global	Single focal area	Biodiversity	1			1
		Climate change	2		1	3
		POPs	1			1
	Multifocal			1	2	3
Subtotal			4	1	3	8
Regional	Single focal area	Biodiversity	1			1
		Climate change	2	3		5
		International waters	1	2		3
		POPs	1			1
	Multifocal		4	6	1	11
Subtotal			9	11	1	21
Total			20	14	4	38

GEF-6—introduced a classification that categorizes GEF programs into country programs, regional programs, multicountry programs, portfolio programs, and public-private partnership programs (Okapi 2013).

PORTFOLIO

As seen, programs can be defined in any of the categories described above, i.e., phased/tranched, parent/child, national/regional/global, or single/multifocal. This evaluation classifies GEF programs according to the geographical focus of the parent program and the single versus multifocal area nature of child projects (figure A.1).[6] This straightforward classification gives prominence to the technical rather than administrative nature of programs. It is also instrumental to understanding the evolution over time from country to multicountry, and from single to multifocal programs in the GEF.

GEF-supported post-PFD introduction is presented in table A.3. This table does not include one global umbrella program, namely the GEF National Portfolio Formulation Document (GEF ID 4402). This program is composed of child projects that share a common objective but are managed independently in each country. This program has been designed as an administrative arrangement, with the distinctive purpose of generating cost efficiencies by saving on transaction costs. In such cases, the GEF Agency has the responsibility to disburse the same (or similar) financing for the same type of support to countries in a GEF geographic region.

The regional programs represent 60.1 percent of the total GEF finance, followed by global programs representing 22.2 percent, and country programs representing 17.7 percent of the GEF finance. For each GEF dollar, country programs have $10.70 cofinancing, while regional and global programs have $8.40 and $4.80, respectively. Multifocal area programs represent by far the largest share of the portfolio (62.9 percent),

[6] Basic portfolio information for all the GEF programs from their introduction to date is provided in appendix A.3.

FIGURE A.1 Program typologies

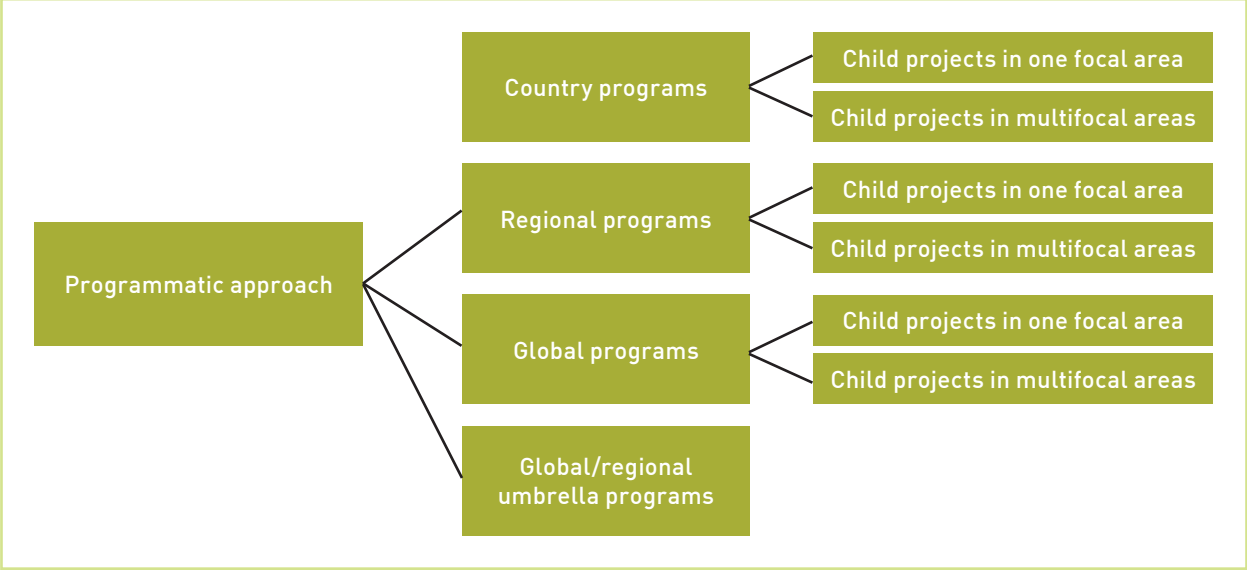


TABLE A.3 Post-PFD GEF support to programs by geographic level and focal area (million $)

Program	Biodiversity		Climate change		Int'l waters		POPs		Single focal area total		Multifocal		Total	
	GEF grant	Cofi-nancing	GEF grant	Cofi-nancing	GEF grant	Cofi-nancing	GEF grant	Cofi-nancing	GEF grant	Cofi-nancing	GEF grant	Cofi-nancing	GEF grant	Cofi-nancing
Country	78.6	917.7	100.5	875.2	0.0	0.0	0.0	0.0	179.1	1,792.9	80.9	990.1	260.0	2,783.0
Regional	33.8	127.7	93.4	1,646.8	83.2	612.1	17.6	21.0	228.1	2,407.5	653.4	4,988.4	881.5	7,396.0
Global	41.1	48.2	90.7	556.4	0.0	0.0	4.4	5.1	136.2	609.7	188.3	937.4	324.5	1,547.1
Total	153.6	1,093.6	284.6	3,078.4	83.2	612.1	22.0	26.1	543.4	4,810.1	922.6	6,915.9	1,466.0	11,726.1

NOTE: GEF grant includes project preparation grants, project grants, and GEF Agency fees.

followed by climate change (19.4 percent), biodiversity (10.5 percent), international water (5.7 percent), and POP programs (1.5 percent).

All of the post-PFD introduction multifocal area programs have biodiversity elements included in the respective PFD, and a large majority has climate change elements as well. International waters and land degradation elements are present in approximately half, while POPs are present in only one. The two most common focal area combinations are in 4 out of 18 programs: (1) biodiversity, climate change (either mitigation, adaptation, or both), and land degradation; and (2) biodiversity, climate change (either mitigation, adaptation, or both), land degradation, and sustainable forest management (table A.4).

TABLE A.4 Focal areas considered in the post-PFD introduction multifocal area programs

GEF ID	Biodiversity	Climate change mitigation	Climate change adaptation	Land degradation	International waters	Sustainable forest mgmt	POPs
2762	x	x		x			
3268	x		x	x			
3420	x	x	x		x		x
3423	x	x	x	x	x		
3482	x	x		x			
3647	x	x			x		
3782	x	x			x		
4511	x	x	x	x		x	
4580	x				x		
4620	x	x	x	x			
4635	x				x		
4649	x	x		x		x	
4664	x	x			x		
4680	x	x		x	x	x	
5395	x	x	x	x	x	x	
9060	x				x		
9071	x	x		x		x	
9272	x	x		x		x	
Total	18	14	6	11	10	6	1

A.2 Purpose, objectives, and audience

The main purpose of this evaluation is to assess whether and how GEF support delivered under the programmatic approaches modality has delivered the expected results in terms of global environmental benefits, while addressing the main drivers of global environmental change. This purpose derives from the IEO Work Program for GEF-6 (GEF IEO 2015a), which in turn has been designed to provide evaluative evidence pertaining to the major strategies approved in the Sixth Replenishment of the GEF Trust Fund and reflected in the GEF-6 Programming Directions (GEF 2016).

This evaluation has the following three overarching objectives:

1. Evaluate the extent, mechanisms, and conditions by which GEF programs have delivered broader-scale and longer-term global environmental benefits;
2. Evaluate the extent, mechanisms, and conditions by which GEF programs have addressed drivers of environmental degradation; and
3. Assess the performance of the GEF in delivering programs (§ 36).

This evaluation assesses how well the GEF has supported countries in applying programs across all sectors. It explicitly indicates the extent to which GEF programs were designed to address the drivers of environmental change, so as to not hold unfairly those activities to standards to which they were not designed to meet. It serves accountability while having a strong formative/learning approach through the provision of relevant evaluative evidence from the past to inform on implementation of the GEF2020 Strategy, including the IAPs. It aims at providing as much evaluative evidence as possible on the transformation of systems at scale through the program modality compared with projects.

The primary audience is the GEF Council, who will eventually be called upon to make decisions on the future of the programmatic approach modality in the context of GEF-6 and beyond. The evaluation will also be useful to the GEF Secretariat, to the broader constituency of GEF Agencies, and to GEF member countries as well as nongovernmental partners.

A.3 Scope, issues, and questions

The evaluation will cover all the programs designed and implemented since the official introduction of the requirement of having a PFD for each program, introduced by the Council (GEF 2008a) in May 2008 to date. Available evaluations covering the pre-PFD programs are reviewed through a meta-analysis approach aiming at summarizing the available evaluative evidence on broader-scale and longer-term results.

The evaluation does not cover the Small Grants Programme (SGP), which has just been evaluated (GEF IEO and UNDP IEO 2015). Umbrella programs are only covered for cost-effectiveness aspects, as this is the main reason for which they have been introduced.

The evaluation assesses issues related to GEF programs' effectiveness in achieving global environmental benefits. It evaluates program results (outcomes and broad-scale, long-term impacts to the extent possible) in terms of their effectiveness in addressing drivers of environmental degradation. It explores efficiency issues as well, including program design, governance and management arrangements, coordination, and M&E. Cross-cutting issues such as gender and private sector involvement are covered where opportunities for specific data gathering arise.

QUESTIONS

The evaluation will respond to a limited number of key questions derived from GEF-6 strategic directions, from the main issues identified by previous evaluations, and from issues of concern for the GEF Council. The GEF Generic Theory of Change Framework is the basic conceptual framework used to guide the way key questions are answered (GEF IEO 2014). Questions are divided into three main evaluation criteria of effectiveness and results, relevance, and efficiency.

Effectiveness and Results

- To what extent have the different typologies of GEF programs delivered the intended results in terms of broader-scale and longer-term environmental outcomes and impacts compared with stand-alone projects?
- To what extent have GEF programs addressed the main drivers of environmental degradation?

Relevance

- What factors have influenced program ownership by participating countries and in turn the relevance of those programs to national environment and development needs and priorities?
- To what extent have child project-level objectives been coherent with and integrated in the program-level ones?

Efficiency

- To what extent have GEF programs been able to disburse large-scale GEF resources to countries and regions with enhanced accountability and oversight?
- To what extent have the governance, management arrangements, and coordination influenced the performance of GEF programs?
- What role did M&E play in the adaptive management of programs for the attainment of expected outcomes and impacts?

A.4 Evaluation design

The evaluation questions will be answered through a mixed-methods approach encompassing both quantitative and qualitative analytical methods and tools. A conceptual framework with a generic TOC for GEF programs and an evaluation matrix composed of the key questions, relevant indicators, sources of information, and methods have been developed as a result of a detailed evaluability assessment, and these are presented in appendix A.1. Synergies with other ongoing evaluations, particularly with the Evaluation of Multiple Benefits in the GEF, will be sought by coordinated data gathering, analysis, and cross-fertilization.

METHODS

Methods and tools include:

- A *documentation review* of GEF policy and strategy documents, and program/child project-related documents, as well as additional literature on programs. These include: PFDs and related child PIFs, PPGs and/or other design documents; project implementation reports and midterm reviews; and terminal evaluations. The review also draws on evaluation reports of other GEF Agencies on programs.
- A *portfolio analysis* of GEF programs and their related child projects. A database will be compiled including basic program information such as GEF activity cycle information, number and typology of child projects, financing (including cofinancing), implementing institutions involved, themes, countries, main objectives,

key partners, and implementation status. A program review template will be developed to assess the programs in a systematic manner for aggregation purposes, and to ensure that key evaluation questions are addressed coherently.

- A *meta-analysis* of available evaluations of pre-PFD programs, aiming at providing a historical perspective on the development of the concept of programmatic approaches in the GEF, starting from the initial analysis contained in this approach paper. The meta-analysis also aggregates the evaluative evidence on broader-scale and longer-term results contained in evaluation reports on pre-PFD programs.
- A *broader adoption/ P2I desk analysis* based on the GEF Generic Theory of Change Framework (GEF IEO 2014) is conducted using the available terminal evaluations, regrouped by program, to aggregate the available evidence on broader-scale and longer-term results.
- A limited number of *P2I case studies* using geographic information system (GIS)/remote sensing (using a specific set of environmental indicators) and field verifications on a purposive selection of geographic ecosystems in which programs are being and/or have been implemented. Some of these are conducted in synergy with the Evaluation of Multiple Benefits in the GEF.
- A limited number of *RIE case studies* (Rowe 2014) on a selection of those mature programs (country and/or regional) on which GIS/remote sensing observations cannot be made and a clear counterfactual is not easily identifiable (i.e., energy efficiency in buildings and in the industrial sector).
- A *quality-at-entry study* with an objectives-mapping exercise to assess the coherence between parent and child project objectives, taking the OPS4 review of the post-PFD programs (§ 16) as the starting point.
- A *crisp-set qualitative comparative analysis (QCA)* on countries participating in a selection of programs to assess ownership factors/conditions influencing the program relevance to national priorities and policies and the ultimate attainment of program results.
- A *cost-effectiveness analysis* of umbrella programs, comparing costs and time taken to design, approve, and deliver such programs and related child projects with the second best available alternative, i.e., project by project.
- A *social network analysis* on a purposive selection of programs to assess the soundness and functioning of program governance, institutional, and management arrangements. The analysis cross-checks evidence from different sources, and uses both qualitative and quantitative information.[7]

Interviews, field verifications and/or online surveys are mainly—but not exclusively— conducted as part of one or more of the above-mentioned methods/tools on a number of the topics identified in the key questions, including institutional/management arrangements, ownership, program parent/child coherence, and M&E, among others.[8]

At the completion of the data analysis and gathering phase, triangulation of the information and qualitative and quantitative data collected will be

[7] This might include using social network analysis visualization software such as UCINET for Windows: Software for Social Network Analysis (Borgatti, Everett, and Freeman 2002).

[8] The team is considering designing an online survey to consult the partners on incentives and/or disincentives to design and implement programs, depending on the availability of a complete list of relevant stakeholders.

conducted to determine trends and to identify the main findings, lessons, and conclusions. Different stakeholders are consulted during the process to test preliminary findings.

PROCESS

The Evaluation of Programmatic Approaches in the GEF is being conducted between October 2015 and June 2017.[9] Preliminary findings on the results and performance of GEF programs since their introduction to date, with a strong focus on the post-PFD ones, will be presented to the Council in October 2016. The full report will be presented to the Council in June 2017. This evaluation will inform the planned IAPs' midterm review, a formative real-time evaluation that will build on the evaluative learning generated during this evaluation and will focus on the process and design aspects as they relate to the IAPs.

Regular stakeholder interaction will be sought to enhance the evaluation process. This includes consultation and outreach while the evaluation is underway, and dissemination and outreach once the study is complete. During the evaluation preparation, the team will solicit feedback and comments from stakeholders to improve the evaluation's accuracy and relevance. An added benefit is stimulating interest in the evaluation results. The principles of transparency and participation will guide this process. Such stakeholder interaction will contribute important information and qualitative data to supplement data, interviews, case studies, and other research.

[9] A substantial amount of work has already taken place in terms of background information and portfolio data gathering, as well as for scoping of issues/questions (table A.5).

QUALITY ASSURANCE

In line with GEF IEO's quality assurance practice, two quality assurance measures will be set up for this evaluation. The first is a Reference Group, composed of representatives from the GEF Secretariat, GEF Agencies, and STAP. The Reference Group will: (1) provide feedback and comments on the approach paper, the preliminary findings, and the evaluation report; (2) help ensure evaluation relevance to ongoing as well as future operations; (3) help identify and establish contact with the appropriate individuals for interviews/focus groups; and 4) facilitate access to information. The second is a Peer Review Panel, consisting of a limited number of evaluators, either from the GEF Agency Evaluation Offices or from other recognized evaluation institutions, with experience in program evaluation. Their role is to advise throughout the evaluation process on: (1) the soundness of evaluation design, scope, questions, methods, and process described in the approach paper; and (2) on the implementation of the methodology and implications of methodological limitations in the formulation of the conclusions and recommendations in the draft and final reports.

LIMITATIONS

A number of limitations can be identified at this stage. These include: (1) paucity and inconsistency of program as well as project-level evaluative information; (2) unreliability of project management information system (PMIS) data on programs as it is not regularly updated, especially on status; and (3) a limited number of field visits that will be possible to conduct in the timeframe allowed for this evaluation. The first limitation will be addressed through the original evaluative data-gathering efforts planned in the P2I analyses. The second limitation will be addressed by cross-checking PMIS portfolio information with

the management information systems of GEF Agencies as the first priority before undertaking any analysis. The third limitation will be mitigated by conducting field missions to countries jointly with those within other ongoing evaluations of IEO (particularly the Evaluation of Multiple Benefits in the GEF) to increase field coverage. The team will report on how these as well as other emerging limitations will be dealt with during the evaluation data gathering and analysis phase.

A.5 Expected outputs and dissemination

A concise progress report will be produced at the GEF Council meeting in October 2016.

Additional analyses will be identified and conducted to refine the findings and lead to the final report to the Council in June 2017, which will include a concise set of conclusions and recommendations. These will be incorporated in the Semi-Annual Evaluation Report of June 2017. The full report will be uploaded as a Council information document. It will be distributed to the Council members, GEF Secretariat, STAP, GEF country focal points, and GEF Agency staff.

A graphically edited version will be published as open access on the Office's website and distributed through email. A 20-page infographic summary and a two-page signpost will also be produced. A detailed dissemination plan will be prepared and implemented, which will include distribution of the above-mentioned outputs in the main evaluation networks through existing IEO mailing lists, as well as mailing lists of audience and stakeholders that will be developed during the conduct of the evaluation. The plan will also consider concrete opportunities to present the evaluation through webinars as well as at evaluation conferences and workshops.

A.6 Resources

TIMETABLE

The evaluation is being conducted between October 2015 and June 2017. The initial work plan is visible in table A.5, and will be further revised and detailed as part of further preparations.

TEAM AND SKILLS MIX

The evaluation will be conducted by a team led by a Senior Evaluation Officer from the IEO with oversight from the Chief Evaluation Officer and Director of the IEO. The team will include IEO's staff and short-term consultants, comprising research assistants, senior evaluators, and GEF focal area and methodology experts.

The skills mix required to complete this evaluation includes evaluation experience and knowledge of IEO's methods and practices; familiarity with the policies, procedures, and operations of GEF and its Agencies; knowledge of the GEF and external information sources; and practical, policy, and/or academic expertise in key GEF focal areas of the programs under analysis (i.e., BD, CC, LD, IW).

In addition, specific inputs will be sourced from experts in selected relevant areas, i.e., RIE, GIS/Remote Sensing, and QCA, among others. Use of local consultants will be sought wherever possible for the conduct of field-level data gathering in the context of the P2I case studies.

TABLE A.5 Timetable

Task	2015			2016												2017					
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Approach paper																					
Background information & portfolio data gathering	x	x																			
Scoping (issues/questions, time/scale, portfolio)		x	x																		
Approach Paper	x			x	x																
Evaluability assessment and evaluation matrix				x																	
Data gathering and analysis																					
Documentation review		x	x	x	x	x															
Portfolio analysis (program review template design and filling)						x	x	x	x												
Quality at entry study							x	x													
Meta-evaluation				x																	
Broader adoption/P2I desk analysis				x																	
P2I case studies (rapid impact evaluation)							x	x	x	x											
P2I case studies (GIS/remote sensing)								x	x	x	x										
Cost effectiveness analysis								x	x	x											
Qualitative comparative analysis									x	x	x	x									
Social network analysis										x	x	x	x								
Additional analyses (gaps filling, refining key findings)														x	x	x	x				
Triangulation of the evidence collected and identification of preliminary findings																					
Triangulation brainstorming				x																	
Gap filling														x	x						
Report writing																					
Progress report to Council				x																	
Technical documents				x												x	x				
Draft report																x	x	x			
Due diligence (gathering feedback and comments)																		x	x		
Final report																			x	x	
Presentation to Council in the Semi-Annual Evaluation Report																				x	
Edited report																					→
Dissemination and outreach																					→

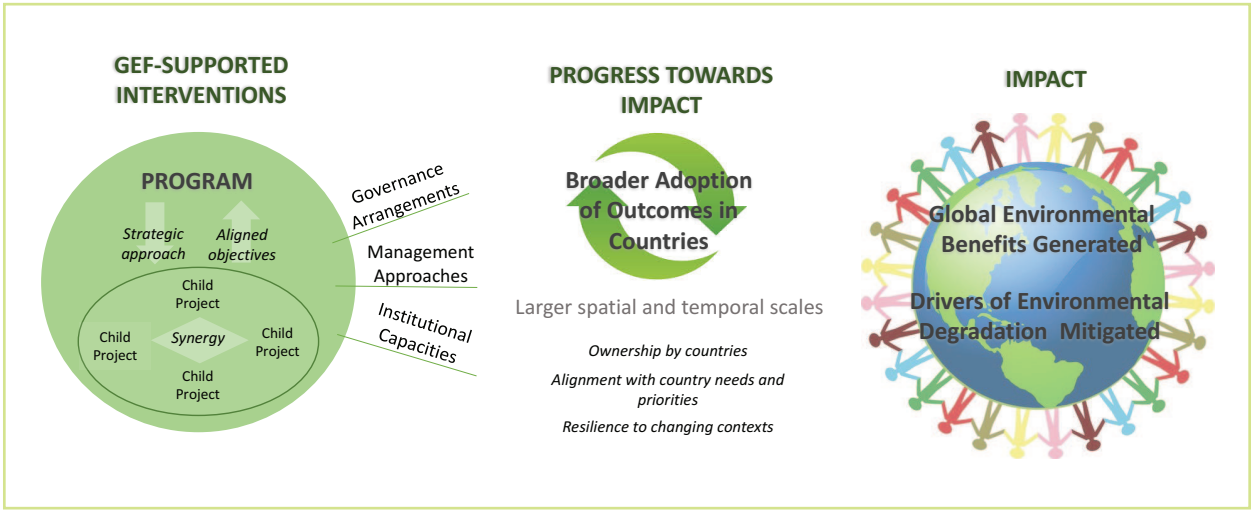
Appendix A.1 Evaluation conceptual framework and evaluation matrix

The evaluation conceptual framework has been mapped out of the concepts and rationale for programmatic approaches described in the background section of the approach paper. Figure A1.1 illustrates how GEF programs aim to achieve impact in ways that are different from individual projects. The conditions that need to be present for impact to be achieved are expressed with text in italics.

A program is expected to provide a strategic approach that outlines how the different child projects together will address a specific environmental concern and lead to the desired large-scale outcome. At the same time, each child project must have objectives aligned with the program's strategic approach. Ideally, the child projects are designed or linked in a way that synergies and/or complementarities are created in terms of environmental, governance, management, and institutional capacity outcomes, for example through knowledge exchange.

GEF-supported interventions typically consist of improvements to governance arrangements, management approaches, and the institutional capacities necessary to implement these arrangements and approaches. The outcomes of these interventions would then be broadly adopted—replicated, scaled up, and mainstreamed—at the scale of the country. Broader adoption is assessed as an indicator of progress toward impact. However, it is assumed that broader adoption within countries will only take place if doing so aligns with the country's needs and development priorities, and if the national government and other stakeholders have a sense of ownership over these outcomes. The circular arrow indicates that the process of broader adoption is an iterative and nonlinear one, with self-reinforcing positive feedback loops ideally leading to outcomes being adopted, and impacts manifesting over increasing spatial and temporal scales. Programs differ from individual projects in that they are able to cover a larger geographical area (such as the country at a minimum), and can be implemented over longer time periods beyond a single project's lifetime. As some

FIGURE A.1.1 Generic theory of change for GEF programs



components of the targeted social-ecological system may take longer to respond to interventions, programs allow for longer-term impacts to emerge at these larger scales. However, benefits from outcomes need to be resilient to changing contexts if these are to lead to long-term, large-scale impact.

Impact in the GEF context is defined as the improvement of environmental status derived from the generation of global environmental benefits, or reduction of environmental stress through the mitigation of the drivers of environmental degradation. The GEF2020 Strategy specifically focuses on addressing drivers of environmental degradation, although addressing drivers is not new in the GEF.

Drivers refer to processes that indirectly affect the use of natural resources at a large scale, and are often social, economic, or political in nature. Examples are industries related to food supply and demand, transportation, energy, and infrastructure. Due to its larger-scale and longer-term objectives when compared with individual projects, programs have the potential to address drivers more effectively.

Programs are also different from projects in that they are intended to increase cost-effectiveness in terms of project approval times, design and implementation costs, coordination among individual projects within a given thematic sector or geographical area, and leveraging of cofinancing. In fact, other donors are more likely to provide cofinancing toward larger, coherent, and more visible programs rather than to individual projects. Due to their size, programs may be more difficult to manage than projects. However, the larger financing and the expected cost-effectiveness are assumed to provide an incentive to GEF Agencies and countries to implement programs rather than individual projects where appropriate.

Cost-effectiveness is the extent to which a program has achieved or is expected to achieve its results at a lower cost compared with alternatives (IEG 2007). In case program-level results simply represent the sum of project-level results, if the costs of a program are less than the "business as usual" alternative (stand-alone project/cluster of projects, or project-by-project approach), then the program is still more cost-effective. Figure A1.2 illustrates advantages (rounded rectangles) and limitations (dashed rectangles) in the GEF Activity Cycle, influencing program cost-effectiveness.[1]

The evaluation matrix (table A.1.1) on the following pages translates the main elements described in the evaluation conceptual framework into indicators, and relates them to the respective sources of information and evaluation methods/tools. It also indicates the team responsibilities.

[1] Factors have been drawn from two GEF reports: GEF IEO (2002) and GEF IEO (2007).

FIGURE A.1.2 Advantages and limitations of GEF programs at different stages of the GEF activity cycle

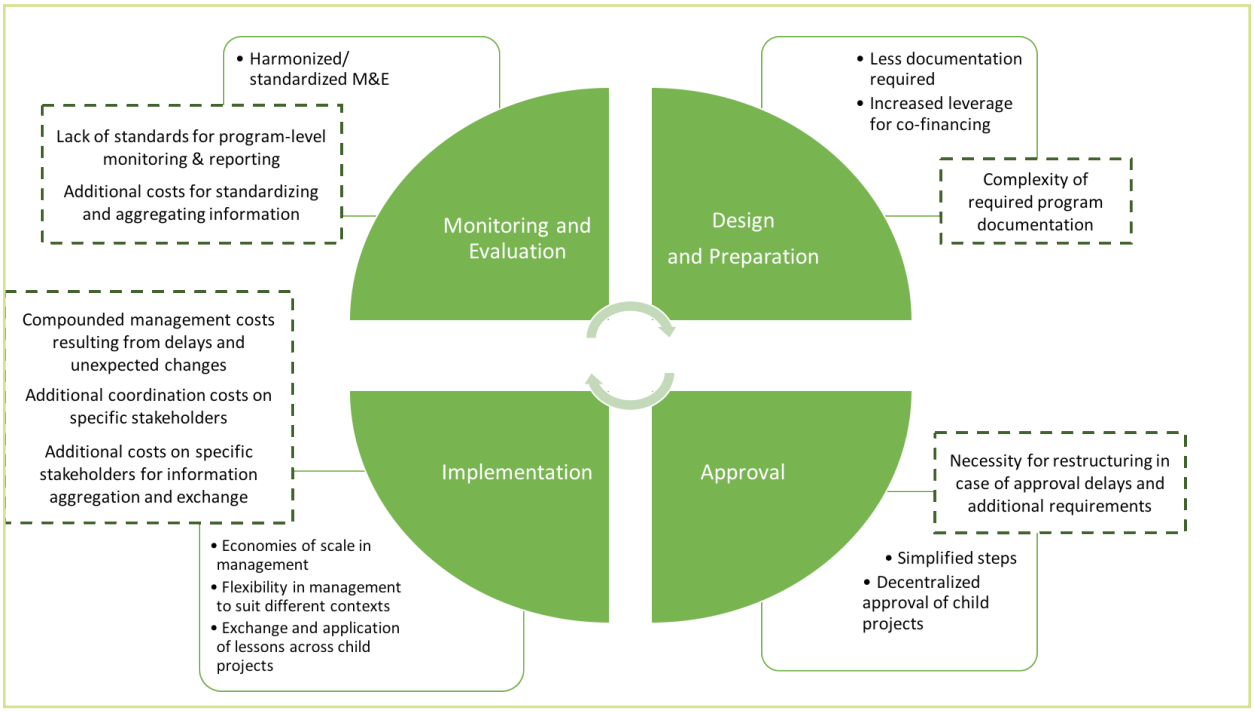


TABLE A.1.1 Evaluation matrix

Key questions	Indicators/basic data/ what to look for	Sources of information	Methodology	Responsibility
Effectiveness and results				
(1) To what extent have the different typologies of GEF programs delivered the intended results in terms of broader-scale and longer-term environmental outcomes and impacts compared with stand-alone projects?	Aggregated program and child project effectiveness and sustainability ratings, by program typology (single versus multifocal area, country versus regional, etc.), compared with "business as usual"	M&E reports (project implementation reports, midterm reviews, terminal evaluations, terminal evaluation reviews)	Documentation review portfolio analysis	GEF IEO research assistants
		30+ available post-2008 child project terminal evaluations	Broader Adoption/ P2I desk analysis	
	Evidence/examples of broader adoption—sustaining, replication, scaling-up, mainstreaming and market change mechanisms in place—in single as well as multifocal area programs, compared with "business as usual" Observed resilience to changing contexts in terms of benefits from program outcomes	Available pre-2008 program evaluations by GEF IEO and other GEF Agencies' evaluation units	Meta-analysis	
		Country stakeholders Available country data Geocoded child projects Field observations	Two P2I case studies (RIE) on energy efficiency in buildings	Senior Consultant, RIE Expert/ Firm TTL
			Four purposively selected P2I case studies (GIS/Remote Sensing)	Senior Consultant, Case Study Consultants, GEF IEO GIS Expert and Evaluator
	Existence and trends in the flow of knowledge exchange between child projects, including lessons and good practices	Country stakeholders Central-level stakeholders (GEF Secretariat and Agencies) GEF IEO "Meta-analysis of evaluative evidence contained in CPEs, on GEF support to knowledge management," other evidence knowledge management from other IEO evaluations Online platforms (i.e., IW-LEARN)	Interviews Field visits and other country-level data collection during the P2I case studies missions Documentation review Web search	Senior Consultant RIE Expert/ Firm Case Study Consultants
	Existence of a coordinated and adequately budgeted program-level knowledge management function under one strategic framework	PFDs M&E reports (project implementation reports, midterm reviews, terminal evaluations, terminal evaluation reviews) Online platforms (i.e., IW-LEARN)	Documentation review Web search	GEF IEO research assistants
	Comparison of results: program versus comparable single project/ cluster of projects (i.e., "business as usual")	Country stakeholders Available country data Geocoded child projects Field data on remote sensing indicators (for validation, calibration and model building)	Two P2I case studies (RIE) on energy efficiency in buildings programs	Senior Consultant RIE Expert/ Firm TTL
			Four purposively selected P2I case studies (GIS/Remote Sensing) *Three case studies will be conducted in synergy with Multiple Benefits Evaluation case studies*	Senior Consultant Case Study Consultants TTL GEF IEO GIS Expert and Evaluator

Key questions	Indicators/basic data/ what to look for	Sources of information	Methodology	Responsibility
	Land use/Land cover changes Vegetation productivity Landscape fragmentation Moderate resolution for long-term analysis (20 yrs) High resolution satellite products for changes (15yrs)	GIS/Remote Sensing databases; all ongoing and completed child projects in "mature programs" that can be geocoded (n = 281)	Quasi experimental design Time series analysis Change analysis *Geocoding and analysis of* environmental parameters to be done in conjunction with the Multiple Benefits Evaluation	GEF IEO GIS Expert and Evaluator Geocoding firm/ institution
(2) To what extent have GEF programs addressed the main drivers of environmental degradation?	Indicators will be built retrospectively. They will be very broad (like a checklist) at the portfolio level, then specific to environmental issues at the case study level. Using UN Food and Agriculture Organization (FAO) and World Resources Institute sources, the GEF2020 Strategy (GEF 2014a) indicates four major socioeconomic drivers of environmental degradation, divided in demand (indirect drivers) and supply (direct drivers) for the food production, buildings, transportation, and energy sectors	M&E reports (project implementation reports, midterm reviews, terminal evaluations, terminal evaluation reviews)	Documentation review	GEF IEO research assistants
		Country stakeholders Available country data Central-level stakeholders (GEF Secretariat and Agencies)	Interviews Field visits and other country-level data collection during the P2I case studies missions	Senior Consultant RIE Expert/ Firm Case Study Consultants
		PFDs M&E reports (project implementation reports, midterm reviews, terminal evaluations, terminal evaluation reviews)	Documentation review	GEF IEO research assistants
Relevance				
(1) What factors have influenced program ownership by participating countries and in turn the relevance of those programs to national environment and development needs and priorities?	Existence of national operational strategies related to the GEF Focal Areas to which GEF program support belongs Predictability of GEF support allocated to countries through RAF and STAR Alignment of GEF program support with other donor programs support as well as with national priorities and national budgets in the framework of the Paris Declaration Degree of integration of GEF program support within country systems Extent of national nonstate actors participation in GEF programs/ child projects Plus any other ownership factors emerging from the QCA analysis	PMIS PFDs and child project PIFs/ PPGs M&E reports (project implementation reports, midterm reviews, terminal evaluations, terminal evaluation reviews) Country stakeholders Available country data	Portfolio analysis Documentation review Qualitative Comparative Analysis (QCA) data gathering during P2I case studies missions in-country	GEF IEO QCA Specialist and Evaluator TTL Senior Consultant Case Study Consultants External QCA Consultant

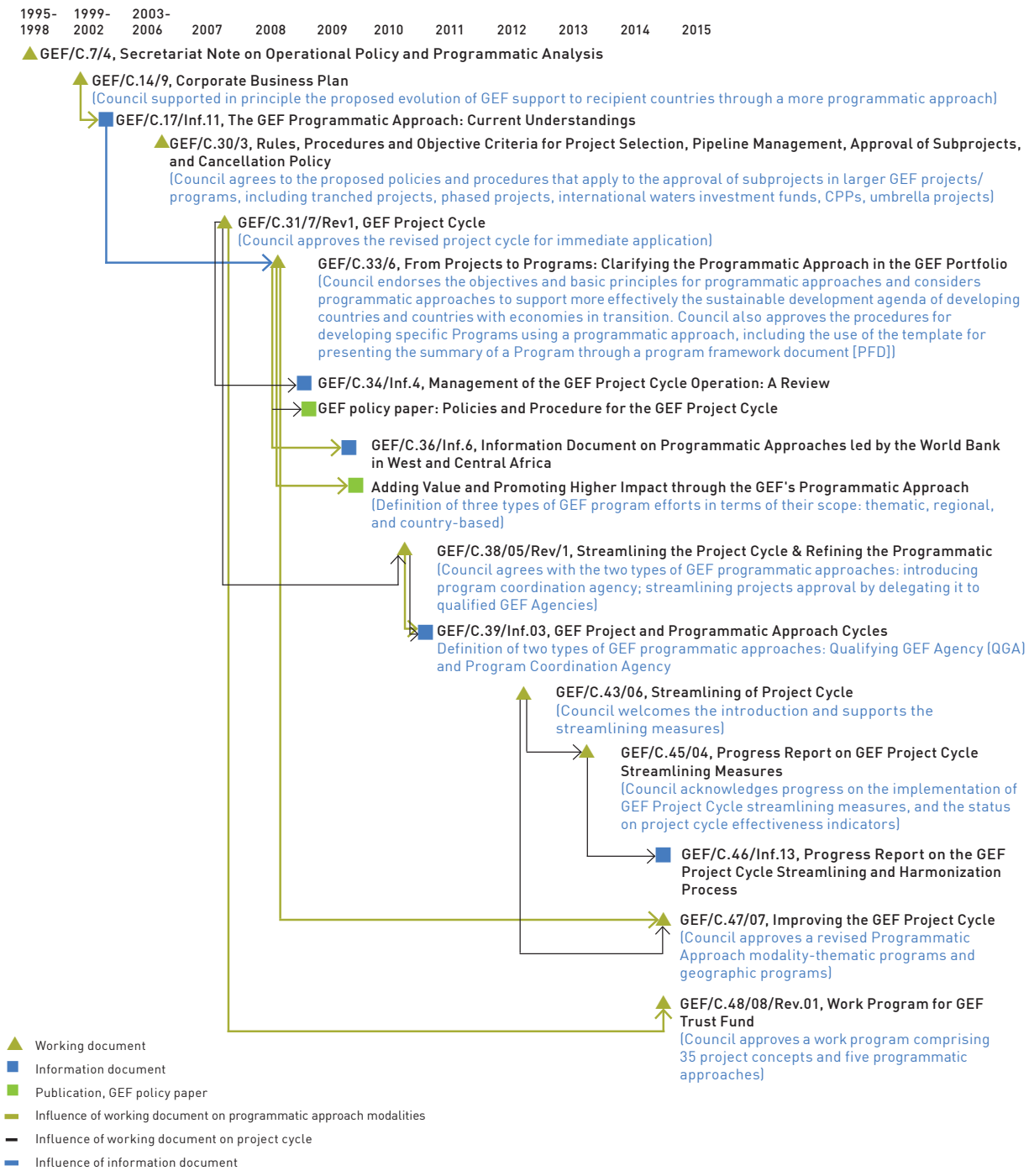
Key questions	Indicators/basic data/ what to look for	Sources of information	Methodology	Responsibility
	Perceptions on stakeholder incentives and/or disincentives to embark in GEF programs and their change over time, i.e., access to GEF funding (from STAR or from set-asides), leverage potential for attracting other donors' funding, long-term perspective, synergies, management arrangements, transaction costs, among others	Country stakeholders Available country data Central-level stakeholders (GEF Secretariat and Agencies)	Interviews Field visits and other country-level data collection during the P2I case studies missions	Senior Consultant, Case Study Consultants
			Online survey	TTL GEF IEO research assistants
	Extent to which programs improved GEF Agency and donor coordination and harmonization of donor procedures (e.g., in program M&E reporting and cofinancing)	Country-level government and GEF Agency stakeholders Available country data	Interviews Field visits and other country-level data collection during the P2I case studies missions	Senior Consultant, Case Study Consultants
	Similarities and differences (in terms of objectives, processes, institutional arrangements, etc.) between GEF programs and more "traditional" donor-based programs as defined by OECD	Available literature on programs from OECD and other donors (including World Bank [WB] trust funds, etc.).	Literature review	External Consultant
(2) To what extent have child project-level objectives been coherent with and integrated in the program-level ones?	Existence of a program strategic approach detailing how the program-level outcome is expected to be achieved through child-level outcomes Alignment of the child projects' objectives with the program objective and strategic approach	Program PFDs and related child projects PIFs/PPGs Entire portfolio of child projects, approx. *n* = 300 and 38 programs OPS4 Review of 34 Post-2008 PFDs	Quality at Entry Study (checklist, outcome mapping)	GEF IEO research assistants
	Observed synergy/ complementarity/integration between program and related child projects' outcomes	M&E reports (project implementation reports, midterm reviews, terminal evaluations, terminal evaluation reviews)	Documentation review	
	Observed synergy/ complementarity/integration between child projects outcomes	Country stakeholders Available country data	Interviews Field visits and other country-level data collection during the P2I case studies missions	Senior Consultant, Case Study Consultants

Key questions	Indicators/basic data/ what to look for	Sources of information	Methodology	Responsibility
Efficiency				
(1) To what extent have GEF programs been able to disburse large-scale GEF resources to countries and regions with enhanced accountability and oversight?	Program approval steps compared with the "business as usual" alternative (i.e., comparable stand-alone projects) Comparison of number and complexity of documentation required at planning and approval between programs and "business as usual" alternative (i.e., comparable stand-alone projects) Comparison of management costs and savings during implementation between programs and the "business as usual" alternative (i.e., comparable stand-alone projects)	Programs data and documentation from PMIS (updated by GEF Agencies)	Cost-effectiveness analysis Portfolio analysis	GEF IEO research assistants
		Central-level stakeholders (GEF Secretariat and Agencies)	Interviews	Senior Consultant
	Process indicators: processing timing (according to the GEF Activity cycle steps), preparation and implementation cost by type of modalities, etc.	Umbrella programs data and documentation from PMIS (updated by GEF Agencies) Central-level stakeholders (GEF Secretariat and Agencies)	Desk review Portfolio analysis Timelines Interviews	Senior Consultant GEF IEO research assistants
	Programs and child project dropouts and cancellations			
	Levels and timings of GEF funding	Program data and documentation from PMIS (updated by GEF Agencies) Central-level stakeholders (GEF Secretariat and Agencies)	Documentation review Portfolio analysis Interviews	Senior Consultant GEF IEO research assistants
	Nature of the types of finance leveraged under programmatic approaches, and related sources, compared with "business as usual" (i.e., comparable stand-alone projects)			
	Existence of an RBM strategy showing how each child contributes to the parent objectives, with baselines, monitoring activities and adequate budget	PFDs and child project PIFs/ PPGs of post 2010 programs. M&E reports (project implementation reports, midterm reviews, terminal evaluations, terminal evaluation reviews)	Documentation review	GEF IEO research assistants
(2) To what extent have the governance, management arrangements and coordination influenced the performance of GEF programs?	Centrality and network density, to be compared for different programs and "correlated" with their outcomes	PFDs GEF Agencies and national stakeholders	Social network analysis Interviews	GEF IEO's QCA Expert and Evaluator

Key questions	Indicators/basic data/ what to look for	Sources of information	Methodology	Responsibility
	Comparing time, costs and functioning patterns of coordination mechanisms of different ongoing programs by typology (single vs multifocal area, regional vs country, etc.)	M&E reports (project implementation reports, midterm reviews, terminal evaluations, terminal evaluation reviews)	Documentation review	GEF IEO research assistants
		Regional stakeholders (i.e., UNDP Regional Technical Advisers), program meeting minutes, etc.	Social network analysis Interviews	Senior Consultant
		Country stakeholders Available program coordination meeting minutes	Interviews Field visits and other country-level data collection during the P2I case studies missions	Senior Consultant, Case Study Consultants
	Availability and level of funding for coordination support at parent level	PFDs and child project PIFs/ PPGs M&E reports (project implementation reports, midterm reviews, terminal evaluations, terminal evaluation reviews) Central and country level stakeholders	Documentation review Interviews	GEF IEO research assistants Senior Consultant
	Level and type of participation/ engagement in program coordination in different ongoing programs by typology (single vs multifocal area, regional vs country, etc.)	M&E reports (project implementation reports, midterm reviews, terminal evaluations, terminal evaluation reviews)	Documentation review	GEF IEO research assistants
		Country stakeholders Available program coordination meeting minutes	Interviews Field visits and other country-level data collection during the P2I case studies missions	Senior Consultant Case Study Consultants
	Cross-referencing in program and child project reports of results of coordination	M&E reports (project implementation reports, midterm reviews, terminal evaluations, terminal evaluation reviews)	Documentation review	GEF IEO research assistants
	Frequency and quality of communication and technical support between program and child project teams	Program stakeholders, meeting minutes, etc.	Documentation review Interviews	Senior Consultant

Key questions	Indicators/basic data/ what to look for	Sources of information	Methodology	Responsibility
(3) What role did M&E play in programs adaptive management for the attainment of expected outcomes and impacts?	Existence and quality of elements of guidance on program-level M&E	Council documents GEF IEO M&E Policy PFDs Available program-level terminal evaluations	Documentation review	GEF IEO research assistants
	Design and implementation of roles and responsibilities for gathering/reporting/sharing monitoring information	PFDs and child project PIFs/ PPGs		GEF IEO research assistants
		Central, regional, and country-level stakeholders	Interviews Field visits and other country-level data collection during the P2I case studies missions	Senior Consultant, Case Study consultants
	Existence of a harmonized and adequately budgeted program-level M&E framework design and coherence with child projects M&E design	PFDs and child project PIFs/ PPGs	Documentation review	GEF IEO research assistants
	Number, type, and quality of post-2008 program and child project M&E reporting	APR 2015 desk-based survey, M&E reports (project implementation reports, midterm reviews, terminal evaluations, terminal evaluation reviews)		
	Evidence of adaptive management (i.e., changes at midterm)	Available midterm reviews		
	Appropriateness of indicators (e.g., SMART)	M&E reports (project implementation reports, midterm reviews, terminal evaluations, terminal evaluation reviews)		
	Types of M&E information used/ acknowledgment of usefulness	Global, regional, and country-level stakeholders	Interviews Online survey	Senior Consultant TTL GEF IEO research assistants

Appendix A.2 Sequencing of major Council documents



Appendix A.3 Portfolio

PHASED/TRANCHED PROGRAMS

GEF ID	Agency	Geo-graphic level	Focal area	Title	GEF period	Type	Status	Approved PPG(s) ($)	GEF grant ($)	Agency fee ($)	Cofinancing ($)	Approval date
62	WB	Country	BD	Protected Areas Program	Pilot	FP	Project Closure	0	25,000,000		17,200,000	1-May-91
877	WB	Country	BD	Consolidation of the Protected Areas Program (SINAP II)	GEF-2	FP	Project Completion	350,000	16,100,000	1,229,000	60,300,000	1-Nov-00
2078	WB	Country	BD	Consolidation of the Protected Area System (SINAP II) - Second Tranche	GEF-3	FP	Project Completion	0	2,210,000		15,230,000	2-May-03
2654	WB	Country	BD	Consolidation of the Protected Area System (SINAP II) - Third Tranche	GEF-4	FP	Project Completion	0	7,350,000	0	7,350,000	8-Jun-07
2655	WB	Country	BD	Consolidation of the Protected Area System (SINAP II) - Fourth Tranche	GEF-4	FP	CEO Endorsed	0	5,440,000	0	5,440,000	30-Sep-08
117	WB	Regional	BD	Atlantic Biological Corridor	GEF-1	FP	Project Closure	330,000	7,100,000		43,600,000	1-Oct-96
121	UNDP/ WB	Regional	BD	Honduras Biodiversity Project	GEF-1	FP	Project Closure	300,000	7,000,000		41,700,000	1-Jan-97
133	WB	Regional	BD	Atlantic Mesoamerican Biological Corridor Project	GEF-1	FP	Project Closure	285,000	8,300,000		30,900,000	1-May-97
671	WB	Regional	BD	Ecomarkets	GEF-2	FP	Project Closure	330,000	8,000,000	878,000	51,900,000	1-Dec-99
779	WB	Regional	BD	Mesoamerican Biological Corridor	GEF-2	FP	Project Completion	360,000	14,840,000	1,261,000	78,110,000	1-May-00
125	UNDP/ WB	Country	BD	Environment Program Support Project	GEF-1	FP	Project Closure	500,000	20,800,000		135,200,000	1-Aug-96
1884	WB/ UNDP	Country	BD	Third Environment Programme	GEF-3	FP	Project Completion	0	13,500,000	1,224,000	135,350,000	21-Nov-03
134	WB	Country	BD	Cape Peninsula Biodiversity Conservation Project	GEF-1	FP	Project Closure	85,000	12,300,000		80,800,000	1-Nov-97
1516	WB	Country	BD	C.A.P.E. Biodiversity Conservation and Sustainable Development Project	GEF-3	FP	Project Completion	320,000	11,000,000	1,291,000	44,450,000	16-May-03
771	WB	Country	BD	Amazon Region Protected Areas Program (ARPA)	GEF-2	FP	Project Closure	350,000	30,000,000	1,550,000	59,000,000	1-May-00
4085	WB	Country	BD	Amazon Region Protected Areas Program Phase 2	GEF-4	FP	Under Implementation	0	15,890,000	1,589,000	70,000,000	17-Mar-10
935	UNDP	Country	CC	Barrier Removal to Namibian Renewable Energy Programme, Phase I	GEF-2	FP	Under Implementation	103,000	2,600,000	242,000	4,730,000	11-May-01
2256	UNDP	Country	CC	Barrier Removal to Namibian Renewable Energy Programme (NAMREP), Phase II	GEF-3	FP	Project Completion	0	2,600,000	234,000	7,636,000	1-Aug-06
941	UNDP	Country	CC	Demonstration of Fuel Cell Bus Commercialization in China (Phase II-Part I)	GEF-2	FP	Project Completion	0	5,815,000	336,000	10,115,000	11-May-01
2257	UNDP	Country	CC	Demonstration of Fuel Cell Bus Commercialization in China, Phase 2	GEF-3	FP	Project Completion	0	5,767,000	519,030	12,858,000	10-Nov-05
943	WB	Country	CC	Renewable Energy Scale Up Program (CRESP), Phase 1	GEF-2	FP	Project Completion	1,350,000	40,220,000	2,823,000	129,580,000	11-May-01
4493	WB	Country	CC	China Renewable Energy Scaling-Up Program (CRESP) Phase II	GEF-5	FP	IA Approved	0	27,280,000	2,720,000	444,100,000	26-May-11
1089	WB/IFC	Country	BD	Asian Conservation Company (ACC)	GEF-2	FP	Project Completion	0	1,600,000	186,000	14,800,000	17-May-02
1094	WB/ UNDP	Regional	IW	Nile Transboundary Environmental Action Project, Tranche 1	GEF-2	FP	Project Completion	350,000	16,800,000	1,315,414	90,760,000	7-Dec-01

GEF ID	Agency	Geo-graphic level	Focal area	Title	GEF period	Type	Status	Approved PPG(s) ($)	GEF grant ($)	Agency fee ($)	Cofinancing ($)	Approval date
2584	UNDP	Regional	IW	Nile Transboundary Environmental Action Project (NTEAP), Phase II	GEF-4	FP	Project Completion	0	6,700,000	670,000	71,990,000	5-Sep-07
1170	WB/ UNDP	Country	BD	Conservation and Management of the Eastern Arc Mountain Forests	GEF-2	FP	Project Completion	373,000	12,000,000	1,310,391	38,450,000	7-Dec-01
1224	UNEP	Global	BD	Conservation and Sustainable Management of Below Ground Biodiversity, Phase I	GEF-2	FP	Project Closure	273,000	5,022,646	240,000	3,576,739	7-Dec-01
2342	UNEP	Global	BD	Conservation and Sustainable Management of Below Ground Biodiversity, Tranche 2	GEF-2	FP	Project Completion	0	4,007,124	360,641	7,438,678	7-Dec-01
1239	UNDP	Country	BD	Sustainable Development of the Protected Area System	GEF-3	FP	Under Implementation	317,821	9,000,000	838,604	22,429,500	1-Aug-06
1348	WB/ FAO	Regional	POPs	Africa Stockpiles Program, P1	GEF-3	FP	Project Completion	700,000	25,000,000	2,523,000	35,000,000	15-Oct-02
2152	WB	Country	BD	Butrint National Park: Biodiversity and Global Heritage Conservation	GEF-4	MSP	Project Completion	25,000	950,000	87,750	1,208,160	29-Jun-07
2344	UNEP	Regional	BD	Desert Margins Programme (DMP) Tranche 2	GEF-2	FP	Project Closure	0	5,617,044	148,550	12,250,182	7-Dec-01
2377	UNEP	Regional	LD	Sustainable Land Management in the High Pamir and Pamir-Alai Mountains - and Integrated and Transboundary Initiative in Central Asia Phase I	GEF-3	FP	Under Implementation	650,000	3,000,000	328,500	6,000,000	1-Aug-06
2509	UNDP	Country	LD	Sustainable Land Management for Combating Desertification (Phase I)	GEF-3	FP	Project Completion	340,000	2,000,000	210,600	2,600,000	9-Jun-06
2591	WB	Country	BD	Creation of Nature Protection Area	Pilot	FP	Council Approved	0				1-Dec-93
2618	WB/IFC	Global	BD	Biodiversity and Agricultural Commodities Program (BACP), Phase 1	GEF-3	FP	Project Completion	435,750	7,000,000	669,218	11,674,000	1-Aug-06
2714	UNDP	Global	BD	National Reporting to the CBD: Supporting Countries to Prepare the Third National Report on Biodiversity, Phase I	GEF-3	MSP	Under Implementation	0	1,000,000	146,000		17-Mar-05
2880	UNDP	Global	BD	National Reporting to the CBD: Supporting Countries to Prepare the Third National Report on Biodiversity (Phase II)	GEF-3	MSP	IA Approved	0	1,000,000	90,000		8-Sep-05
3037	UNEP	Global	BD	Conservation and Use of Crop Genetic Diversity to Control Pests and Diseases in Support of Sustainable Agriculture (Phase 1)	GEF-3	FP	Project Completion	350,000	3,411,148	338,503	4,274,344	1-Aug-06
Total								8,477,571	393,219,962	25,359,201	1,808,000,603	

SOURCE: PMIS.

PROGRAMS WITHOUT PFD

GEF_ ID	Agency	Geo-graphic level	Focal area	Title	GEF period	Type	Status	Approved PPG(s) ($)	GEF grant ($)	Agency fee ($)	Cofinancing ($)	Approval date
1014	WB	Regional	IW	Danube/Black Sea Basin Strategic Partnership on Nutrient Reduction, Tranche I	GEF-2	FP	Council Approved	0	79,000,000	7,935,000	308,577,000	11-May-01
1615	WB	Regional	CC	Geothermal Energy Development Program , GeoFund	GEF-3	FP	Canceled	700,000	25,000,000	2,500,000	175,000,000	16-May-03
1685	WB/IFC	Global	CC	FC-1: Fuel Cells Financing Initiative for Distributed Generation Applications (Phase 1)	GEF-3	FP	Under Implementation	25,000	9,825,000	922,000	9,000,000	21-Nov-03
2093	WB	Regional	IW	SP-SFIF: Strategic Partnership for a Sustainable Fisheries Investment Fund in the Large Marine Ecosystems of Sub-Saharan Africa (Tranche 1, Installment 1)	GEF-3	FP	Council Approved	670,000	28,600,000	2,790,300	160,640,000	15-Nov-05
2437	UNDP/ UNEP, FAO	Country	LD	CPP Cuba: Supporting Implementation of the Cuban National Programme to Combat Desertification and Drought (NPCDD)	GEF-3	FP	PPG Approved	403,000	9,652,500	900,000	79,437,500	10-Nov-05
2439	UNDP/ WB	Country	MFA	CPP Namibia: Country Pilot Partnership for Integrated Sustainable Land Management, Phase 1	GEF-3	FP	Council Approved	250,000	10,000,000	922,500	51,988,600	10-Nov-05
2441	UNDP	Global	LD	LDC and SIDS Targeted Portfolio Approach For Capacity Development and Mainstreaming of Sustainable Land Management	GEF-3	FP	Project Completion	0	29,000,000	3,770,000	30,950,000	21-May-04
2454	WB	Regional	IW	World Bank/GEF Partnership Investment Fund for Pollution Reduction in the Large Marine Ecosystems of East Asia (Tranche 1 of 3 tranches)	GEF-3	FP	Council Approved	700,000	35,000,000	3,213,000	701,570,000	10-Nov-05
2504	ADB	Regional	LD	CACILM: Central Asian Countries Initiative for Land Management Multi-country Partnership Framework Phase 1	GEF-3	FP	Project Completion	700,000	20,000,000	1,863,000	134,823,000	28-Aug-06
2601	WB	Regional	MFA	World Bank-GEF Investment Fund for the Mediterranean Sea Large Marine Ecosystem Partnership, Tranche 1, 1st Allocation	GEF-3	FP	Council Approved	0	27,000,000	2,250,000	135,000,000	28-Aug-06
2710	UNDP	Country	LD	CPP: Partnership Programme for Sustainable Land Management, Phase 1	GEF-3	FP	Council Approved	350,000	9,650,000	900,000	60,707,000	28-Aug-06
2757	WB/ UNDP, UNEP, AfDB, IFAD, FAO	Regional	LD	SIP PROGRAM: Strategic Investment Program for SLM in Sub-Saharan Africa (SIP)	GEF-4	FP	Council Approved	700,000	137,298,000	12,702,000	986,215,000	14-Jun-07
Total								4,498,000	420,025,500	40,667,800	2,833,908,100	

SOURCE: PMIS.

PROGRAMS WITH PFD

GEF ID	Agency	Geo-graphic level	Focal area	Title	GEF period	Type	Status	Approved PPG(s) ($)	GEF grant ($)	Agency fee ($)	Cofinancing ($)	Approval date
2762	World Bank/ IFAD, UNDP	Country	MFA	SFM VIETNAM Country Program Framework for Sustainable Forest Land Management (COUNTRY PROGRAM)	GEF4	FP	Council Approved	100,000	654,545	75,455	4,989,500	24-Apr-08
3268	World Bank	Country	MFA	SLEM/CPP - Sustainable Land and Ecosystem Management Partnership PROGRAM	GEF4	FP	Council Approved	340,000	26,083,502	2,642,350	302,798,636	16-Nov-07
3420	World Bank	Regional	MFA	PAS GEF Pacific Alliance for Sustainability	GEF4	FP	Council Approved	375,000	59,645,965	6,081,822	220,488,729	24-Apr-08
3423	IFAD	Regional	MFA	MENARID Integrated Nature Resources Management in the Middle East and North Africa Region (PROGRAM)	GEF4	FP	Council Approved	1,975,000	53,518,406	5,000,340	217,332,910	24-Apr-08
3482	ADB/IFAD, World Bank	Country	MFA	PRC-GEF Partnership on Land Degradation in Dryland Ecosystems Program (PROGRAM)	GEF4	FP	Council Approved	1,145,000	19,633,001	2,042,799	371,986,700	24-Apr-08
3538	World Bank/ UNDP, UNIDO	Country	CC	IND Programmatic Framework Project for Energy Efficiency in India (PROGRAM)	GEF4	FP	Council Approved	290,000	35,172,097	3,536,300	208,376,483	25-Apr-08
3647	ADB/UNDP/ FAO/ World Bank	Regional	MFA	CTI The Coral Triangle Initiative (PROGRAM)	GEF4	FP	Council Approved	1,624,200	30,233,182	3,127,818	217,500,139	24-Apr-08
3648	UNEP	Global	POPs	DSSA Demonstrating and Scaling-up of Sustainable Alternatives to DDT in Vector Management (PROGRAM)	GEF4	FP	Council Approved	194,975	3,810,400	400,537	5,132,028	24-Apr-08
3653	EBRD/UNDP, UNIDO	Country	CC	RUS: Energy Efficiency in the Russian Federation (UMBRELLA PROGRAM)	GEF4	FP	Council Approved	1,035,000	54,934,075	5,536,407	666,780,231	24-Apr-08
3654	UNEP	Global	BD	BS GEF Biosafety Program	GEF4	FP	Council Approved	521,353	36,895,961	3,701,828	48,176,549	24-Apr-08
3661	UNDP	Country	BD	IND-BD: GEF Coastal and Marine Program (IGCMP)	GEF4	FP	Council Approved	100,000	9,461,930	946,193	30,000,000	24-Jun-09
3756	UNIDO	Regional	CC	CF: Reducing Industry's Carbon Footprint In South East Asia Through Compliance With a Management System for Energy (ISO 50,000) (PROGRAM)	GEF4	FP	Council Approved	390,650	14,025,536	1,429,118	76,170,000	13-Nov-08
3782	World Bank	Regional	MFA	CBSP: Strategic Program for Sustainable Forest Management in the Congo Basin	GEF4	FP	Council Approved	1,590,700	46,300,888	4,630,089	222,910,111	13-Nov-08
3785	World Bank/ UNDP, UNEP, FAO	Regional	BD	SPWA-BD: GEF Program in West Africa: Sub-component on Biodiversity	GEF4	FP	Council Approved	900,687	29,948,745	2,999,874	127,662,649	13-Nov-08
3787	UNDP/UNEP	Global	CC	LGGE Framework for Promoting Low Greenhouse Gas Emission Buildings	GEF4	FP	Council Approved	708,450	29,237,393	2,926,239	286,098,886	13-Nov-08
3789	UNIDO	Regional	CC	SPWA-CC: GEF Strategic Program for West Africa: Energy Component (PROGRAM)	GEF4	FP	Council Approved	840,000	34,939,564	3,493,953	467,441,631	13-Nov-08
3926	UNDP	Country	BD	CBPF China Biodiversity Partnership and Framework for Action	GEF4	FP	Council Approved	2,212,000	36,296,587	3,820,338	745,124,752	16-Nov-07
3977	World Bank	Regional	IW	MED Mediterranean Environmental Sustainable Development Program "Sustainable MED"	GEF4	FP	Council Approved	456,000	30,835,090	3,083,310	133,166,400	24-Jun-09

GEF ID	Agency	Geo-graphic level	Focal area	Title	GEF period	Type	Status	Approved PPG(s) ($)	GEF grant ($)	Agency fee ($)	Cofinancing ($)	Approval date
3994	UNEP/ UNIDO	Regional	POPs	AFLDC Program: Capacity Strengthening and Technical Assistance for the Implementation of Stockholm Convention National Implementation Plans (NIPs) in African Least Developed Countries (LDCs) and Small Islands Developing States (SIDS)	GEF4	FP	Council Approved	0	16,000,000	1,600,000	20,971,768	24-Jun-09
4031	GEFSEC	Global	CC	TT-Pilot (GEF-4)	GEF4	FP	Council Approved	885,000	41,197,273	4,119,727	214,551,384	13-Nov-08
4487	World Bank	Regional	IW	LME-AF Strategic Partnership for Sustainable Fisheries Management in the Large Marine Ecosystems in Africa (PROGRAM)	GEF5	FP	Council Approved	0	25,000,000	2,000,000	135,000,000	9-Nov-11
4511	World Bank	Regional	MFA	GGW Sahel and West Africa Program in Support of the Great Green Wall Initiative	GEF5	FP	Council Approved	0	100,759,260	8,060,741	1,810,000,000	26-May-11
4580	FAO/UNEP, World Bank	Global	MFA	ABNJ Global Sustainable Fisheries Management and Biodiversity Conservation in the Areas Beyond National Jurisdiction (PROGRAM)	GEF5	FP	Council Approved	1,044,000	45,412,844	4,087,156	222,741,000	9-Nov-11
4620	World Bank	Regional	MFA	MENA - Desert Ecosystems and Livelihoods Program MENA-DELP)	GEF5	FP	Council Approved	0	21,200,928	1,696,072	226,200,000	9-Nov-11
4635	World Bank	Regional	MFA	LME-EA Scaling Up Partnership Investments for Sustainable Development of the Large Marine Ecosystems of East Asia and their Coasts (PROGRAM)	GEF5	FP	Council Approved	387,000	43,500,000	3,480,000	753,500,000	9-Nov-11
4638	ADB	Regional	CC	ASTUD Asian Sustainable Transport and Urban Development Program (PROGRAM)	GEF5	FP	Council Approved	0	13,611,000	1,089,000	988,000,000	9-Nov-11
4646	UNDP/FAO	Country	BD	CBPF-MSL Main Streams of Life – Wetland PA System Strengthening for Biodiversity Conservation (PROGRAM)	GEF5	FP	Council Approved	710,633	23,010,915	2,070,983	142,600,000	9-Nov-11
4649	ADB/ World Bank	Regional	MFA	GMS-FBP Greater Mekong Sub-region Forests and Biodiversity Program (PROGRAM)	GEF5	FP	Council Approved	150,000	20,152,339	1,787,661	131,896,100	9-Nov-11
4664	UNEP/EBRD, UNDP, World Bank	Country	MFA	ARCTIC GEF-Russian Federation Partnership on Sustainable Environmental Management in the Arctic under a Rapidly Changing Climate (Arctic Agenda 2020)	GEF5	FP	Council Approved	500,000	25,379,346	2,284,144	310,300,000	9-Nov-11
4680	AfDB	Regional	MFA	LCB-NREE Lake Chad Basin Regional Program for the Conservation and Sustainable Use of Natural Resources and Energy Efficiency (PROGRAM)	GEF5	FP	Council Approved	415,200	20,313,084	1,625,049	172,563,158	10-Nov-11
4936	UNDP	Regional	IW	EAS Reducing Pollution and Rebuilding Degraded Marine Resources in the East Asian Seas through Implementation of Intergovernmental Agreements and Catalyzed Investments (PROGRAM)	GEF5	FP	Council Approved	60,000	20,000,000	1,800,000	343,905,766	15-Nov-12
5037	ADB	Regional	CC	Climate Proofing Development in the Pacific	GEF5	FP	Council Approved	0	13,900,000	1,112,000	51,220,000	28-Mar-14
5228	AfDB	Regional	CC	RLACC - Rural Livelihoods's Adaptation to Climate Change in the Horn of Africa (PROGRAM)	GEF5	FP	Council Approved	300,000	7,655,556	612,444	64,000,000	20-Jun-13

GEF ID	Agency	Geo-graphic level	Focal area	Title	GEF period	Type	Status	Approved PPG(s) ($)	GEF grant ($)	Agency fee ($)	Cofinancing ($)	Approval date
5395	UNDP/UNE, FAO	Regional	MFA	R2R- Pacific Islands Ridge-to-Reef National Priorities – Integrated Water, Land, Forest and Coastal Management to Preserve Biodiversity, Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods	GEF5	FP	Council Approved	1,335,100	82,925,296	7,463,277	333,046,794	20-Jun-13
9060	FAO/ WWF-US, UNDP, World Bank, CI, UNEP	Global	MFA	CFI: Coastal Fisheries Initiative (PROGRAM)	GEF5	FP	Council Approved	975,230	33,731,193	3,035,807	201,500,000	4-Jun-15
9071	World Bank/ UNDP, UNEP, IUCN, WWF-US, ADB	Global	MFA	Global Partnership on Wildlife Conservation and Crime Prevention for Sustainable Development (PROGRAM)	GEF5	FP	Council Approved	1,525,486	90,377,470	8,133,974	513,137,060	4-Jun-15
9083	UNEP/UNDP	Global	CC	Leapfrogging Markets to High Efficiency Products (Appliances, including Lighting, and Electrical Equipment) (PROGRAM)	GEF5	FP	Council Approved	290,000	10,370,000	933,300	55,781,000	21-Oct-15
9272	World Bank/ WWF-US, UNDP	Regional	MFA	Amazon Sustainable Landscapes Program	GEF5	FP	Council Approved	137,615	113,684,455	10,231,601	682,980,000	21-Oct-15
Total								23,514,279	1,319,807,826	122,697,706	11,726,030,364	

SOURCE: PMIS. GEF-4 programs financial figures are the sum of their respective child projects.

Annex B: Methods and tools

B.1 Introduction

The evaluation was undertaken applying a mixed-methods approach, encompassing a number of quantitative as well as qualitative methods and tools. The broad range of methods applied allowed to systematically assess issues related to GEF programs' effectiveness in achieving global environmental benefits (i.e., outcomes and broad-scale, long-term impacts to the extent possible) as well as addressing drivers of environmental degradation. In addition to those core questions, program efficiency issues such as program design, governance and management arrangements, coordination, and M&E were also explored.

B.2 Methods

Data were collected through several complimentary methods and tools. These included:

1. A **documentation review** of GEF policy and strategy documents, and program/child projects related documents, as well as additional literature on programs. These included: PFDs and related child PIFs, project preparation grants (PPGs) and/or other design documents; project implementation reports; midterm reviews; and terminal evaluations. The review also drew on evaluation reports of other GEF Agencies on programs.
2. A **portfolio analysis** of GEF programs and their related child projects. A database including basic program information such as GEF activity cycle information, number and typology of child projects, financing (including cofinancing), implementing institutions involved, themes, countries, main objectives, key partners, and implementation status was developed to assess programs in a systematic manner for aggregation purposes, and to ensure that key evaluation questions are addressed coherently.
3. A **meta-analysis** of available evaluations of pre-PFD programs provided a historical perspective on the development of the concept of programmatic approaches in the GEF (appendix B.1). The meta-analysis aggregated the evaluative evidence on broader-scale and longer-term results contained in evaluation reports on pre-PFD programs.
4. A **broader adoption/P2I desk analysis** based on the GEF Generic Theory of Change Framework (GEF IEO 2014) was conducted on child projects belonging to post-2008 programs using the available terminal evaluations to provide evidence on broader-scale and longer-term results;
5. Three in-depth **program P2I case studies** that involved visits to China, India, Jordan, Tunisia, and Morocco (appendix B.2). Case study data were collected through interviews,

focus group meetings, documentation review, and direct field observations during visits to project sites. Geospatial data and coordinates were collected in project offices where available as well as while traveling to project sites (through GPS tracking). These were used for geospatial impact analysis using a specific set of environmental indicators. The country visit in China was conducted in synergy with the Evaluation of Multiple Benefits in the GEF.

6. A **rapid impact evaluation (RIE)** case study (Rowe 2014), conducted on the Reducing Industry's Carbon Footprint in South East Asia program (appendix B.3). This case study involved a visit to the program lead Agency (UNIDO) at its headquarters in Vienna, and country visits to Vietnam and Indonesia. This case study had the same purpose of the other three, namely to assess the program results in terms of achieved global environmental benefits. The impossibility to gather data on environmental change for geospatial impact analysis was the reason for choosing the RIE methodology.

7. A **geospatial impact analysis** examined the impact of programs along indicators to capture fluctuations in natural capital: (1) forest cover change and (2) vegetative productivity (appendix B.4). This analysis, conducted in collaboration with AidData, assessed how GEF projects delivered under the program modality have compared to stand-alone modalities.

8. A **quality-at-entry study** assessed the coherence between parent and child project objectives.

9. A **cost-effectiveness analysis** of programs, comparing administrative requirements, costs and time taken to design, approve, and deliver such programs and related child projects with the stand-alone projects.

10. **Central-level interviews** were conducted with a limited number of key partners in the GEF Secretariat and GEF Agencies involved. Interviews covered in-depth several topics, gathering key stakeholder perceptions on broader and longer-term results, drivers of environmental change, institutional/management arrangements, ownership, program parent/child coherence, and M&E, among others.

11. A **stakeholder online survey**, administered to country-level program and child project stakeholders, i.e., those who have either been or still are involved in those programs and child projects in the countries. An initial list was provided by the GEF Agencies involved in the 38 programs. The list was complemented with stakeholders identified through field visits for the four program case studies.

Triangulation of the information and qualitative and quantitative data collected was conducted at the completion of the data analysis and gathering phase, determining trends and identifying main findings as well as any eventual data inconsistencies that needed to be addressed. More details on some of the methods and analyses conducted are reported in appendixes B.1 to B.4.

Appendix B.1 Meta-analysis

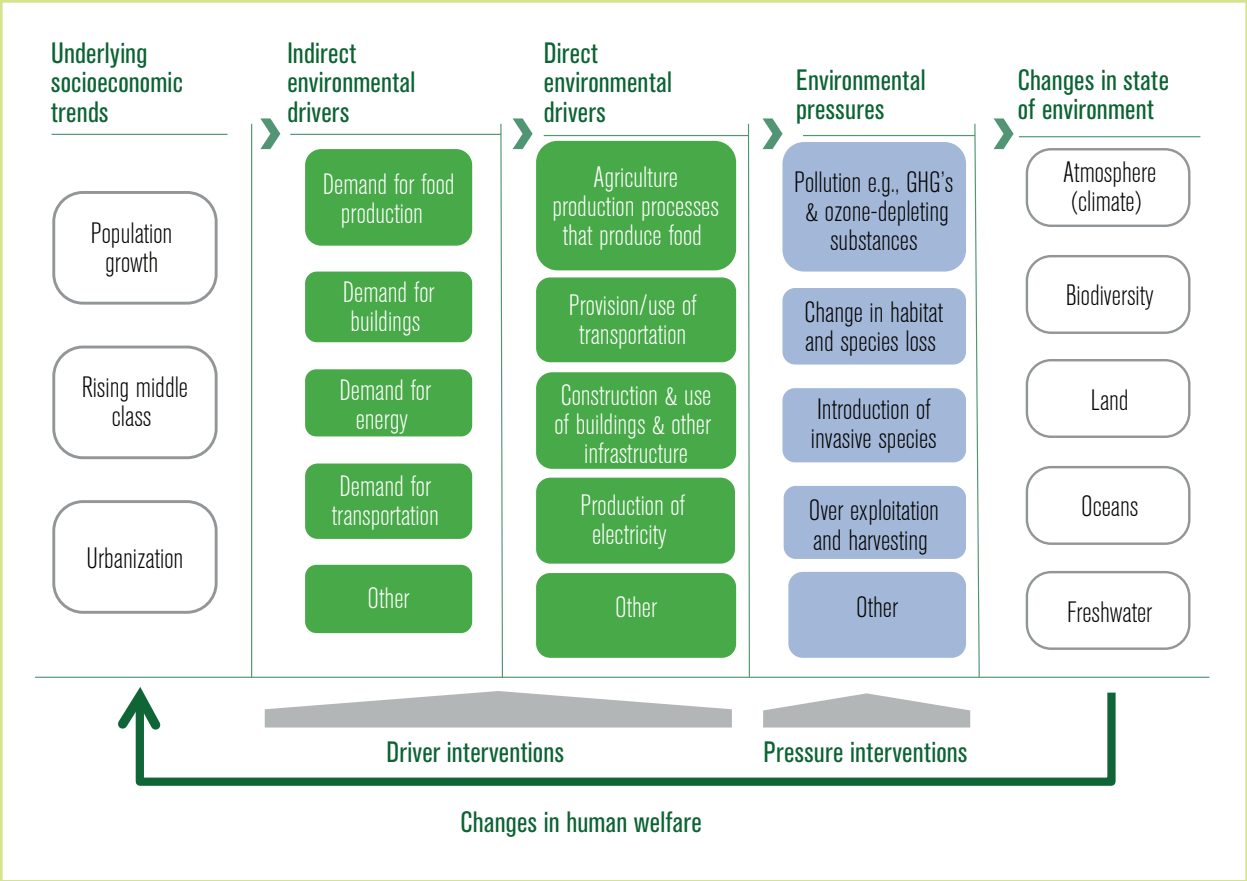
BACKGROUND

The meta-analysis covered all available evaluation reports of GEF pre-PFD programs.[1] The meta-analysis aimed at: (1) providing an historical perspective on the development of the concept of programmatic approaches in the GEF; and (2) identifying common trends and aggregating the available evaluative evidence on broader-scale and longer-term results contained in evaluation reports on GEF pre-PFD programs.

The meta-analysis also looked retrospectively at any available evidence on drivers of environmental degradation, as they have been defined in the GEF2020 Strategy. Although addressing drivers is not new in the GEF, drivers had to be looked at retrospectively, as the concept has been introduced in GEF-6. The GEF2020 Strategy indicates four major socio-economic drivers of environmental degradation, divided in demand (indirect drivers) and supply (direct drivers) for the food production, buildings, transportation, and energy sectors (GEF 2014a).

[1] These were most of the times identified as projects in PMIS, as before May 2008 the program modality was not official. Many were phased/trenched ones. As such they were the subject of terminal evaluations.

FIGURE B.1.1 Causal chain of environmental change



SOURCE: GEF 2014a.

META-ANALYSIS TEMPLATE

Evaluation type *(Project, Program, Thematic, Corporate, other):*	
Title:	Date:
Period covered:	**PA-dedicated amount** *($000):*[1]
Country(ies)/Region(s)/Ecosystems covered:	

[1] If available.

1. Effectiveness/Results: To what extent have the different typologies of GEF pre-PFD programs delivered the intended results in terms of broader-scale and longer-term environmental outcomes and impacts?

Indicator	Yes/no	Evidence/examples
Evidence/examples of broader adoption in terms of **sustaining** mechanisms in place		
Evidence/examples of broader adoption in terms of **replication** mechanisms in place		
Evidence/examples of broader adoption in terms of **scaling-up** mechanisms in place		
Evidence/examples of broader adoption in terms of **mainstreaming** mechanisms in place		
Evidence/examples of broader adoption in terms of **market change** mechanisms in place		
Evidence/examples of observed **resilience to changing contexts** in terms of benefits from program outcomes		

2. Effectiveness/Factors (contributing): What are the key contributing factors affecting BA and P2I results?

Factor (project-related)	Yes/no
Highly relevant technology/approach (e.g., micro-credit facilities for local beneficiaries)	
Broader adoption processes initiated using project resources (e.g., conferences held on project lessons, establishing sustainable revolving funds)	
Good engagement of key stakeholders (e.g., involve communities or local governments in decision making)	
Good coordination with/continuity of previous/current initiatives (e.g., lessons learned/used)	
Good project design	
Adaptation of project to changing contexts	
Extended implementation period (e.g., midterm evaluation led to project extension)	
Previous GEF support [add GEF ID]	
Follow-up initiatives using GEF resources (e.g., enabling activity [EA] led to a full-size project)	
Other (specify)	
Factor (context-related)	**Yes/no**
Previous/current related initiatives (by government, global events, etc.)	
"Champions" (e.g., officials of local government providing extra support to help the project)	
Country support (e.g., alignment with the country's objectives leads to extra cofinancing)	
Other stakeholder support (e.g., donors, private sector)	
Other favorable political conditions/events	
Favorable economic conditions/drivers/events	
Favorable social conditions/drivers/events	
Favorable environmental conditions/drivers/events	
Other (specify)	

3. Effectiveness/Factors (hindering): What are the key hindering factors affecting results?

Factor (project-related)	Yes/no
Inappropriate technology/approach (e.g., local users could not use the new equipment)	
No activities to sustain momentum (e.g., no follow-up funding from the government)	
Poor project design (other than factors above)	
Poor project management (e.g., inadequate project manager, dysfunctional steering committee)	
Inability to adapt project to changing context	
Insufficient time for implementation (e.g., the project had unrealistic objectives for the timeframe)	
Other (specify)	
Factor (context-related)	**Yes/no**
Lack of country support (e.g., project was driven by GEF Agency, no buy-in from relevant Agency)	
Lack of other stakeholder support (e.g., donors, private sector)	
Other unfavorable political conditions/events	
Unfavorable economic conditions/drivers/events	
Unfavorable social conditions/drivers/events	
Unfavorable environmental conditions/drivers/events	
Other (specify)	

4. Effectiveness/Drivers: To what extent have GEF pre-PFD programs addressed the main drivers of environmental degradation?

Indicator	Evidence/examples[1]
FOOD PRODUCTION: Evidence/examples of specific program results addressing/mitigating the negative effects of food production activities on:	
Biodiversity loss, from:	
Habitat change	
Overexploitation or unsustainable use of natural resources	
Invasive alien species (particularly in island ecosystems)	
Pollution from pesticides/fertilizers/weed control chemicals	
Other (specify)	
Land degradation, from:	
Unsustainable land use practices	
Inadequate or ineffective land use policies	
Other (specify)	
Deforestation or forest degradation, from:	
Agriculture production	
Expansion of infrastructure	
Mining	
Illegal logging	
Overharvest of fuelwood and nontimber forest products	
Overgrazing	
Human-induced fires	
Poor management of shifting cultivation	
Other (specify)	
Degradation of freshwater and marine resources, from:	
Unsustainable fishing practices	
Market distortions	
Other (specify)	

TRANSPORTATION: Evidence/examples of specific results addressing/mitigating the negative effects of transportation (essentially by providing/promoting the use of environment-friendly transportation) on:	
Climate change, from:	
GHG and ODS emissions	
Overexploitation or unsustainable use of fossil fuels	
Other (specify)	
BUILDINGS: Evidence/examples of specific results addressing/mitigating the negative effects of using polluting construction materials in buildings and other infrastructure on:	
Climate change, from:	
GHG and ODS emissions resulting from construction activities	
Overexploitation/unsustainable use of wood, minerals, cement	
Other (specify)	
Land degradation, from:	
Inadequate or ineffective urban land use policies	
Other (specify)	
Deforestation or forest degradation, from:	
Expansion of buildings/infrastructure in forest land	
Mining for building materials extraction (e.g., cement, sand)	
Illegal logging for timber production	
Other (specify)	
ENERGY: Evidence/examples of specific results addressing/mitigating the negative effects of energy/electricity production activities on:	
Climate change, from:	
GHG/ODS emissions resulting from energy production activities	
Overexploitation/unsustainable use of fossil fuels, fuelwood,	
Other (specify)	
Deforestation or forest degradation, from:	
Expansion of infrastructure in forest land	
Mining in forest land	
Illegal fuelwood harvesting for household energy consumption	
Other (specify)	

[1] Narrative of the examples must be summarized and referenced to the page in the document where they come from. Examples of results can me more than one in each driver.

INFORMATION SOURCES

The documentation analyzed included all available evaluations of the pre-2008 portfolio, regardless the evaluation typology (project, program, thematic, impact, other). Thirty-three pre-2008 programs were reviewed for this exercise: 21 phased/tranched programs, five Strategic Partnership Programs, three Country Partnership Programs, and one Strategic Investment Program. The pre-2008 programs also included three programmatic approaches without set-asides. These three programs do not have a PFD. The evaluation looked at project documents, project implementation reports, and midterm reviews of 175 projects and terminal evaluations of 88 closed projects. The following high-level program evaluations and studies were included in the analysis: Bewers and Uitto (2001), GEF IEO (2004), GEF IEO (2007), GEF IEO (2009), GEF IEO (2010b), GEF IEO (2013a), GEF IEO (2013b), GEF IEO (2014); GEF IEO (2015b), IEG (2011), Okapi (2013), and Ollila et al. (2000).

Appendix B.2 Selection of programs for P2I case studies

INTRODUCTION

The selection of candidate programs for P2I program case studies was made based on program maturity in terms of implementation status of the respective child projects. This allowed the evaluation to look at programs that have managed to produce an environmental change that can be observable, in terms of results or at least progress toward results. Mature programs are those that have either more than 60 percent of their child projects under implementation for more than 2 years (i.e., having been under implementation before April 1, 2014) or are completed, or both.

The application of the maturity criterion left the sample with 23 out of the 38 post-2008 programs. From these, four global programs (GEF IDs 3648, 3654, 3787, and 4031) were excluded as they were more likely to be administrative arrangements designed with the main purpose to achieve cost-efficiencies rather than broader-scale and longer-term results.

Programs with child projects that were either pending or in the pipeline (GEF IDs 3782, 3789, 3926, 4511, 4635, and 4646) were excluded. Finally, one program in Russia (GEF ID 3653) was excluded due to the current situation. The application of the above-mentioned criteria narrowed down the selection to 12 programs, presented in table B.2.1.

These programs represent all combinations of single versus multi-Agency, single versus multicountry and single versus multifocal area programs, except for one. As shown in table B.2.2, for four combinations there is only one program (GEF IDs 3661, 3756, 4620, and 3538).

The 12 preselected programs were subdivided based on their coherence, following the hypothesis that coherent programs have a low or absent child project cancellation/dropout rate. Here, coherence is meant to identify the programs implemented as per program design. The splitting of the 12 programs between fully coherent and partially coherent ones is presented in table B.2.3.

Additional criteria were used to further narrow down the selection to a manageable number of programs, which reflect key aspects of the range

TABLE B.2.1 12 preselected programs

No.	GEF ID	Single Agency	Multi-Agency	Single country	Multicountry	Single focal area	Multifocal area
1	3268		x	x			x
2	3420		x		x		x
3	3423		x		x		x
4	3482		x	x			x
5	3538		x	x		Climate change	
6	3647		x		x		x
7	3661	x		x		Biodiversity	
8	3756	x			x	Climate change	
9	3785		x		x	Biodiversity	
10	3977		x		x	Int'l waters	
11	3994		x		x	POPs	
12	4620	x			x		x

TABLE B.2.2 Splitting the 12 programs by combination

Combination	GEF ID
Single Agency, single country, single focal	3661
Single Agency, single country, multifocal	
Single Agency, multicountry, single focal	3756
Single Agency, multicountry, multifocal	4620
Multi-Agency, single country, single focal	3538
Multi-Agency, single country, multifocal	3268; 3482
Multi-Agency, multicountry, single focal	3785; 3977; 3994
Multi-Agency, multicountry, multifocal	3420; 3423; 3647

TABLE B.2.3 Subdividing by program coherence

				Under implementation							
		Canceled/ dropped/ rejected		Total ongoing projects		Begun before April 1, 2014		Completed			
No.	GEF ID	No.	%	No.	% of total	No.	% of total	No.	% of total	Total	Start year of child projects under implementation
Fully coherent: no child project canceled/dropped, ongoing projects either under implementation or completed											
1	3420	0	0	12	80	12	80	3	20	15	2010: 1, 2011: 4, 2012: 3, 2013: 4
2	3423	0	0	8	67	7	58	4	33	12	2009: 1, 2010: 4, 2012: 1, 2013: 1, June 2014: 1
3	3538	0	0	4	80	4	80	1	20	5	2010: 1, 2011: 3
4	3647	0	0	5	56	5	56	4	44	9	2010: 1, 2011: 1, 2013: 2, Feb. 2014: 1
5	3661	0	0	2	100	2	100	0	0	2	2011: all
6	3756	0	0	4	80	4	80	1	20	5	2011: all
7	3994	0	0	3	100	3	100	0	0	3	2011: all
Total		0	0	38	75	37	73	13	25	51	
Partially coherent: some child projects canceled/dropped, ongoing projects either under implementation or completed											
1	3268	2	25	2	25	2	25	4	50	8	2009: 1, 2010: 1
2	3482	1	14	2	29	2	29	4	57	7	2011: 2
3	3785	2	10	13	65	13	65	5	25	20	2010: 5, 2011: 5, 2012: 1, 2013: 2
4	3977	2	25	4	50	4	50	2	25	8	2011: 1, 2012: 2, 2013: 1
5	4620	1	25	3	75	3	75	0	0	4	2013: all
Total		8	17	24	51	24	51	15	32	47	

NOTE: Child projects under implementation that started after April 1, 2014, are in red.

of diversity in the portfolio. First, programs working on focal areas and intervention typologies already covered by recent IEO evaluations (i.e., terrestrial biodiversity, covered by the recent Joint GEF-UNDP Evaluation of the Protected Areas) were excluded. Second, programs working in geographic regions already covered by recent IEO evaluations (i.e., SIDS, covered by several country-level evaluations) were also excluded. Three more programs dropped out as a result of these two exclusions (GEF IDs 3420, 3687, and 3785), as table B2.4 shows:

TABLE B.2.4 Narrowing down the preselection

Combination	GEF ID
Single Agency, single country, single focal	3661
Single Agency, single country, multifocal	
Single Agency, multicountry, single focal	3756
Single Agency, multicountry, multifocal	4620
Multi-Agency, single country, single focal	3538
Multi-Agency, single country, multifocal	3268; 3482
Multi-Agency, multicountry, single focal	3977; 3994
Multi-Agency, multicountry, multifocal	3423

In the multi-Agency, single country, and multifocal case, GEF ID 3268, working in India, was excluded because two of the programs selected in the previous step, namely GEF IDs 3661 and 3538, also work in India. In the multi-Agency, multicountry, and single focal case, GEF ID 3994 was excluded, as, although not a global program, it was designed as an administrative arrangement for providing the same type of enabling support in POPs to countries belonging to three economic subregions in Sub-Saharan Africa (Common Market for Eastern and Southern Africa [COMESA], Southern African Development Community [SADC], and Economic Community of West African States [ECOWAS]).

Excluding all the programs described above, the sample was reduced to seven programs. Four programs were selected for case studies based on their maturity in terms of implementation status of their child projects, representation of various combination of single versus multi-Agency, single versus multicountry, and single versus multifocal programs, and coherence of their design in terms of absence of child project cancellations and/or dropouts, among other criteria.[1] The selected programs are presented in table B.2.5.

[1] Note on the selection of programs for Progress toward Impact (P2I) Case Studies (IEO internal document).

TABLE B.2.5 Final selection of case studies

No.	Combination	GEF ID	GEF Agency	Country/ region	Type of intervention		Coherence
1	Single Agency, single country, single focal area	3661	UNDP	India	BD-2	Marine protected area	Full
2	Single Agency, multi-country, single focal area	3756	UNIDO	South East Asia	CC-1 CC-2	Energy efficiency in buildings and in the industrial sector	Full
3	Single Agency, multi-country, multifocal area	4620	WB	Middle East and North Africa	LD-1 SLM BD-2 CCA-1	▪ Land degradation/sustainable land management ▪ Marine protected area ▪ Adaptation	Partial
4	Multi-Agency, single country, multifocal area	3482	ADB, IFAD, WB	China	LD-1 LD-2 LD-3 CC-6	▪ Land degradation/sustainable land management ▪ Land use, land use change, and forestry	Partial

NOTE: WB = World Bank.

COUNTRY VISIT APPROACH

The design of the country case study visits ensured the use of the same data-gathering approach by the different teams, to enable comparability across all countries and programs (with their respective child projects) visited. Case studies and related country visits/data gathering covered all but one key evaluation question (efficiency question a. in the approach paper).

Country visits followed these indicative steps: (1) background reading prior to the country visits, (2) information/data collection and interviews at the central level in the capital, (3) child project site visits, (4) analysis, and (5) report writing. Interviews in the country visits were held with the government (GEF OFP, other officers involved with the program and/or child project), GEF Agency/ies, executing agencies, and beneficiaries, most of whom were sufficiently familiar with the child project in order to be able to reply to the questions in an informed manner.

Appendix B.3 Technical note on rapid impact evaluation

INTRODUCTION

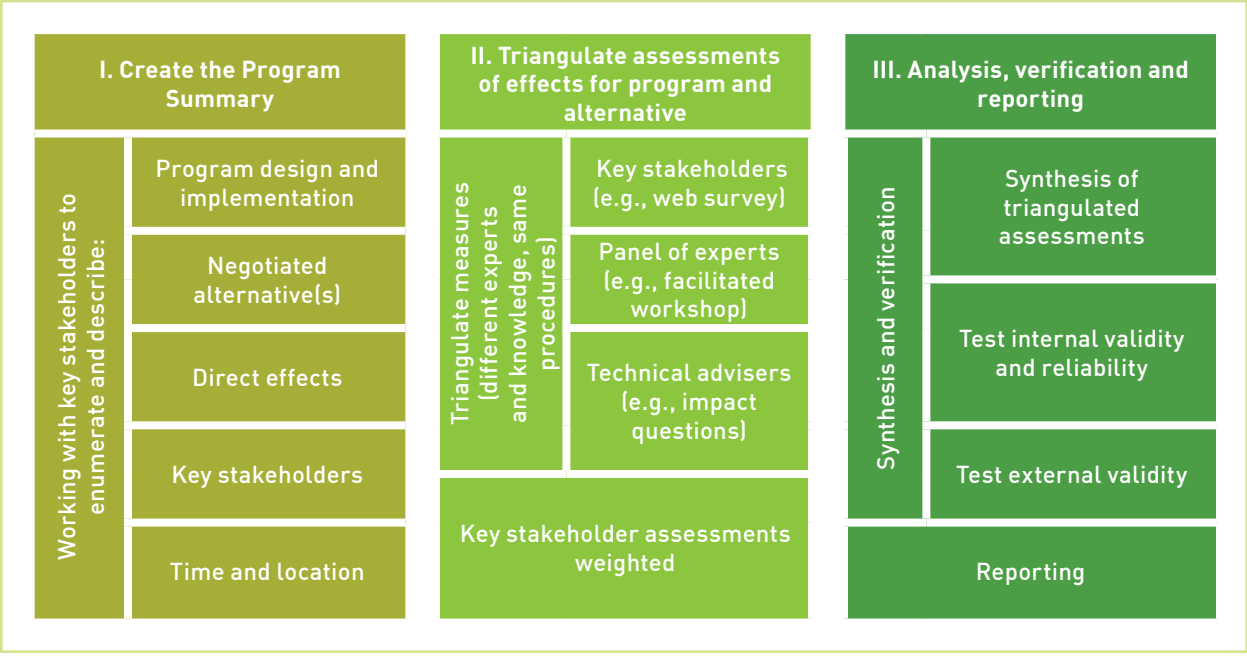
Rapid impact evaluation has three main phases (figure B.3.1), all undertaken with the direct involvement of the decision makers and key interests who are the likely users of the evaluation results:

1. Develop a summary of the evaluation (termed the intervention summary) that includes the mechanisms of change, anticipated direct effects, parties involved in the intervention either as part of the intervention or directly affected by it, temporal and spatial frames for the intervention and direct effects, and the scenario that the parties agree would likely have occurred with a different but highly likely alternative to the actual intervention.
2. Obtaining judgments from the three distinct groups of experts with good but different knowledge of the decision and intervention and using the same evaluation metric but different judgment processes.
3. Synthesis of judgments from the three expert groups and QA on the quality of the evaluation evidence.

PHASE I: SUMMARY OF THE INTERVENTION

This first phase can be thought of as an expedited evaluation design, where we (1) obtain information to populate our evaluation framework and (2) engage key decision makers and stakeholders in the evaluation. The information is progressively captured in a concise intervention summary starting with information from intervention and public domain documents. It is then enriched through discussions with the convening parties and finally used as the focal point for discussions with core and other parties. The intent is to reach agreement with all parties that the summary and individual elements contained in it are reasonable

FIGURE B.3.1 RIE phases



representations of the intervention. Phase I uses up to three-quarters of the budget. A TOC is also drafted during this first phase.

The completed intervention summary provides the information needed for Phase II and is required for a typical evaluation plan. This includes a short description of the intervention, including time, location, and scale and the mechanisms of change, and, if appropriate, a map of the intervention site and affected areas. It also includes lists of the anticipated direct effects and intended impacts, including temporal and spatial frames, and of the parties and interests participating in the intervention, including those who can affect success and those who are directly affected by the intervention. Finally, and importantly, it includes one or more scenarios for alternative interventions.

To date we have usually used individual in-person or telephone interviews to review and develop the intervention summary with parties. Interviews are scheduled for 15 minutes and cover all of the elements; we ask if the summary is a reasonable representation of the elements, and for each element we ask if they think it should be modified. Where modifications are suggested, including unintended effects, we incorporate them into a revised summary that is recirculated and discussed when necessary. In principle, this cycle continues until there is comfort with the summary across parties. In practice we usually only require one cycle; in a few cases two have been required. We want to end up with parties agreeing on the elements in the case summary, especially the statement of alternative scenario(s).

We have usually used individual interviews for this consultation because our evaluations have been high-stakes natural resource decisions where we were concerned that assembling the parties would reopen a discussion of issues that have been previously settled. Often, too, it is logistically impossible to assemble a group of senior and geographically dispersed parties. It is far more likely that a lead corporate attorney will agree to a 15-minute telephone call than to spend a day in travel and meetings. However, RIE is now being applied to sustainable development interventions where it is logistically and politically possible to gather parties into one place, and so we are able to consider group processes as an alternative to individual interviews.

PHASE II: OBTAINING EXPERT JUDGMENTS

Obtaining judgments from the three groups of experts is the main undertaking in the second phase of RIE. In this second phase we also estimate impacts by combining and weighting the direct effects using the TOC and information from the expert groups and external sources

The three groups of experts provide their judgments on direct outcomes using the same questions—administered with a web survey for intervention experts and technical advisors, and with a facilitated workshop for the expert

FIGURE B.3.2 **Phase II: Obtaining judgments from experts on the probability and magnitude of effects**

- Probability of an effect occurring and its magnitude are the main source of variation in future effects
- Three groups of experts judge probability and magnitude for each effect for the intervention and alternative scenario

panel. In the preceding section we described our approach to simplifying how we judge direct effects. Briefly, there are two considerations that cause variation in the merit of outcomes, the probability of the outcome occurring and its magnitude. All experts in each of the three expert groups provide their judgment on probability and magnitude for each direct effect under the actual intervention and under the counterfactual scenario. We also ask respondents to assess the importance of each direct effect to the impacts of interest (e.g., importance of salmon habitat to salmon populations).

A high response rate is essential for the survey of decision makers. Responses must also represent all interests to balance the bias of individual interests. For example, response rates were 76 percent of parties and 100 percent of interests for Marmot Dam. We follow Dillman's approach to consistently achieve good response rates (Dillman, Smyth et al. 2008). A facilitated workshop is used for the expert panel because its members, unlike decision makers and the technical advisors (with their extensive access to case information), have a relatively limited knowledge of the intervention, but of course a great depth of domain knowledge. This raises the risk that they will make different assumptions about the intervention creating threats to reliability. In the expert panel workshop, for each case being evaluated, we first facilitate a general discussion about the case and TOC. Then, next to their initials on flip charts, each panel member provides their judgment on the probability and magnitude of each outcome for the intervention and alternative. Where there is a noticeable (2 or more points) difference in the scoring by panel members, we facilitate a discussion of their assumptions and rationale for the score. We are not seeking agreement, only to ensure that they are making the same assumptions about the intervention. Panel members can and do change their scores during or after the discussions. We have found that an expert panel can complete their judgments on three to four similar cases in a day.

The result is an assessment by each member of the three expert groups of the change in each direct effect, expressed as an index, under the intervention and counterfactual scenario. These are combined in Phase III to generate estimates of impacts.

PHASE III: VERIFICATION

The final RIE phase is relatively short involving estimating impacts and testing the quality of the evaluation judgments.

Direct effects are very influential in shaping impacts, but it is the larger outcomes or impacts that we are interested in. Direct effects are a stepping stone to these. The direct effects enumerated in Phase I and assessed in Phase II are those that the literature, decision makers, and stakeholders suggest are the most influential on the impacts of the intervention. The technical advisors confirm or adapt the list of direct effects and this is included in the discussions with parties in Phase I. The technical advisors also search for sources with which we can weigh the direct effects when combining them to estimate impacts in Phase III. Weighting is informed by several sources: the research literature including simulation and other models, from the ranking of importance by parties and the TOC, and from technical studies prepared to brief those designing the intervention. The technical advisors who represent the main disciplines applicable to the intervention play an important role in identifying and extracting the necessary information, and in reducing the ambiguity associated with this. Using this knowledge, we combine the direct effects to estimate impacts.

Appendix B.4 Selection of programs and child projects for geospatial impact analysis

The selection of programs for geospatial impact analysis at the global portfolio level was based on maturity, in terms of implementation status of child projects. The evaluation adopted the same procedure used for the selection of programs for P2I case studies, i.e., to consider those programs mature that have either more than 60 percent of their child projects under implementation for more than 2 years (i.e., having been under implementation before April 1, 2014) or are completed, or both. Mature programs were assumed to be more likely to have produced results that can be observed in terms of environmental change measured through NDVI (to measure vegetative productivity) and forest cover changes over time.

The application of the maturity criterion left the evaluation team with 23 out of the 38 post-PFD introduction programs. From these, four global programs were excluded as these are administrative arrangements designed with the main purpose of achieving cost-efficiencies rather than larger-scale and longer-term results. Climate change, POPs, and international waters programs were also excluded as their results cannot be observed through GIS/remote sensing, as biodiversity, land degradation, and sustainable forest management programs are.[1]

The application of the above-mentioned criteria narrowed down the selection to 13 programs with 108 child projects. Table B.4.1 shows the selected programs stratified by single versus multi-Agency, single versus multicountry, and single versus multifocal programs.

TABLE B.4.1 List of selected programs

No.	Program GEF ID	Single Agency	Multi-Agency	Single country	Multi-country	Single focal area	Multifocal area
1	3268		x	x			x
2	3420		x		x		x
3	3423		x		x		x
4	3482		x	x			x
5	3647		x		x		x
6	3661	x		x		BD	
7	3782		x		x		x
8	3785		x		x	BD	
9	3926		x	x		BD	
10	4511	x			x		x
11	4620	x			x		x
12	4635	x			x		x
13	4646		x	x		BD	

NOTE: BD = biodiversity.

This analysis addressed the following key question: "To what extent have the different typologies of GEF programs delivered the intended results in terms of broader scale and longer-term environmental outcomes and impacts as compared to stand-alone projects?" (See question 1 of Effectiveness and Results.) The analysis assessed change over time, with a view of checking the extent to which a project under a program makes a difference in terms of unit of global environmental benefits produced compared with stand-alone projects. Measured environmental change included the reduction in forest loss and forest degradation, and vegetation productivity. Table B.4.2 presents the main features of the 13 programs covered in this analysis.

[1] Climate change, POPs, and international waters child projects included in the 108 programs have also been excluded.

TABLE B.4.2 Main features of programs selected for geospatial impact analysis

No.	GEF ID	GEF Agency	Country	Budget	Focal area	Title	Intervention typologies
1	3268	World Bank, UNDP, FAO	India	GEF: $28 mil.; cofinancing: $302 mil.	MF	SLEM/CPP—Sustainable Land and Ecosystem Management Partnership Program	LD-1: Sustainable agriculture and rangeland LD-2: Sustainable forest management LD-3: innovative approaches in SLM BD-4: mainstreaming biodiversity, BD-5: Fostering markets for BD goods and services CC-SPA: Strategic pilot on adaptation
2	3420	World Bank, UNDP, UNEP, FAO, ADB	Regional: Cook Islands, Fiji, Micronesia, Kiribati, Marshall Islands, Nauru, Niue, Papua New Guinea, Palau, Solomon Islands, Tonga, Timor-Leste, Tuvalu, Vanuatu, Samoa	GEF: $60 mil.; cofinancing: $138 mil.	MF	PAS GEF Pacific Alliance for Sustainability	Child projects cover: BD-1: Improved management effectiveness of existing and new protected areas BD-2: Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation BD-3: Strengthening terrestrial PA networks BD-4: Mainstream BD BD-5: Fostering market for BD goods and services BD-7: Biosafety CC-1, CC-2: Energy efficiency CC-3: Renewable energy CC-4: Biomass IW-1: Coastal and marine fish stocks and associated biological diversity IW-2: Reducing land-based pollution IW-3: Reducing conflicting use of water IW-4: Reducing persistent toxic substance and testing adaptive management of waters with melting ice POPs-1, POPs-2: NIP development and implementation POPs-3: POPs reduction
3	3423	IFAD, UNIDO, UNDP, UNEP, World Bank	Regional: Algeria, Egypt, Iran, Jordan, Morocco, Tunisia, Yemen	GEF: $53 mil.; cofinancing: $186 mil.	MF	MENARID Integrated Nature Resources Management in the Middle East and North Africa Region	LD-1: Sustainable agriculture and rangeland IW-3: Reducing conflicting use of water resources BD-3: Strengthening terrestrial PA networks BD-4: Mainstreaming BD BD-5: Fostering markets for BD goods and services CC-6: LULUCF to protect carbon stocks and reduce GHG emissions CC-SO8: climate change adaptation projects

No.	GEF ID	GEF Agency	Country	Budget	Focal area	Title	Intervention typologies
4	3482	ADB, IFAD, World Bank	China	GEF: $27 mil.; cofinancing: $386 mil.	MF	PRC-GEF Partnership on Land Degradation in Dryland Ecosystems Program	LD-1: Sustainable agriculture and range-land management LD-2: Sustainable forest management in production landscapes LD-3: Investing in innovative approaches in SLM BD-3: Strengthening terrestrial PA networks BD-4: Mainstreaming BD BD-5: Fostering markets for BD goods and services BD-8: Access and benefit sharing CC-6: LULUCF to protect carbon stocks and reduce GHG emissions
5	3647	ADB, UNDP, FAO, World Bank	Regional: Fiji, Micronesia, Indonesia, Malaysia, Papua New Guinea, Philippines, Palau, Solomon Islands, Timor-Leste, Vanuatu	GEF: $38 mil.; cofinancing: $264 mil.	MF	CTI—The Coral Triangle Initiative	BD-2: Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation BD-4: Mainstreaming BD BD-8: Access and benefit sharing IW-1: Coastal and marine fish stocks and associated biological diversity IW-2: Reducing land-based pollution IW-3: Reducing conflicting use of water
6	3661	UNDP	India	GEF: $9 mil.; cofinancing: $28 mil.	BD	IND-BD: GEF Coastal and Marine Program	BD-2: Protected area (marine)
7	3782	World Bank, UNDP, FAO, UNEP	Regional: Central African Republic, Congo, Cameroon, Gabon, Equatorial Guinea, Congo DR	GEF: $46 mil.; cofinancing: $223 mil.	MF	World Bank, UNDP, FAO, UNEP	BD-1: Improved management effectiveness of existing and new protected areas BD-2: Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation BD-3: Strengthening terrestrial PA networks BD-4: Mainstreaming BD BD-5: Fostering markets for BD goods and services CC-6: LULUCF to protect carbon stocks and reduce

No.	GEF ID	GEF Agency	Country	Budget	Focal area	Title	Intervention typologies
8	3785	World Bank, UNDP, UNEP, FAO	Regional: Burkina Faso, Benin, Cote d'Ivoire, Cabo Verde, Ghana, Gambia, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Sierra Leone, Senegal, Chad, Togo	GEF: $30 mil.; cofinancing: $98 mil.	BD	SPWA-BD: GEF Program in West Africa: Sub component on Biodiversity	BD-1: Improved management effectiveness of existing and new protected areas BD-2: Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation BD-3: Strengthening terrestrial PA networks BD-4: Mainstream BD CC-4: Biomass
9	3926	UNDP, FAO, ADB	China	GEF: $36 mil.; cofinancing: $745 mil.	BD	CBPF China Biodiversity Partnership and Framework for Action	BD-1: Improved management effectiveness of existing and new protected areas BD-2: Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation BD-3: Strengthening terrestrial PA networks BD-4: Mainstreaming BD BD-7: Biosafety SGP-1: Small grant program
10	4511	World Bank	Regional: Burkina Faso, Benin, Ethiopia, Ghana, Mali, Mauritania, Niger, Nigeria, Sudan, Senegal, Chad, Togo	GEF: $100 mil.; cofinancing: $1.8 bil.	MF	GGW Sahel and West Africa Program in Support of the Great Green Wall Initiative	BD-1: Improved management effectiveness of existing and new protected areas BD-2: Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation LD-1: Sustainable agriculture and rangeland LD-2: Sustainable forest management LD-3: Enhanced cross-sector enabling environment for integrated landscape management CCA-1: Reduced vulnerability to climate change in development sectors CCA-2: Strengthening adaptive capacity to reduce risks to climate-induced economic losses CCM-3: Investment in renewable energy technologies increased CCM-5: Restoration and enhancement of carbon stocks in forests and non-forest lands, including peatland (hectares) SFM/REDD+: Good management practices applied in existing forests

No.	GEF ID	GEF Agency	Country	Budget	Focal area	Title	Intervention typologies
11	4620	World Bank	Regional: Algeria, Egypt, Jordan, Morocco, Tunisia	GEF: $21 mil.; cofinancing: $226 mil.	MF	MENA-DELP	LD-1: Improved agricultural management; sustained flow of services in agro-ecosystems; increased investments in SLM BD-2: Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation CCM-3: Promote investment in renewable energy technologies CCA-1: Reduced vulnerability to climate change in development sectors
12	4635	World Bank	Regional: China, Indonesia, Philippines, Vietnam	GEF: $43.5 mil.; cofinancing: $753.5 mil.	MF	LME-EA Scaling Up Partnership Investments for Sustainable Development of the Large Marine Ecosystems of East Asia and their Coasts	BD-1: Improved management effectiveness of existing and new protected areas BD-2: Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation BD-5: Development and sectoral planning frameworks at country level integrate measurable biodiversity conservation and sustainable use targets IW-2: Reducing land-based pollution; catalyze multistate cooperation to rebuild marine fisheries and reduce pollution of coasts and large marine ecosystems (LMEs) while considering climatic variability and change IW-3: Reducing conflicting use of water; support foundational capacity building, portfolio learning, and targeted research needs for joint, ecosystem-based management of transboundary water systems
13	4646	UNDP, FAO	China	GEF: $23 mil.; cofinancing: $142.6 mil.	BD	CBPF-MSL Main Streams of Life–Wetland PA System Strengthening for Biodiversity Conservation	BD-1: Improved management effectiveness of existing and new protected areas

NOTE: BD = biodiversity, MF = multifocal.

Annex C: Portfolio

The post-2008 portfolio covered by this evaluation is diverse in type, scope, focal area, and implementation arrangements. It includes 38 programs and their 301 respective child projects. Two out of the 38 programs have been closed (i.e., all their child projects completed), both belonging to GEF-4. The remaining 36 programs are at different levels of maturity with 67 child projects (22 percent) currently pending, 171 child projects (57 percent) under implementation, and 63 (21 percent) child projects having been completed (belonging to 16 programs).

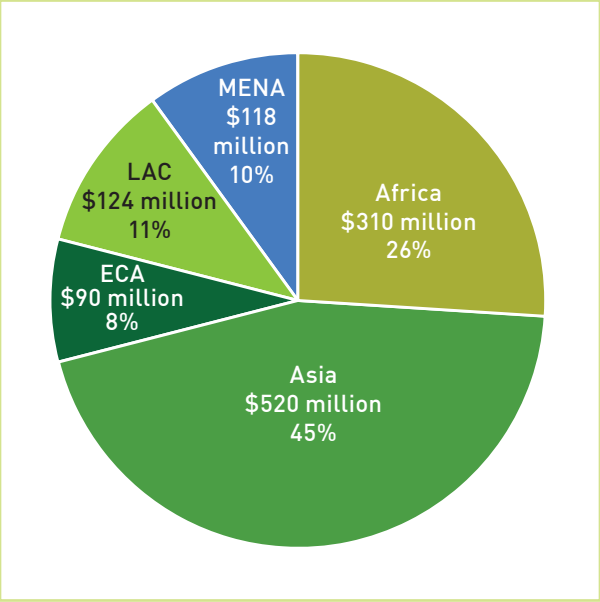
Nine country programs, of which seven are in Asia and two in Europe and Central Asia, account for $269 million of GEF grant financing (18 percent of the total program financing) (table C.1). Twenty-one regional programs—of which eight are in Africa, nine in Asia, one in Latin America and the Caribbean, and two in the Middle East and North Africa region—account for $892 million (60 percent of the total program financing). Eight global programs account for $325 million (22 percent of the total program financing).

Most child projects are implemented in a single country, i.e., 230 projects, accounting for $856 million (71 percent of the total child project financing). The remaining 71 ($347 million, 29 percent) are regional or global projects. As for the regional distribution, Asia is predominant, with 127 projects ($520 million, 35 percent), followed by Africa with 111 projects ($310 million, 21 percent).

TABLE C.1 **Post-2008 programs by geographic scope and GEF phase**

	GEF-4			GEF-5			GEF-6		
Geographic scope	No.	GEF grant (million $)	Cofinancing (million $)	No.	GEF grant (million $)	Cofinancing (million $)	No.	GEF grant (million $)	Cofinancing (million $)
Country	7	215	2,337	2	54	453	0	0	0
Asia	6	153	1,671	1	26	143	0	0	0
Eur. & Cent. Asia	1	62	667	1	28	310	0	0	0
Global	4	125	554	1	51	223	3	149	770
Regional	9	366	1,760	11	402	5,009	1	124	683
Africa	4	143	839	4	167	2,182	0	0	0
Asia	3	128	570	6	213	2,602	0	0	0
Latin Am. & Car.	0	0	0	0	0	0	1	124	683
Mid. East & N. Afr.	2	95	350	1	23	226	0	0	0
Total	20	705	4,651	14	507	5,685	4	273	1,453

FIGURE C.1 Project regional distribution



NOTE: ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa.

Eighteen of the 38 programs are multifocal, and are composed of 138 (46 percent) child projects. The majority of child projects are multifocal, biodiversity, and climate change projects (table C.2).

Twenty-four out of 38 are multi-Agency programs, accounting for $1,079 million (73 percent of the total program financing) (table C3). However, the projects themselves tend to be implemented by a single Agency (figure C.2): 191 projects under multi-Agency programs (61 percent of the total program financing) are implemented by a single Agency. Overall, the majority of child projects are implemented by the World Bank ($384 million, 32 percent), followed by UNDP ($325 million, 27 percent) and UNEP ($119 million, 10 percent).[1] Together, these three Agencies comprise 69 percent of the total project financing.

The majority of child projects are executed by government entities (74 percent); 15 percent are executed by multilateral Agencies.

[1] These percentages include all single and multi-Agency child projects, be these under a single or a multi-Agency program.

TABLE C.2 Post-2008 programs and projects by focal area

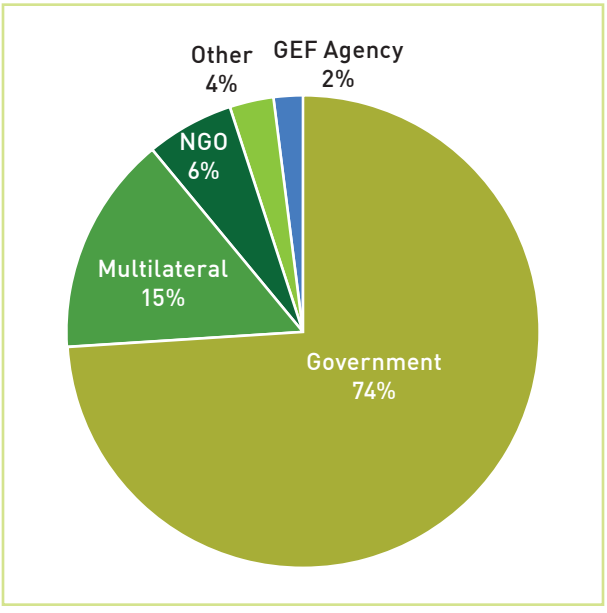
Program focal area	Project focal area	No.	GEF grant ($)	Cofinancing ($)
Biodiversity *n* = 5, 13%	Biodiversity	73	153,598,027	1,093,563,950
Climate change *n* = 10, 26%	Climate change	71	284,570,082	3,078,419,615
International waters *n* = 3, 8%	International waters	13	83,234,400	612,072,166
POPs *n* = 2, 5%	POPs	6	22,005,912	26,103,796
Multifocal *n* = 18, 47%	Biodiversity	23	89,846,463	317,306,072
	Climate change	9	36,774,559	251,077,236
	International waters	17	57,858,197	457,495,991
	Land degradation	5	7,153,749	14,232,211
	POPs	2	4,396,200	6,586,290
	Multifocal	82	494,545,371	4,233,707,965
Total		301	1,233,982,960[a]	10,090,565,292

a. While the total funding for all GEF programs as of April 2016 is $1,486 million, project total funding to date is $1,233 million due to some projects in newer programs not having been submitted or approved yet.

TABLE C.3 Post-2008 programs and projects by GEF Agency

Program	Project	Lead Agency	No.	GEF grant ($)	Cofinancing ($)
Single Agency *n* = 14	Single Agency *n* = 98	Asian Development Bank	9	28,966,800	1,343,938,000
		African Development Bank	5	22,574,365	194,193,500
		Inter-American Development Bank	2	8,500,000	65,350,000
		UN Development Programme	6	35,147,723	438,254,642
		UN Environment Programme	39	45,525,054	53,308,577
		UN Industrial Development Organization	9	43,414,804	173,055,000
		World Bank	28	190,219,999	2,361,797,738
Multi-Agency *n* = 24	Single Agency *n* = 191	Asian Development Bank	15	86,169,707	1,186,621,600
		Eur. Bank for Reconstruction & Development	2	17,205,442	152,638,600
		Food and Agriculture Organization of the UN	17	79,511,307	279,474,335
		Int'l Fund for Agricultural Development	5	20,294,497	81,797,200
		UN Development Programme	76	271,949,375	1,384,053,183
		UN Environment Programme	22	52,300,394	172,244,245
		UN Industrial Development Organization	10	23,673,516	90,359,575
		World Bank	42	186,732,157	1,664,221,141
		World Wildlife Fund	2	275,230	0
	Multi-Agency *n* = 12	Multi-Agency	12	90,539,202	707,085,908
			301	1,233,982,960	10,090,565,292

FIGURE C.2 Project executors by type and grant



Annex D: Stakeholders interviewed

D.1 Central-level interviews

Claude Gascon, Manager, GEF Secretariat

Chizuru Aoki, Lead Environmental Specialist, GEF Secretariat

Gustavo Fonseca, Director of Programs, GEF Secretariat

Mohamed Bakarr, Lead Environmental Specialist, GEF Secretariat

Ibrahima Sow, Senior Environmental Specialist, GEF Secretariat

Christian Severin, Senior Environmental Specialist, GEF Secretariat

Thomas Hammond, STAP Secretary, STAP

Karin Shepardson, GEF Executive Coordinator, World Bank

Dominique Kayser, Senior Operations Officer, World Bank

Adriana Dinu, GEF Executive Coordinator, UNDP

Nancy Bennet, Results Management and Evaluation Advisor, UNDP

Brennan VanDyke, GEF Executive Coordinator, UNEP

Kelly West, Senior GEF Portfolio Manager, UNEP

Rami Salman, MENARID Program, IFAD

Estibalitz Morras, GEF Unit, IFAD

Steve Twomlow, Lead Advisor Environment, IFAD

Sunae Kim, China Drylands Partnership, IFAD

Eric Patrick, Food Security IAP, IFAD

Juergen Hierold, GEF Coordinator, UNIDO

Marta Simonetti, Senior Manager, EBRD GEF Executive Coordinator, EBRD

Ryan Alexander, EBRD

Vlad Olievschi, EBRD

Mohamat Assouyouti, GEF Coordinator, AfDB

Jeffery Griffin, Senior Coordinator–GEF, FAO

Fritjof Boerstler, FAO

Jean-Ives Pirot, Head, GEF Coordination Unit, IUCN

Hervé Lefeuvre, Senior Director, GEF Relations and GEF Coordinator, WWF-US

D.2 Country-level interviews

CHINA

Wensong Guo, GEF OFP, Ministry of Finance

Lilia Jiang, GEF OFP Staff, Ministry of Finance

Min Tian, GEF OFP Staff, Ministry of Finance

Zhiming Niu, Senior Project Officer, ADB Country Office

Kawamura Reiko, Representative, JICA Country Office

Wendao Cao, Senior Agriculture Economist, WB Beijing Office

Jin Liu, Senior Environmental Specialist, WB Beijing Office

Dali Geng, Director, Foreign Economic Cooperation Department, Ministry of Agriculture

Liucai Zhu, Director, GEF China Office–FECO, Ministry of Environment

Xun Pan, Program Officer, Senior Engineer, GEF China Office–FECO, Ministry of Environment

Yinhong Sun, Country Program Officer, IFAD Beijing Office

Chaode Ma, Program Manager, UNDP Beijing Office

Zengming Song, Project Manager of the PRC-GEF partnership, State Forestry Administration (SFA)

Dongya Ran, Director, Technology Division, State Forestry Administration (SFA)

Jie Wan, Division Chief, World Bank Loan Project Management Center, State Forestry Administration (SFA)

Lei Song, Senior Engineer, State Forestry Administration (SFA)

Jian Zhang, Director of the International Division, Gansu Department of Finance

Hui Yang, Deputy Director of the Office of Gansu Provincial Foreign Loan Administration Committee (the project management section in the International Division); Gansu Department of Finance

Xiaoping Zhang, Investigator of the International Division, Gansu Department of Finance

Xin Lei, Deputy Director of the International Division, Gansu Department of Finance

Wenbo Dou, Deputy Director of the International Division, Gansu Department of Finance

Caixia Feng, Senior Staff of the International Division, Gansu Department of Finance

Shaokang Liu, Senior Staff of the International Division, Gansu Department of Finance

Qian Wang, Senior Staff member of the International Division, Gansu Department of Finance

Guolin Li, Leader of the WB Gansu and Xinjiang Pastoral Development PMO (in the review), Division Director of Gansu Department of Agriculture and Animal Husbandry, Project Management Office

Qibin Duan, Leader of the IFAD-GEF (in this mission) PMO, Division Director of Gansu Department of Agriculture and Animal Husbandry, Project Management Office

Zhengxuan Li, Senior Staff of Gansu Department of Agriculture and Animal Husbandry, Project Management Office

Yaolin Wang, Leader of the UNDP-GEF and the ADB-GEF (in this mission) PMOs, Division Director of Gansu Department of Forestry, Project Management Office

Li Li, Reporter from the ADB-GEF (in this mission) PMO, senior Staff of Gansu Department of Forestry, Project Management Office

Ai'ping An, Reporter from the JICA-GEF (in the review) PMO (already dismissed), Deputy Director of Gansu Office of Agricultural Development of the Gansu Department of Finance; Project Management Office

Guoxiong Zeng, Reporter from the WB Gansu Hexi Corridor (in this mission) PMO, Division Director of the Gansu Shule River Authority, Project Management Office

Lan Wang, Project Officer from the WB Sustainable Forestry Development PMO, Senior Staff of Tianshui Bureau of Finance, Project Management Office

Xiaoping Shi, Deputy County Chief, Government of Hezheng County

Lin Huang, Director, Animal and Husbandry Bureau/GEF project Office

Quanxi Cao, Deputy Director, Animal and Husbandry Bureau/GEF project Office

Yuzhu Yao, Officer, Animal and Husbandry Bureau/GEF project Office

Fengyuan Bai, Deputy Director, Forestry Bureau of Hezheng County

Lin Yang, Manager (beneficiary), Traditional Chinese Medicine Herbs Cooperative in Hezheng County

Chengyi Wang, Farmer (beneficiary), Traditional Chinese Medicine Herbs Cooperative in Hezheng County

Kui Shi, Manager (beneficiary), Yunfa Agriculture Business Co., LTD

Quanyou Cao, Beneficiary, Farmer

Yi Cao, Beneficiary, Farmer

Chengrong Wang, Deputy Director, Taizishan NNR Management Bureau

Wen Ma, Division Chief, Taizishan NNR Management Bureau

Xingguo Ma, Division Chief, Taizishan NNR Management Bureau

Jian Wang, Staff, Taizishan NNR Management Bureau

Shangzhi Ma, Staff, Taizishan NNR Management Bureau

Yanqin Ren, Staff, Taizishan NNR Management Bureau

Xiaoping Bai, Village Secretary (beneficiary), Liewa Village, Basong Town, Kangle County

Jinhu Wang, Village Head (beneficiary), Liewa Village, Basong Town, Kangle County

Zhigang Shi, Chairman of the Board, Sand Lake Tourist Company

Dong Zhao, Deputy General Manager, Sand Lake Tourist Company

Ning Yang, Project Manager, Sand Lake Tourist Company

Jiyong Yin, Manager, Wetland Museum of Sand Lake Tourist Area

Liping Sun, Manager, Project Management Department of Ningxia Farming Group Company, Ltd

Shengmin Sun, Wetland Management Expert

Rong Xie, Senior Staff, Financial Bureau of Yinchuan City

Wanxue You, Deputy Director, GEF Project Management Office, Haba Lake Management Bureau

Yadong Cui, Deputy Director, Foreign Debt Management Office of Ningxia Finance Department

Qiang Li, Director, Agricultural Technology Extension and Service Center

Yongjie He, Senior Agronomist, Agricultural Technology Extension and Service Center

Yongsheng Zhou, Deputy Township Head, Wanglejin Township, Yanchi County

Haisheng Wang, Deputy Township Head, Wanglejin Township, Yanchi County

Dian Yu, Deputy Director, GEF Yanchi PMO

Li Cai, Deputy Director, GEF Yanchi PMO

Caihua Zhang, Curator, Haba Lake Museum of Haba Lake NNR

Lijin Yang, Chairman of the Village committee, Zhengjiabao Village, Wanglejin Township, Yanchi County

Zhuangwu Guo, Station Chief, Erdaohu Management station of Haba Lake NNR

Xiaobo Xia, Technical Staff, Erdaohu Management station of Haba Lake NNR

Guoqiang Dai, Technical Staff, Liuyaotou Management and Protection Point, Erdaohu Management station of Haba Lake NNR

Chunxu Hou, IFAD greenhouse farmer, Shizhuangzi natural Village, Tianjizhang Village, Huamachit Township, Yanchi County

Rongguo yang, GEF greenhouse farmer, Haojitai Village, Qingshan Township of Yanchi County

Wang Jianfeng, Officer, GEF Yanchi PMO

Hongsong Li, Staff, Foreign Debt Management Office of Ningxia Finance Department

Ling Feng, Director, Foreign Debt Management Office of Ningxia Finance Department

Xiping Zhao, Staff, Finance Bureau of Zhouyu County

Xinyao Su, Deputy Director, Agriculture and Forestry Committee of Xi'an City

Weihua Bai, Deputy Director of the Planning and Finance Department, Agriculture and Forestry Committee of Xi'an City

Zhen Wen, Director, Shaanxi Provincial Forestry Project Management Center of International Cooperation

Yang Lin, Project Officer, Shaanxi Provincial Forestry Project Management Center of International Cooperation

Jun He, Deputy Director, Shaanxi Provincial Forestry Project Management Center of International Cooperation

Gongping Kang, Deputy Director, Shaanxi Department of Finance

Qindao Cao, Director, Forestry Bureau of Zhouyu County

Xiaomao Cai, Director, Houzhen Forest Farm of Zhouyu County

Zhenjiang Hui, Director, Shaanxi Province Foreign Investment Management Center

Hui Zhao, Deputy Division Chef, Shaanxi Province Foreign Investment Management Center, Division One

Weibing Zhang, Senior Forestry Engineer, International Forestry Cooperation Center, Forestry Department of Shaanxi Province

Shihua Chen, Deputy Director, Poverty Alleviation Office of Baoji City

Qilong Liu, Officer, Poverty Alleviation Office of Baoji City

Zhi Li, Officer, Financial Bureau of Baoji City

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Huaiyu Li, Beneficiary, Dingjiagou Village of Longxian County

Bainiu Li, Beneficiary, Dingjiagou Village of Longxian County

Yongan Li, Beneficiary, Dingjiagou Village of Longxian County

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Baoyou Wei, Beneficiary, Dingjiagou Village of Longxian County

Huiping Liu, Beneficiary, Dingjiagou Village of Longxian County

Baikuan Li, Beneficiary, Dingjiagou Village of Longxian County

Laicheng Xiao, Beneficiary, Dingjiagou Village of Longxian County

Jintian Lan, Beneficiary, Dingjiagou Village of Longxian County

Jilao Yao, Beneficiary, Dingjiagou Village of Longxian County

Zhuacheng Wang, Beneficiary, Dingjiagou Village of Longxian County

Aijuan Wei, Beneficiary, Dingjiagou Village of Longxian County

Ai Yue, Beneficiary, Quliuyuan Village of Longxian County

Xiuzhen Chen, Beneficiary, Quliuyuan Village of Longxian County

Huiqin Tian, Beneficiary, Quliuyuan Village of Longxian County

Yinxia Zhang, Beneficiary, Quliuyuan Village of Longxian County

Jinxiu Guo, Beneficiary, Quliuyuan Village of Longxian County

Zaocheng Yan, Beneficiary, Quliuyuan Village of Longxian County

Wenxue Zhang, Beneficiary, Quliuyuan Village of Longxian County

Shuqiu Guo, Beneficiary, Quliuyuan Village of Longxian County

INDIA

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Amitabh Pandey, Professor, IIFM

Amol Tamhankar, Maharashtra Provincial Government

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Dr. K. Thulsirao, Project Coordinator, Andhra Pradesh Provincial Government

Dr. P. Sathiyaselvam, Conservation Biologist, UNDP

Dr. S. Ghosh, Project Staff, UNDP

Durga Thigale, Project Staff, UNDP

Jaco Cilliers, Country Director, UNDP

Lianchawii Chhakchhuak, Program Analyst, UNDP

Marina Walter, Deputy Director, UNDP

C. Sasikumar, Program Manager, UNDP

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N. Vasudevan, Project Manager, Government of India

Nayanika Singh, GEF Consultant

Prakash Bagawali, Maharashtra Provincial Government

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Shivaji Shelke, Maharashtra Provincial Government

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Sugandha Chavan, Maharashtra Provincial Government

Suhel Jamadar, Maharashtra Provincial Government

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Uday Choudhary, District Collector, Government of India

Coromandel International limited, Fertilizer Company

GMR, Infrastructure Company

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Metrawinda Tunus, National Standardization Agency of Indonesia

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Raed Al-Tabini, Project Staff, The Hashemite Fund for Development of Jordan Badia

Rana Mahaasenh, Project Staff, National Canter for Agricultural Research and Extension

Saleh Kharabsheh, GEF OFP, Ministry of Environment

Wa'ed AL-Ja'afreh, GEF OFP Office Staff, Ministry of Environment

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Yahya Khaled, Project Staff, Royal Society for the Conservation of Nature

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Ouiame El Ghazi, Project Manager, Agence pour le Développement Agricole (ADA)

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Sabria Bnouni, GEF OFP, Ministry of Local Affairs and Environment

Sonia Njah, Program Staff, Observatoire du Sahara et du Sahel (OSS)

Taoufiq Bennouna, Program Manager, World Bank

Youssef Mejai, Program Staff, Ministry of Local Affairs and Environment

Zmerli Mohamed, Program Staff, Observatoire du Sahara et du Sahel (OSS)

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Do Nam Thang, Deputy Director General, Department of International Cooperation

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Le Hong Van, Project Assistant, UNIDO

Tran Quoc Dung, Deputy Director, STAMEQ/Deputy Director of QUACERT

Nguyen Anh Khoa, Technical manager, Tien Phong Plastic Jsc

Pham Anh Tam, Tien Phong Plastic Jsc

Man Thuy Giang, STAMEQ//VSQI, she was attended training program on Energy Management Systems

Nguyen Thi Luyen, Manager, Tien Phong Plastic Jsc

Vu Tu Quyen, International Cooperation Department, STAMEQ

Nguyen Xuan Quang, Director of company, ENERVI – Vietnam energy and environment Joint Stock Com

Pham Thi Nga, Project Coordinator PMU of IEE project, UNIDO

Phan Thi Minh Thao, Director, RCEE Company

Tran Duc Hoa, Energy auditor, RCEE Company

Trần Nhat Ninh, Deputy general Director, Tien Phong Plastic Jsc

Trinh Quoc Vu, Director of Science, Technology and Energy Conservation Department, Ministry of Industry and Trade

Annex E: Countries and projects visited

Province/ state	GEF ID	Agency	Project title	Project location
China (Program ID 3482)				
Gansu	2369	IFAD	An Integrated Ecosystem Management Approach to the Conservation of Biodiversity in Dryland Ecosystems	Taizishan National Nature Reserve; Linxia Hui Autonomous Prefecture; Hezheng County
	3483	ADB	Forestry and Ecological Restoration Project in Three Northwest Provinces	Tianshui City, Daping Village, Shifo Township
	3864	UNDP	CBPF: Strengthening Globally Important BD Conservation through Protected Area Strengthening in Gansu	Taizishan National Nature Reserve
Ningxia	2369	IFAD	An Integrated Ecosystem Management Approach to the Conservation of Biodiversity in Dryland Ecosystems	Haba Lake National Nature Reserve; Yanchi County
	2788	ADB	CBPF: Ningxia Integrated Ecosystem and Agricultural Development Project	Yinchuan City
	3484	ADB	Management and Policy Support to Combat Land Degradation	Yongning County
	Non-GEF	JICA	Ningxia Afforestation and Vegetation Cover Project	Yinchuan City, Yanchi County
	Non-GEF	WB	Ningxia Desertification Control and Ecological Protection Project	Yinchuan City, Yanchi County
	Non-GEF	UNDP	Ningxia Anti-Desertification and Livelihood Improvement Project	Yanchi County
Shaanxi	3483	ADB	Forestry and Ecological Restoration Project in Three Northwest Provinces	Heihe National Forest Park, Xi'an City
	3608	WB	Sustainable Development in Poor Rural Areas–SLM	Quliuyuan Village; Dingjiagou Village, Longxian County
Morocco (Program ID 4620)				
Marrakech	5292	WB	MENA: Morocco GEF Solidarity-Based Integrated Agriculture (ASIMA)	Plantation de 30000 Ha de Cactus de Rhamna, Rhamna
Jordan (Program ID 4620)				
Al Husseinieh	5026	WB	MENA: Badia Ecosystems and Livelihoods Project (BELP)	Al Husseinieh Hafir, Al Husseinieh
Qaseer Burqu				Burqu Lodge and Burqu Castle, Qaseer Burqu
Al Hashemiah				Al Hashemiah Reserve, Al Hashemiah

Province/ state	GEF ID	Agency	Project title	Project location
India (Program ID 3661)				
Andhra Pradesh	3936	UNDP	IND-BD Mainstreaming Coastal and Marine Biodiversity Conservation into Production Sectors in the Godavari River Estuary in Andhra Pradesh State	Kakinada
Maharashtra	3941	UNDP	IND-BD Mainstreaming Coastal and Marine Biodiversity Conservation into Production Sectors in the Malvan Coast, Maharashtra State	Sindhudurg
India (stand-alone project used as counterfactual)				
Tamil Nadu	634	UNDP	Conservation and Sustainable Use of the Gulf of Mannar Biosphere Reserve's Coastal Biodiversity	Gulf of Mannar

NOTE: IFAD = International Fund for Agricultural Development; JICA = Japan International Cooperation Agency; WB = World Bank.

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86	OPS5: Final Report: At the Crossroads for Higher Impact	2014
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