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STRATEGIC COUNTRY CLUSTER EVALUATION OF THE SMALL ISLAND DEVELOPING STATES

(Prepared by the Independent Evaluation Office of the GEF)

Recommended Council Decision

The Council, having reviewed the "Strategic Country Cluster Evaluation of the Small island Developing States" endorses the recommendations of the evaluation.

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ABBREVIATIONS

- CEO Chief Executive Officer
- GDP gross domestic product
- GEF Global Environment Facility
- GIS geographic information system
- IBRD International Bank for Reconstruction and Development
- IDA International Development Association
- IEO Independent Evaluation Office
- LDC least developed country
- LDCF Least Developed Countries Fund
- M&E monitoring and evaluation
- NDVI normalized difference vegetation index
- NGO nongovernmental organization
- ODA official development assistance
- PPG project preparation grant
- SCCF Special Climate Change Fund
- SIDS small island developing states
- SGP Small Grants Programme
- STAR System for Transparent Allocation of Resources

EXECUTIVE SUMMARY

For more than 25 years, the GEF has supported projects in critical areas for SIDS such as biodiversity protection on land and in the ocean, resilience to climate change and related disaster risk management, increased energy access through renewable energy and energy efficiency, halting and reversing land degradation, cooperation on international waters, and improved chemicals management. From the GEF-4 replenishment period through GEF-6 (2006-2018), the GEF has invested \$1.37 billion in SIDS through 337 interventions.

In light of several common environmental and economic challenges shared by the SIDS countries, this evaluation was conducted as a country cluster evaluation, with the following strategic objectives.

- (1) Assess the relevance and performance of GEF support aimed at addressing the main environmental challenges to SIDS from the country perspective
- (2) To provide a deeper understanding of the determinants of sustainability regarding the outcomes of GEF-supported interventions in SIDS.

A mixed methods approach was applied, and the evidence was based on a combination of closed and ongoing projects to evaluate performance and sustainability and capture lessons learned.

Main Conclusions

- (1) GEF-financed projects in SIDS are strongly aligned with the government's priorities and reflect the heterogenous needs of the various countries.
- (2) GEF interventions are relevant to national environment challenges and are aligned with the GEF focal areas.
- (3) The GEF is encouraging integrated approaches by promoting ridge to reef, an integrated watershed management approach to sustainably manage soil, water, and biodiversity, while considering renewable energy resources and productive sectors such as agriculture, forestry, fisheries, and tourism.
- (4) The performance of SIDS projects was lower than for the overall GEF portfolio on the dimensions of outcome performance, and project implementation and execution. The SIDS ratings on sustainability are similar to the overall GEF portfolio. Regional projects perform significantly better on outcomes and sustainability.
- (5) Context related factors which support sustainability include legal and regulatory reforms, national ownership, establishment of national environment funds, institutional and public private partnerships. Weak institutional capacity, low levels of environmental awareness, pressure from agriculture and tourism sectors impede sustainability.
- (6) Project related factors which have a positive influence on sustainability include training and building capacity, adaptive project management, strong project teams with a good

steering committee, and scaling up and replication based on lessons learned. Limited attention to the quality of project design, inadequate investment in building local and national capacity and lack of a clear exit strategy and future financing, are project related factors which negatively impact sustainability.

- (7) The GEF has supported the long-term sustainability of outcomes in the SIDS through a variety of interventions and verified post-completion sustainability ratings of several projects have improved since project completion.
- (8) The GEF has been given increasing attention to cross-cutting issues including gender mainstreaming, resilience and fragility, and private sector engagement and financing in project design; the ability to accessing private sector financing was noted as a challenge.
- (9) The GEF's main areas of additionality are strengthening institutions and assistance with legal and regulatory frameworks.

Recommendations

- (1) Derive greater benefits from the expanded GEF partnership. GEF Agencies should focus their efforts in SIDS based on their thematic and geographic competence and establish a permanent presence to strengthen dialogue with the respective government and key stakeholders.
- (2) Increase the number of integrated interventions. GEF Agencies should respond to the SIDS demand by designing more integrated projects, in line with the ridge to reef, whole island, and blue economy approaches. When justified, multiphase projects should be a prioritized model for GEF projects to improve outcome sustainability.
- (3) Promote innovation and knowledge exchange. The GEF project portfolio in SIDS should include a combination of innovative (e.g., income-generating products from invasive alien species) and scaling-up approaches that have shown to be effective. Innovation should be supported even if it has a higher risk. Regional programs should encourage a transfer of knowledge to the poorest SIDS through a South-South capacity-building approach.
- (4) Strengthening institutional capacity. GEF Agencies and projects should continue to build institutional capacity in the SIDS and assist in improving project design with due consideration to sustainability (exit strategy, stakeholder engagement, national and local capacity building to ensure continuation, M&E) and in the use of financial resources.
- (5) Within the context of the climate change mitigation projects, build on the GEF's comparative advantage. When considering interventions in the climate change mitigation area, the GEF should strategically explore the opportunity to address two of the main challenges facing SIDS—deficient waste management and the lack of sustainable energy. GEF financing should continue to explore the various alternatives

for renewable energy in SIDS possibly including wind, tidal and ocean wave power, and geothermal energy resources.

I. INTRODUCTION AND BACKGROUND

1. The GEF and SIDS

1. The Global Environment Facility (GEF) has a mandate to protect the global environmental commons—the biodiversity, water, oceans, healthy forests, land, and stable climate on which the planet and human health depend. The pressures on these resources are especially dramatic in small island developing states (SIDS), in view of their unique vulnerability. The SIDS therefore demand urgent and intensified action. SIDS simultaneously offer a distinct opportunity to innovate and model transformational change, such as transitioning to lowcarbon development pathways.

2. For more than 25 years, the GEF has supported projects in critical areas for SIDS such as biodiversity protection on land and in the ocean, resilience to climate change and related disaster risk management, increased energy access through renewable energy and energy efficiency, halting and reversing land degradation, cooperation on international waters, and improved chemicals management. From the GEF-4 replenishment period through GEF-6 (2006-2018), the GEF has invested \$1.37 billion in SIDS through 337 interventions, 219 of which were at the country level. Eighty-two percent of this funding came from the GEF Trust Fund, with the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF) together contributing 16 percent of the total funding, while 2 percent came from the Nagoya Protocol Implementation Fund (NPIF).

3. The GEF partnership with its member countries and 18 Agencies serving as a catalyst for GEF funding enables stakeholders to come together—including governments, development partners, global environmental conventions, intergovernmental institutions, nongovernmental organizations (NGOs), and the private sector—to support major projects and programs. This partnership and its interactions have led to increased cooperation in SIDS and support, for example, for the SIDS Accelerated Modalities of Action (SAMOA), the Sendai Framework, and the Sustainable Development Goals, many of which are highly relevant for sustainable development of SIDS.

4. Given the significance of SIDS, and the GEF's long and extensive investment in SIDS, the GEF Council requested the GEF Independent Evaluation Office (IEO) to conduct an in-depth review of the SIDS portfolio of projects. This report presents the context, findings, conclusions, and draft recommendations of the GEF IEO's Strategic Country Cluster Evaluation of Small Island Developing States. The analysis in this evaluation is based on a total of 286 projects as of January 2018. This includes an in-depth review of 98 closed projects with terminal evaluations (16 enabling activities), 188 ongoing projects, approved between GEF-4 and GEF-6 which had been endorsed for a year in January 2018 (see Annex 1 for list of projects). This was done to ensure that recent projects were included in the sample. Field visits were carried out in 10 countries covering 64 projects, including closed and active projects (See Annex 2 for projects

visited in countries). The evaluation also delves into the factors affecting sustainability through an in-depth analysis of 45 of the closed projects, with a minimum of 5 years past-completion.

5. The following sections present an overview of the challenges—environmental, economic, and institutional—facing SIDS. Taking these into account led the IEO to its decision to take a strategic country cluster approach, as described in section 1.4. It is, however, important to recognize that, although SIDS share certain geophysical constraints, environmental challenges, and vulnerabilities as a result of their small size, geographic remoteness, and fragile environment, they are heterogenous in terms of the specific environmental challenges they face and their socioeconomic development condition.

2. Environmental challenges for SIDS

6. Many contextual factors are common across SIDS, especially climate-related issues of sea level rise, coral bleaching, beach erosion, invasive alien species, non-sustainable use of land and water affecting productive sectors, natural resource management, and the increased impact of climate-related natural disasters such as tropical storms. The following highlights the key environmental challenges facing SIDS.

7. **Sea level rise.** Sea level is likely to rise on average 0.61–1.10 meters by 2100 if global greenhouse gas emissions are not mitigated, and a rise of 2 or more meters cannot be ruled out (IPCC 2019). Particularly at risk from rising sea levels are the Bahamas, Kiribati, Maldives, Marshall Islands, and Tuvalu where between 30 and 55 percent of the land is less than 5 meters above sea level.¹ Without ambitious adaptation, the combined impact of hazards such as coastal storms and very high tides will drastically increase the frequency and severity of flooding on low-lying coasts. This means that many of the world's atolls² (e.g., Kiribati and Maldives) may need to be abandoned.

8. **Coastal and coral reef degradation.** Beach erosion is another common problem reported on many islands, which has increased with increased climate change. The coral reefs around many islands are also severely affected by global warming, with reef degeneration and more frequent coral bleaching. Coastal tourism-related development and the influx of tourists puts pressure on coastal areas and feeds into coral reef degradation. Tourism is often the main avenue to foreign capital, and the tourism sector is for many countries a very important source of jobs. However, as an example, more than 70 percent of Antigua and Barbuda's coral reef is under threat from coastal development, and in St. Vincent and the Grenadines the coral reefs around Tobago Cays are under threat of further deterioration due to the anchoring of cruise ships. The

¹ Based on the latest World Development Indicators data on this indicator, dating from 2010.

² Atoll is a coral island or islands, consisting of a belt of coral reef, partly submerged, surrounding a central lagoon or depression

development of marinas, hotels, and other tourism-related facilities has also put pressure on mangroves and wetlands and reduced important fish breeding habitats.

9. **Impacts of deforestation.** The primary sectors of agriculture, agroforestry, and fisheries are important in most SIDS. The soils are, however, often degraded due to deforestation and overexploitation by a relatively high population, as well as strong and increasingly more intense tropical rainfalls that are causing erosion and landslides. In the atoll countries, the soils are mostly infertile and not very good for agriculture. Limited freshwater resources, combined with excessive drainage in these islands, makes agriculture even more difficult, with the result that annual crops often are produced only in the rainy season. Climate change and unusual weather variability have made it increasingly difficult to plan agricultural production, and adaptation measures might include change of main crops or focusing more on agroforestry.

10. Land degradation. The deterioration or loss of the productive capacity of the soils is a global challenge that affects SIDS because of the scarcity of land suited for agriculture. Land degradation leads to food insecurity, higher food prices, climate change, environmental hazards, and the loss of biodiversity and ecosystem services. Unsustainable agricultural practices result in soil erosion and water pollution, with adverse downstream impacts and degradation of coastal areas such as the mangroves, as well as the oceans, especially the coral reefs. When land is degraded, soil carbon and nitrous oxide is released into the atmosphere, contributing to climate change. Rural communities, smallholder farmers, and the very poor are most affected by land degradation, which is getting worse due to climate change with extreme weather events, prolonged droughts, and unreliable rainy seasons. Lack of water for agriculture has especially affected the driest islands and the atoll islands that have low-productive soils and excessive drainage. The agricultural production systems are also made less resilient by the loss of biodiversity and less protection of soils from natural vegetation cover.

11. **Threats to marine resources (overfishing).** While fishing is very important for families living in coastal areas, as a source of household income and a source of protein and nutrients, unsustainable commercial fishing puts pressure on marine resources. In Nauru, Palau, and Tonga commercial fishery accounts for 50 to 70 percent of total fishery activity, and though the number of tons produced per year is rather small it does have an impact on fish stocks. The top three fish-exporting SIDS—Fiji, Kiribati, and Papua New Guinea—have still lower rates of commercial fishery, ranging from 10.0 to 28.6 percent. Other threats to marine resources in these three countries are natural disasters—mainly cyclones—damaging finishing grounds and fish breeding habitats, and in Papua New Guinea, seabed mining. Other threats to the marine resources include illegal, unreported and unregulated (IUU) fishing, harmful fishing subsidies, pollution, habitat degradation, governance structures and lack of policies and their enforcement.

12. **Threats to biodiversity.** The restrictive habitats and small populations common to SIDS because of their isolation make their biodiversity often unique, but also extremely fragile; species often lack the ability to adapt to rapid changes. Their rich biodiversity is seen by many countries

as an economic, cultural, and social resource. Countries that currently face immediate threats to their flora and fauna include Cabo Verde, Cook Islands, Guinea-Bissau, Kiribati, Palau, São Tomé and Príncipe, Solomon Islands, and Vanuatu. Another problem in many SIDS, especially those that have been most geographically isolated, is the impact of invasive alien species. There are often problems with large numbers of invasive alien plants in both the agricultural sector and forest areas³, invasive animal species are a huge problem as well.⁴

13. Waste management and water quality. Another challenging issue in the SIDS is waste management, due to lack of space and deficient waste-handling systems. Solid waste is frequently burned or discarded in the sea or in nearby mangroves. Large amounts of solid waste are therefore accumulated on land, often flowing into the ocean. The substantial number of tourists and tourist facilities feeds into the amount of waste produced. In St. Vincent and the Grenadines, wastewater from tourist yachts has severely polluted the eastern coasts. Solid and liquid waste make their way to the coastal areas, contaminating beaches and marine ecosystems. Sewage water most often goes directly into the sea without any treatment. In addition, permeation of wastewater into aquifers, including contaminated water from agricultural production (fertilizers, pesticides), reduces water quality.

14. **Mining.** The methods used to extract minerals—mainly diamonds, bauxite, cobalt, copper, nickel, gold, oil, and natural gas—from the Earth's surface can have an extremely negative impact on the environment. For example, some of Guyana's and Suriname's extractive processes for gold use cyanide and mercury, which are both highly toxic. Impacts from mining include soil contamination, deforestation, removal of soil surface, and biodiversity loss. In the Americas, particularly at risk from the environmental impacts of mining are Cuba, Dominican Republic, Haiti Guyana, Jamaica and Suriname. In the Pacific, phosphate mining in Nauru has a major impact on the natural resources, and there is regional concern about exploration of deepsea mining in Papua New Guinea and Kiribati. For many SIDS, sand mining and mining of the seabed is also a practice that has a major impact on the local ecosystems' integrity and sustainability. The extraction of minerals is an important source of foreign capital and government revenue, and a source for jobs. Many SIDS have rich but currently untapped repositories of mineral resources, which might translate into future environmental challenges due to mining.

3. Economic and institutional challenges facing SIDS

15. While a few SIDS are high-income countries, most in the sample evaluated by the GEF IEO are middle-income countries. Regarding income level, it is worth mentioning high costs of

³ The albizia tree (*Falcataria moluccana*) native to Indonesia that is invasive in the Indian Ocean, and the paperbark tree (*Melaleuca quinquenervia*) native to Australia that is invasive in the Caribbean.

⁴ The small Indian mongoose (*Herpestes auropunctatus*) native to Asia is invasive especially in the Caribbean; and rats that are invasive in most regions, preying on native animals and bird eggs. Invasive alien ocean species include the lionfish (*Pterois volitans*) native to the Indo-Pacific, which is a problem in the Caribbean.

living and vulnerability to natural disasters. Thirty four of the 39 SIDS reviewed were official development assistance (ODA) recipients in 2016, but net ODA as a percentage of their current gross domestic product (GDP) has steadily decreased.

16. Their middle- or high-income status makes many SIDS ineligible for concessional finance from the International Development Association (IDA), and a low aid priority for donors in general. The small islands exception was created because SIDS often lack the creditworthiness needed to borrow from IBRD. Eleven countries have access to IBRD financing only, and five SIDS—Bahamas, Barbados, Cook Islands, Cuba, and Niue—have no access to either IDA or IBRD financing.

17. SIDS are more heavily indebted than the aggregate of least developed countries (LDCs). There are wide variations between countries, with SIDS in the Caribbean being the most heavily indebted (over 70 percent of GDP on average in 2016), while the average for the Pacific was 37 percent. The picture varies by country, but fiscal deficits average almost 5 percent of GDP with the Atlantic Ocean, Indian Ocean, Mediterranean Sea, and South China Sea region having the highest deficits, averaging 8.5 percent. Reserves in SIDS are also low when compared to LDCs, and countries have difficulties mobilizing domestic financial resources.

18. SIDS are often affected by governance issues, limited institutional capacity, and brain drain. These issues are further exacerbated in those SIDS that consist of a large number of islands with sparse human populations on each (e.g. Federated States of Micronesia, Kiribati, and Maldives), making an efficient public sector structure difficult and costly to operate and manage, resulting in limited or no access to services such as school systems, clean drinking water, sewage systems, garbage collection, mail service, and Internet.

19. Most types of communication are highly challenging in countries with many islands and strong cultural and language barriers between the islands. Vanuatu in the Pacific has a population of approximately 300,000 spread on the 65 inhabited islands, with 113 indigenous languages plus Bislama, English, and French. The Maldives in the Indian Ocean has a population of approximately 533,000, and 1,190 coral islands, of which approximately 200 are inhabited. This situation makes it necessary to rely heavily on regional councils and traditional community structures. High transport and travel costs, both from abroad and between islands, are reflected in the high costs of goods and services. This in turn affects the cost-benefit of investments and efficiency.

4. Rationale for a strategic country cluster evaluation

20. From its fourth replenishment period on, the GEF has moved toward more integrated programming as a strategy to tackle the main drivers of environmental degradation and achieve impact at scale. Meeting these goals often requires programs that go beyond national boundaries, encompassing several contiguous or cognate countries. To assess the effectiveness of such efforts, the GEF IEO occasionally conducts portfolio evaluations of country clusters. The

first such cluster country portfolio evaluation was done in 2011 and focused on six member countries of the Organization of Eastern Caribbean States (see box 1 for some key findings of this evaluation). The Vanuatu and Secretariat of the Pacific Regional Environment Programme (SPREP) country portfolio evaluation (GEF IEO 2015) examined GEF support to SIDS in the Asia and Pacific region. The evaluation covered the Vanuatu national portfolio and the 11 area projects for which the secretariat was the regional executing agency.

Box 1: Findings from earlier small state cluster portfolio evaluations

The 2012 evaluation of Organization of Eastern Caribbean States found GEF support to be relevant to countries' national environmental priorities but noted that regional approaches had diluted the relevance of efforts that were not directly related to country-driven initiatives (GEF IEO 2012). GEF support was also found to be relevant to global environmental benefits and to GEF strategies and policies, and positive results were noted particularly in adaptation projects. Limited institutional capacity, resources, and personnel had adversely affected project efficiency, and tracking of impacts was an issue due to limited monitoring data.

Similarly, the country cluster evaluation of small states conducted by the World Bank's Independent Evaluation Group (IEG 2016) noted positive results in the area of adaptation and highlighted limited institutional capacity and weak results monitoring as constraints to World Bank project performance.

21. The fact that regional projects are a predominant support modality in the countries covered justified the use of a clustered country approach in the evaluations mentioned above. The choice to evaluate the SIDS as a cluster was based on their shared geophysical constraints, resulting in disproportionately large economic, social, and environmental challenges.

5. Evaluation objectives, key questions, and methods

- 22. The overarching objectives of this evaluation were to
 - (a) Assess the relevance and performance of GEF support aimed at addressing the main environmental challenges to SIDS from the country perspective.
 - (b) Provide a deeper understanding of the determinants of sustainability regarding the outcomes of GEF-supported interventions in SIDS.

23. These objectives were translated into three key evaluation questions and three crosscutting issues gender, resilience and fragility, and private sector engagement. The three key evaluation questions follow (more detail is provided in the approach paper):

- (a) What are the key factors influencing and/or driving the sustainability of outcomes in SIDS?
- (b) In what way, if any, does the environment and socioeconomic developmental context help explain sustainability in SIDS?

(c) To what extent has GEF support been relevant to the main environmental challenge SIDS face, and are there any gaps?

24. The evaluation questions were answered through a mixed-methods approach encompassing both quantitative and qualitative analytical tools. For most of its components, the evaluation covers the GEF-4 to GEF-6 period (2006–18). Given that projects that make up the portfolio are at different stages of implementation, the status of respective projects determines the way and extent in which they will be included in the evaluation. The sustainability analysis, including both the terminal evaluation/terminal evaluation review, portfolio and geospatial analysis components, will focus on national and regional interventions that have been completed between 2007 and 2014, to provide enough time after completion to observe the sustainability of outcomes for these completed projects in the long term.

25. The analysis is based on a 2018 desk review of the GEF project portfolio in 39 SIDS and thematic country case studies in 10 of the 39 SIDS, to identify and understand the determinants of long-term sustainability and observed change over time against the countries' main environmental challenges. The portfolio review covered 286 projects (Annex 1) and looked at design documents, project documents, program framework documents, requests for Chief Executive Officer (CEO) endorsement, project implementation reports, midterm reviews, terminal evaluation documents, and implementation completion report reviews.

26. This portfolio comprised 49 enabling activities, 84 medium-size projects, and 153 fullsize projects and programs; Small Grants Programme (SGP) interventions in SIDS were also reviewed, since the SGP constitutes for many of those countries an important modality of GEF support. The analysis covers all GEF focal areas, although most of the projects are either in the biodiversity, climate change adaptation or climate change mitigation area; the latter tend to focus on carbon sequestration from forestry and other land management practices. Other areas covered were land degradation, international waters, POPs/Chemicals, and multifocal interventions composed of any of the mentioned GEF focal areas.

27. Quality assurance measures were established for this evaluation in line with IEO quality assurance practices. A reference group composed of representatives from the GEF Secretariat, the GEF Agencies, and the GEF Scientific and Technical Advisory Panel provided feedback and comments on the approach paper, the preliminary findings, and the evaluation report. Two peer reviewers from the IEO and the World Bank's Independent Evaluation Group provided detailed guidance and comments on the approach paper and the draft report.

28. Several limiting factors were considered and compensated for where and as possible; these included the following:

- (a) the unreliability of the GEF's Project Management Information System (PMIS) data on programs, as it is not regularly updated, especially on status
- (b) coverage of country visits (Annex 2)

29. The first limitation was addressed by cross-checking PMIS portfolio information with GEF Agencies' management information systems as a priority before undertaking any analysis. The second limitation was mitigated by conducting field missions to countries in conjunction with other evaluations conducted either by the IEO or by the GEF Agencies' evaluation units to increase field coverage. Field missions were carried out in 10 SIDS for this evaluation.

II. THE GEF SIDS PORTFOLIO

30. Support to SIDS has been increasingly important for the GEF during the last few years, especially because of the need for climate change adaptation. The GEF Global Programming Unit has a dedicated SIDS Team. The emphasis on SIDS led to a reformulation of the GEF's System for Transparent Allocation of Resources (STAR) allocation formula, making more financing available to SIDS. The GEF document "Small Island Development States and the Global Environment Facility—Building Lasting Partnerships" (GEF, October 2018) highlights that the GEF has been a strong partner and supporter of SIDS since its establishment.

31. The GEF has supported the development of green and blue economy approaches in SIDS because the inextricable connection between people's well-being, prosperity, and the environment is very clear on small islands. Growing recognition of the vital importance of the oceans to the economies and livelihoods in SIDS has increased calls for integrated blue economy approaches. At the same time, SIDS face fundamental challenges that must be tackled immediately—especially their high vulnerability to the impacts of climate change, which is reflected in several ways, including the need for in the sustainable management of natural resources on land and in the ocean and the need to convert to renewable and less costly energy sources. Adaptation measures are complicated by limited land and water resources, a lack of awareness, and long-standing traditions of unsustainable exploitation of resources.

1. Characteristics of the GEF SIDS portfolio

GEF funding

There has been an increase in GEF support for SIDS from 8 to 9 percent from GEF-5 to 32. GEF-6, and further to 12 percent in GEF-7. During the shortfall in GEF-6 an effort was made to ensure that SIDS were sufficiently funded without major delays in approval. In GEF-6, the SIDS in the Pacific islands spent all their STAR allocation, while the SIDS in the other regions were close to their allocations. The current GEF-7 funding cycle (2018–22) continues to provide strong support and an emphasis on the needs of SIDS. The GEF is allocating \$233 million in GEF-7 for countries within the GEF SIDS constituency as national allocations to address pressing sustainable development challenges. The Pacific islands were the only region to see their total STAR allocation increase in GEF-7, in the face of smaller total STAR resources as well as the relative increase for SIDS as a percentage. Beyond country allocations, there are other resources available via the GEF Trust Fund, such as from a special window for SIDS and LDCs under the chemicals and waste focal area, regional funds available under the international waters focal area, resources via the SGP, and support for fulfilling convention obligations (Box 2). In addition, LDCF/SCCF funds are available to SIDS. The regional distribution of GEF STAR allocation in SIDS is 43 percent to Asia and the Pacific; 37 percent to Latin America and the Caribbean; and 20 percent to the Atlantic Ocean, Indian Ocean, Mediterranean Sea, and South China Sea.

Box 2: SIDS and the international conventions

All 39 SIDS ratified the three main Rio conventions—i.e., the United Nations Framework Convention on Climate Change, the United Nations Convention to Combat Desertification, and the Convention on Biological Diversity (CBD). Almost all countries ratified the Stockholm Convention on Persistent Organic Pollutants, and most countries ratified the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, and the Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat. Twenty-two countries ratified the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade. Only nine countries ratified the Minamata Convention on Mercury. Thirty-three countries ratified one or more regional conventions focused on the marine environment, such as the Cartagena Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region and the Ballast water convention.

33. The GEF STAR—the allocation system that determines the amount of GEF resources a given country can access in a replenishment period for the biodiversity, climate change mitigation, and land degradation focal areas—has provided full financial flexibility to 25 countries in GEF-5 and 24 countries in GEF-6 of the 35 SIDS receiving STAR allocations during these replenishment periods (GEF 2010b, 2014b). STAR flexibility means that countries can shift allocations between focal areas. The STAR replaced the Resource Allocation Framework that was used during GEF-4, but which did not have the same flexibility as the STAR.

34. As of, the GEF had provided more than \$555 million in country allocated finance to the 39 SIDS covered by this evaluation. In addition, SIDS participated in a significant number of regional and global projects and programs that overall totaled an additional \$810 million. GEF finance has leveraged several times that amount in additional resources for sustainable development.

Project modality

35. Most SIDS have used a combination of full- and medium-size projects and enabling activities, as well as small grants. Of the operations reviewed in this evaluation, 153 (53.5 percent) were full-size projects, 84 (29.4 percent) were medium-size projects, and 49 (17.1 percent) were enabling activities. As of the time the evaluation was conducted, 98 projects had been completed. The SIDS have also participated in a significant number of regional and global projects and programs that overall totaled US\$ 810 million in GEF financing. Of the 286 SIDS projects reviewed, 81 (28.3%) were regional programs. Programmatic approaches have not got much traction in SIDS, but one program to be implemented by UNEP is in the pipeline: "Implementing Sustainable Low and Non-Chemical Development in SIDS (ISLANDS), GEF ID 10185, with USD 56 Million from the GEF.

36. Even though no projects under the GEF SGP were specifically reviewed as part of the country studies, the SGP country portfolios have been reviewed to see complementarities with

other GEF supported areas. The GEF SGP project portfolio from July 2017 to June 2018 covered 35 SIDS country programs consisting of 846 ongoing projects, including 268 projects approved during the fiscal year. In the same period 171 GEF-funded SGP projects were finalized. The GEF funding in the period was \$33.1 million, complemented by \$34.3 million in co-financing.

	Enabling activity		activity Medium-size project		Full-size project		Total	
	# of Projects	%	# of Projects	%	# of Projects	%	# of Projects	%
Pilot Phase (1991-1994)		0.0		0.0	1	0.7	1	0.3
GEF-1 (1994-1998)		0.0		0.0	1	0.7	1	0.3
GEF-2 (1998–02)		0.0	1	1.2	2	1.3	3	1.0
GEF-3 (2002–06)		0.0	10	11.9	18	11.8	28	9.8
GEF-4 (2006–10)	6	12.2	24	28.6	45	29.4	75	26.2
GEF-5 (2010–14)	25	51.0	35	41.7	77	50.3	137	47.9
GEF-6 (2014–18)	18	36.7	14	16.7	9	5.9	41	14.3
Total	49	100	84	100	153	100	286	100

Table 1: SIDS projects reviewed by GEF phase

GEF Agencies

37. UNDP is the dominant GEF implementing Agency in SIDS, with 147 projects (51.4 percent) of the projects reviewed, while only three Agencies have implemented more than 85 percent of the GEF portfolio. This has to do with limited direct contact with the Agencies in small and isolated countries. In table 2, the regional programs (81) have been included according to the lead Agency. Some Agencies have experience in co-implementing GEF projects, e.g., UNDP and UNEP, thereby combining one Agency's national presence with another Agency's core competence on environmental issues. Such collaboration is sometimes done dividing the projects by components, however it is often more bureaucratic, which is a challenge for design and implementation. On average, following the expansion of the partnership, there are on average seven Agencies covering the SIDS (IEO 2016a).

38. Some GEF Agencies have strong relations with the Ministry of Environment in countries, in particular UNDP, and this often dominates the GEF portfolio—especially in the smallest countries. The strong collaboration is positive, but sometimes there is a perception of overlap between the role of the government and UNDP, and the distinction between roles of execution and supervision/quality assurance is not always clear.

39. GEF-financed projects in SIDS are reflected in the country programs for Agencies that have a national presence, especially UNDP, but also frequently the World Bank and the respective regional development banks (Inter-American Development Bank, Asian Development Bank, African Development Bank). The formulation and identification of priority

areas are discussed between the GEF operational focal point (often situated in the ministry of environment) and other relevant ministries and agencies and consulted with relevant potential GEF Agencies, both those with national office and others that have national experience. The SIDS have typically had fewer GEF implementing Agencies present in the country to select from than in larger countries, but access has increased to some extent after the expansion based on IEO evaluation findings.

	GEF-4 (20	06–10)	GEF-5 (2	010–14)	GEF-6 (2014–18)		Grand	Total
GEF Agency	# of Projects	%	# of Projects	%	# of Projects	%	# of Projects	%
UNDP - United Nations								
Development Programme	38	50.7	74	54.0	20	48.8	147	51.4
UNEP - United Nations								
Environment Programme	18	24.0	30	21.9	13	31.7	67	23.4
WBG - The World Bank								
Group	8	10.7	8	5.8	3	7.3	31	10.8
FAO - Food and								
Agriculture Organizaton								
of the United Nations	3	4.0	9	6.6	1	2.4	13	4.5
IDB - Inter-American								
Development Bank	3	4.0	5	3.6	1	2.4	9	3.1
ADB - Asian Development								
Bank	2	2.7	4	2.9	1	2.4	7	2.4
UNIDO - United Nations								
Industrial Development								
Organization	2	2.7	4	2.9	1	2.4	7	2.4
AfDB - African								
Development Bank		0.0	1	0.7	1	2.4	2	0.7
IFAD - International Fund								
for Agricultural								
Development	1	1.3	1	0.7		0.0	2	0.7
WWF-US - World Wildlife								
Fund		0.0	1	0.7		0.0	1	0.3
Total	75	100.0	137	100.0	41	100.0	286	100.0

Table 2: The GEF	project por	tfolio in SIDS b	y implementing Agency

Focal areas

40. All GEF focal areas are relevant for SIDS; multifocal area projects form the largest share of the GEF-4 to GEF-6 project portfolio. The biodiversity, climate change adaptation and mitigation, land degradation, and international waters focal areas receive most funding as part of the multifocal area projects.

41. Consistent with the challenges the SIDS confront, the percentage of projects reviewed is highest in climate change, both adaptation and mitigation (34.7 percent), followed by biodiversity (31.2 percent) and international waters (10.1 percent). Note that the percentage

columns in table 3 refer to the projects covering a focal area, based on the original classification of the project in the database. Some projects that cover two focal areas sometimes are classified in both, while projects with two or more focal areas most often are registered as multifocal. This makes the number of projects in the table higher than the number of projects reviewed (286). It is also worth noting that many projects under one focal area generate cobenefits in other areas, especially between the areas of biodiversity and climate change (both mitigation and adaptation), but these co benefits are often not measured. The projects reviewed cover 153 (53.5%) full size projects, 84 (29.4%) medium size projects, and 49 (17.1%) enabling activities.

	GEF-4 (2006–10)		GEF-5 (2010–14)		GEF-6 (2014–18)	
Focal Area	# of Projects	%	# of Projects	%	# of Projects	%
Biodiversity	27	36.0	40	29.2	8	19.5
Climate change (mitigation)	15	20.0	22	16.1	13	31.7
Climate change adaptation (LDCF/SCCF only)	12	16.0	28	20.4	1	2.4
International waters	6	8.0	17	12.4	1	2.4
Land degradation	1	1.3	19	13.9		0.0
Persistent organic pollutants (POP)	7	9.3	6	4.4	3	7.3
Mercury		0.0	1	0.7	9	22.0
Multifocal	7	9.3	25	18.3	7	17.1

Table 3: SIDS projects reviewed by focal area

42. Within each of these areas it is important for the GEF to ensure support to achieve global environmental benefits. A desk review that examined the global environmental benefits most important in SIDS showed that the most important areas include maintaining biodiversity goods and services (36.8 percent) and support for low-emission development (35.1 percent), followed by enhancement of the countries' capacity to implement multilateral environmental agreements and mainstream them into national and sub-national policy, planning, financial and legal frameworks (26 percent). 16 projects (5.6 percent) did not have any global environmental benefits identified in the design, reflective of enabling activities. Reviewing the environmental domains in the projects' logical frameworks, results frameworks or monitoring tools, climate change adaptation, climate change mitigation and biodiversity are the three dominant areas. Several projects cover more than one environmental domain.

43. In the areas of institutional development and governance, more than half the projects reviewed focus on policy frameworks and skills building (table 4). Knowledge generation and strategic implementation of appropriate technologies and approaches are other important areas of focus in projects. While projects may address more than one contribution area, in

general fewer projects focus on the specific elements of governance structures, strategic development of financial mechanisms for sustainability and awareness raising.

44. Very few of the projects reviewed focused specifically on the agricultural sector. It is more common for GEF projects in SIDS to have an indirect relation with the sector through activities that target the reduction of deforestation and land degradation. Many projects cover watershed management from an integrated natural resource management perspective, sometimes with a ridge to reef approach, and establish alliances with the agricultural sector in conservation of soil, water, and biodiversity, such as the newly approved UNDP projects "A ridge to reef approach for the integrated management of marine, coastal and terrestrial ecosystems in the Seychelles" (GEF ID 9431) and "Conserving biodiversity and reducing land degradation using a ridge to reef approach" in St Vincent and the Grenadines (GEF ID 9580). Both these projects included resources from the LD Focal area. Projects in the climate change focal areas also cover the agricultural sector, both from adaptation and mitigation perspectives.



Figure 1: GEF projects in SIDS by Global Environmental Benefits

5.6% of projects did not have GEBs identified (16 projects) – reflecting the EAs included in the review.

Area	Sub area	Projects	%
Strategy implementation	Technologies and approaches	120	42.1
	Implementing mechanisms and bodies	81	28.4
	Financial mechanisms for implementation and sustainability	62	21.8
Institutional capacity development	Policy, legal and regulatory frameworks	172	60.4
	Governance structures and arrangements	66	23.2
	Informal processes for trust building and conflict resolution	1	0.4
Knowledge management	Knowledge generation	125	43.9
	Information sharing and access	92	32.3
	Awareness raising	73	25.6
	Skills building	152	53.3

Table 4: GEF contribution areas in SIDS for institutional development and governance

Resilience

45. To improve climate resilience and reduce disaster risks, GEF supports land use planning with an integrated and sustainable natural resources management approach, and disaster risk management focused especially on prevention and mitigation of natural disasters. The UNDP project Adapting water resource management in Comoros to increase capacity to cope with climate change (GEF ID 3857) supported and trained community reforestation using an agrosilvo-pastoral approach to promote local resilience. In Kiribati the project KAP II (GEF ID 2543) focused on climate resilience and disaster risk management, including the design of seawalls to protect against sea-level rise and coastal erosion, and included strengthening of local resilience. KAP III (GEF ID 4068) continued the process, strengthening climate resilience based on the strategies and designs developed, and improved the seawall designs based on lessons learned during the previous phase. Through its two adaptation funds, the LDCF and the SCCF, the GEF has built an active portfolio of projects across SIDS in Africa, Indian Ocean, Asia-Pacific, and Latin America and the Caribbean.

46. The LDCF has supported 12 projects in SIDS in GEF-3, 12 in GEF-4, 20 in GEF-5, 7 in GEF-6 and 2 in GEF-7, where two projects include non-SIDS countries. The SCCF has supported 10 projects in SIDS, all from GEF-3 to GEF-5, including three programs that included non-SIDS countries, and the GEF Council meeting in June 2019 approved the GEF-7 regional SOILCARE project (GEF ID 10195) with funds from SCCF covering 7 Caribbean SIDS, in line with the strategic focus in the new GEF adaptation strategy 2018-2022. The current evaluation includes an analysis of 35 LDCF projects and 7 SCCF projects. At the time of the SCCF program evaluation (2017), there was only one ongoing SCCF project in a SIDS country, Building Climate Resilience through Innovative Financing Mechanisms for Climate Change Adaptation (GEF ID 5523) in Antigua and Barbuda, which is still under implementation.

47. In GEF-7 (2018–22), the LDCF and SCCF continue to support adaptation priorities identified by countries to build near, medium, and long-term climate resilience, with special

focus on: (1) Disaster preparedness and resilience including mapping of disaster prone areas and establishment of local early warning systems, as well as ecosystem-based approaches; (2) Innovative tools to manage disaster risk such as risk insurance facilities, risk pooling, risk transfer, and supportive policy and capacities; and (3) 'Win-win' solutions that can deliver adaptation as well as global environmental benefits, such as improved access to drinking water (including rainwater harvesting); improved access to clean and resilient energy; more climateresilient smallholder food systems; and integrated semi-urban and urban planning. Building the capacity of the private sector to engage in climate change adaptation, and mainstreaming community and gender considerations, are also important aspects. Both the LDCF and SCCF are supporting national and regional projects, as well as global programs.

Integrated resource management through the ridge to reef approach

48. The GEF and its Agencies, most notably UNDP, are promoting an approach known as ridge to reef. This is an integrated watershed management approach where the planning area starts at the top of the island and ends at the coral reef. Integrated approaches to the management of land, water, forest, biodiversity and coastal resources can contribute to enhanced livelihoods, reduce poverty, and increase resilience. In some low altitude islands without a clearly defined watershed (such as the atolls), a similar integrated approach is often applied, called a whole island approach.

49. The GEF is supporting SIDS countries in the Pacific, Africa, Indian Ocean, and the Caribbean to implement such approaches to sustainably manage soil, water and biodiversity, while also considering renewable energy resources and productive sectors such as agriculture, forestry, fisheries and tourism. The ridge to reef approach is designed to reverse the degradation of coastal resources by finding ways to reduce the flow of untreated wastewater, chemicals, nutrients, and sediments from land-based economic activities and cities into deltas, coastal zones, and oceans. Two ecosystems are specifically important for the resilience and economic viability of the coastal zones—the mangroves and the coral reef. Ridge to reef is one important measure to help protect these ecosystems that protect human settlements against natural disasters and are important for productivity of fisheries. Consequently, the approach requires Integrated Water Resource Management and Integrated Coastal Management plans that come together into long-term sustainable use of natural resources while limiting the impact on the fragile environments. Thirty percent of the GEF projects in SIDS consider integrated approaches such as ridge to reef, whole island approach, or blue economy clearly or to some extent. However, some integrated projects have institutional challenges that must be considered during design to ensure effective implementation.

Blue economy

50. GEF-7 presents a unique opportunity to assist SIDS in addressing stress to the ocean resources such as overfishing, land-based sources of pollution, and loss and damage of key

coastal and marine ecosystems and includes priority areas for GEF is to strengthen national blue economy opportunities through a combination of national and regional investments. Through GEF IW multisectoral approaches supporting ocean governance, SIDS countries have been supported in developing scientifically-underpinned transboundary diagnostic analyses and this has led to the formulation of strategic priority-setting plans, which were ultimately endorsed at the highest political level. The implementation of these plans has been, and still is, playing a central role for SIDS countries to truly develop sustainable blue economies. Examples from the different regions are SAP in the Pacific, WIOLAB in the Indian Ocean and CLME in the Caribbean.

51. Some SIDS representatives have commented that instead of "small island states" they should be considered "large ocean countries." The reason is that many of them cover huge ocean territories with significant resources and sometimes strategic significance. The list of the 20 countries with largest exclusive economic zones includes four SIDS in the Pacific: Kiribati (3,441,810 km²), Federated States of Micronesia (2,996,419 km²), Papua New Guinea (2,402,288 km²) and Marshall Islands (1,990,530 km²). Many of the SIDS have worked together in regional and global efforts to protect the oceans. In recent years they have made notable progress and demonstrated leadership to enhance the protection of marine resources to sustain and grow national economic opportunities in sectors such as fisheries, shipping and tourism.

52. During the period of GEF-7 a priority area for GEF is to strengthen national blue economy opportunities through a combination of national and regional investments. GEF support aims to sustain healthy coastal and marine ecosystems; catalyze sustainable fisheries management; and address pollution reduction in marine environments, including from ship transport and the cruise industry. The GEF assists SIDS in identifying sustainable public and private national investments within the blue economy space, through funding of collective management of coastal and marine systems and implementation of integrated ocean policies and legal and institutional reforms. This support is often channeled through regional GEF programs, e.g., in the Indian Ocean and the Caribbean which is giving importance to South-South knowledge transfer.

Land use management

53. Soil erosion, land-slides and gradually reduced land productivity are problems that in many SIDS are particularly important due to the small size of the islands, along with diverse soil types, topography, and geological hazards and the added vulnerability to climatic variability and change. Agriculture on atolls is especially vulnerable due to poor soils with little organic matter and few resources of freshwater.

54. The GEF's work in land degradation— specifically deforestation and desertification— has emphasized the need to take an integrated approach to sustainable land management

while ensuring the sustainability of livelihoods. The projects on land degradation including land use planning have been financed not only from the Land Degradation Focal area, but also from the Biodiversity and Climate Change Adaptation areas. The GEF has now expanded this approach to include the United Nations Convention to Combat Desertification's guiding principle of land degradation neutrality. GEF support to SIDS has evolved in the same way, seeking to ultimately halt and reverse land degradation, restore degraded ecosystems, and sustainably manage resources. Sustainable land management with soil and water conservation is often combined with reduced use of pesticides and industrial fertilizers—or even organic production, thereby giving health benefits to the population while protecting biodiversity in the coastal and marine areas. Land degradation financing to SIDS in previous replenishments has included single country-based projects and support to a global initiative where 15 SIDS identified land degradation neutrality baselines and defined national land degradation neutrality targets.

55. In the area of sustainable forest management (SFM), GEF-6 has supported at least five national projects in SIDS with SFM set-aside funds, in both the Caribbean and the Pacific. In addition, Guinea-Bissau and São Tome and Principe are included in the global program The Restoration Initiative (TRI) - Fostering Innovation and Integration in Support of the Bonn Challenge (GEF ID 9264). The work on land degradation in SIDS is also strongly related to the work on climate change adaptation, because climate change is leading to desertification and prolonged periods of drought.

Protected areas

56. The GEF's support for protected areas establishment and management goes all the way back to GEF's inception and is still a main area of support under the Biodiversity Focal area. The type of support has evolved, and now incorporates NGO's and the local communities in comanagement arrangements. GEF assistance has included the establishment of new protected areas, building capacity for planning and effective area management including co-management with local stakeholders, and establishment of protected areas funds and other mechanisms for sustainable financing. GEF will continue to promote the participation of local communities, including indigenous peoples and women groups, in the design, implementation, and management of protected area projects. Protected areas management however confronts many challenges, such as the lack of sustainable financing, insufficient vigilance, slash-and-burn agriculture, illegal extraction of timber and natural resources, and governments' plans for infrastructure projects and mining/oil exploration inside the areas. The GEF supports strategies to reduce the negative impacts of tourism, fisheries, agriculture, while at the same time allowing traditional communities situated in and around the areas for sustainable incomegenerating activities from fruit, nuts, fish, ecotourism, etc., based on the ecosystems' carrying capacity. The incorporation of the local population in planning, decision-making processes and surveillance is considered vital for their awareness building and interest in conserving the areas.

Invasive alien species

57. Invasive alien species are one of the main causes of ecosystem degradation and species extinctions in SIDS. Many SIDS have been geographically isolated for thousands of years with high level of endemism and are therefore more vulnerable to the effects of invasive alien plants and animal species. The regional UN Environment project "Mitigating the Threats of Invasive Alien Species in the Insular Caribbean" (GEF ID 3183) has been successful in combating invasive alien species such as the lionfish - under the slogan "eat it to beat it". Other marine invasive species have been targeted by the Ballast Water Convention, which was an outcome of a successful project "Building Partnerships to Assist Developing Countries to Reduce the Transfer of Harmful Aquatic Organisms in Skips' Ballast Water" (GEF ID 2661). The GEF seeks regional cooperation and engagement of nontraditional partners on invasive alien species that seek to overcome the challenges of limited resources and capacity for invasive alien species. Targeted eradication will be supported in specific circumstances where proven, low-cost, and effective techniques can result in the extermination of targeted invasive alien species and the survival of globally significant species and/or ecosystems, while supporting research and collaboration with universities and the private sector on new innovative combat methods.

Chemicals and waste

58. Many SIDS have accumulated stockpiles of hazardous waste from households, the agricultural sector and industries which represent a danger to the population and the environment. Toxic chemicals, other hazardous waste, and waste arriving from the ocean present acute challenges to the fragile ecosystems in SIDS and their coastal areas. As part of the GEF-7 strategy, under a specific program (program 3) of the chemicals and waste focal area, SIDS can access funding to implement sustainable, low and nonchemical development in their territories through regional and national approaches. This program seeks to address the sound management of chemicals and waste through strengthening the capacity of sub-national, national, and regional institutions and strengthening the enabling policy and regulatory framework in these countries.

Renewable energy and energy efficiency

59. Investments in solar energy in SIDS that a few years ago were only possible through incentives from the GEF are now often financially viable even with commercial loan rates, and there are opportunities for the GEF to focus on other alternative energy resources, where feasible, to stay at the forefront of the technological development with environmental benefits.

60. Many SIDS have a huge potential of untapped renewable energy resources from solar, wind, hydroelectric, tidal, wave, geothermal, and biomass resources, but continue with a high percentage of their energy consumption provided by the burning of fossil fuels. A UNDP implemented project on geo-thermal energy in Comoros (GEF ID 9040) has the objective to promote an alternative energy resource development for base-load electricity generation. The

project could help addressing the national demand for electricity, which is approx. 20 MW, while the current production is at 14 MW. Sustainable and affordable energy supplies, which require renewable energy development and promotion of energy efficiency, are crucial to SIDS to achieve SDG7 and the nationally determined contributions in the framework of the Paris Climate Accord. With continued technology advancement in renewable energy, where the cost of renewable energy such as solar continues to go down—these sources are increasingly viable alternatives. The nationally produced renewable energy sources bring the added benefits of stimulating employment with local economic growth.

61. While renewable energy is replacing fossil fuels to meet increasing energy demand in SIDS, energy efficiency will remain an immediate priority for sustainable and affordable energy use due to its lower investment costs. Advanced energy efficient technologies, such as energy efficient lighting, air conditioning, appliances, new building codes, and retrofitting of constructions to reduce energy use, are cost-effective options for commercial buildings and homes to reduce energy demand and cut greenhouse gas emissions in SIDS. To facilitate transformational change in energy consumption systems for SIDS, GEF-7 includes two specific opportunities to support renewable energy and energy efficiency investments: De-centralized renewable power with energy storage, that promotes renewable energy innovation and technology transfer in SIDS; and Accelerating energy efficiency adoption that improves energy efficiency, such as for the hotel industry, commercial buildings, and homes. The GEF aims to continue to support SIDS to strengthen national energy security, develop clean energy policies, catalyze private investments in the renewable energy sector, and facilitate the use of advanced renewable energy and energy efficiency technologies in agriculture, urban and rural development, with co-benefits to health, community development, poverty eradication, and women's empowerment. Climate change adaptation projects and climate change mitigation projects are often seen as separate issues, even though the most cost-efficient projects most often are those that combine adaptation and mitigation in the same project (e.g. in the energy and forestry sectors). A very small share of the GEF projects support what in the project documents is defined as innovation—for example in the energy sector where the UNIDO project "Strategic Platform to Promote Sustainable Energy Technology Innovation, Industrial Development and Entrepreneurship in Barbados" (GEF ID 9648) is still in the pipeline.

Governance and stakeholder involvement

62. In all the thematic areas mentioned above, some cross-cutting issues are fundamental to project performance, impact, and sustainability, such as governance, stakeholder involvement (including gender, indigenous peoples, and local communities), private sector engagement and resilience building. The GEF considers these areas in all projects, both during design and implementation. Strong consultation with the main stakeholders is important during project design to ensure a good and relevant project. Most GEF projects have a focus on awareness building, training and capacity building, and these areas could signify success or

failure of project outcomes, as well as the opportunity for achieving sustainability. The area of resilience has not been sufficiently considered in the design of SIDS projects, except for climate resilience. These cross-cutting areas are further reviewed in chapter 3.

III. PERFORMANCE, RELEVANCE, OUTCOMES AND SUSTAINABILITY OF GEF INTERVENTIONS IN SIDS

1. Project performance

63. The performance of SIDS projects was lower than the overall GEF portfolio on the dimensions of outcome performance and implementation and execution quality. Seventy-one percent of projects in the SIDS have outcome ratings in the satisfactory range compared with 79 percent of the comparable GEF portfolio over the same time period. M&E design and implementation, and sustainability ratings were comparable to the respective ratings for the overall GEF portfolio. Expanding the analysis to include all 152 SIDS closed projects in the current terminal evaluation data base that meet the selection criteria (GEF 4-GEF6 and 2007-2014) confirm this trend.



Figure 2: Performance ratings of projects in the SIDS portfolio

64. Using the updated terminal evaluation dataset, 82 percent of projects in biodiversity had higher outcomes and 61 percent had likely ratings on sustainability. Land degradation, climate change and multi focal projects had a higher percentage of projects with satisfactory outcomes and a lower percentage of projects with "likely" sustainability ratings. The trend is reversed in the case of International Waters where a higher percentage of projects are likely to be sustainable as compared with the percentage of projects with satisfactory outcome ratings. Table 5 includes the most current TE data set of 152 closed projects in SIDS and reflects the

increase in the number of LD projects. The original data set with 98 closed projects only included 3 LD projects.

Focal Area	Likely Sustainability	Satisfactory outcomes	Grand Total
BD	61.40%	81.80%	44
СС	56.40%	66.70%	39
Chem	100.00%	100.00%	2
IW	77.30%	68.20%	22
LD	53.10%	62.50%	32
MF	41.70%	66.70%	12
POPs	0.00%	100.00%	1
Grand Total	59%	71.10%	152

Table 5: Outcome and Sustainability Ratings by Focal Area

2. Regional Project Performance

65. **Compared with the TE ratings for the SIDS closed project portfolio, regional projects have significantly higher ratings on outcomes and sustainability.** For the 41 regional projects included in the TE database, the percentage of projects with satisfactory outcomes and likely sustainability were at 88 percent and 66 percent respectively. Performance of regional projects on outcomes and sustainability has improved by almost 10 percentage points between GEF-3 and GEF-6.

Table 6: Outcome and Sustainability Performance of Regional Projects in SIDS

GEF Phase	Satisfactory Outcomes	Likelihood of Sustainability	Grand Total
GEF - 1	100.0%	0.0%	1
GEF - 2	100.0%	100.0%	5
GEF - 3	80.0%	53.3%	15
GEF - 4	89.5%	68.4%	19
GEF - 6	100.0%	100.0%	1
Grand Total	88%	66%	41

There are no GEF-5 SIDS regional projects with terminal evaluations as of November 2019.

66. The evaluation reviewed ten of these regional programs through visits to several countries that had participated in the same program. Five of these projects were in the International Waters focal area, three in the Climate Change focal area, one in Biodiversity and one multi-focal project. Many of the SIDS have worked together in regional and global efforts to protect the oceans. In recent years they have made notable progress and demonstrated leadership to enhance the protection of marine resources to sustain and grow national and regional economic opportunities in sectors such as fisheries, shipping and tourism. One example is Integrating Watershed and Coastal Area Management (IWCAM) in the Small Island Developing States of the Caribbean (GEF ID 1254), an international waters program covering 13 countries with USD 13.7 Million from GEF and USD 98.2 million in co-financing. The program achieved adoption of appropriate policy and legislation at the national and regional levels. A relatively unsuccessful program was the Western Indian Ocean Marine Highway Development and Coastal and Marine Contamination Prevention (GEF ID 2098) which included eight countries including three SIDS (Comoros, Mauritius and Seychelles), with USD 11 million from GEF and USD 15 million co-financing. The lack of national ownership of the program undermined its sustainability and caused delays. The countries were not equally involved in the design and preparation phase, and some technical agencies were not even aware of the project until after approval.

67. Regional programs have also covered land, such as addressing land-based activities in the Western Indian Ocean (GEF ID 1247), which covered the same set of eight countries as GEF ID 2098. The ministries of environment, as National Focal Points for the Nairobi Convention, were in charge of the project in the countries, ensuring coordination and follow up of implementation. Funding was secured at the national level to ensure sustainability of activities after project completion. Another area of regional cooperation with GEF support has been the combat of proliferation of invasive alien species on land and in the ocean, e.g. through the successful program Mitigating the Threats of Invasive Alien Species in the Insular Caribbean (GEF ID 3183), covering five Caribbean countries. One program goal was to overcome the challenges of limited resources and technical capacity on invasive species though South-South knowledge sharing.

68. Another important area of regional cooperation is in climate change adaptation. In the Pacific, the SCCF funded regional program Pacific Adaptation to Climate Change (GEF ID 3101) was implemented in 13 countries with Secretariat of the Pacific Regional Environment Programme (SPREP) as executing agency, with a budget of USD 13.1 Million from GEF and USD 44.5 Million co-financing. The project had mixed results across the targeted sectors (water resources, coastal management, and food security). Although all participating countries had drafted policies or plans integrating climate change, few were endorsed by the time of the terminal evaluation. It should be noted that SPREP since then has been strengthened through the regional project Enhancing Capacity to Develop Global Environment Projects in the Pacific (GEF ID 6982).

69. Under the GEF-7 period, regional investments in the International Waters focal area has been strengthened, where one priority area is Blue Economy. The regional efforts support aims to sustain healthy coastal and marine ecosystems, catalyze sustainable fisheries management, and address pollution reduction in marine environments, including from ship transport and the cruise industry. The GEF is funding collective management of marine regions and implementation of integrated ocean policies and legal and institutional reforms. As part of the GEF-7 strategy, SIDS can also achieve funding for regional programs through the Chemicals and Waste Focal Area, which supports sustainable, low and non-chemical development, including regional approaches and strengthening of the enabling policy and regulatory frameworks.

M&E, Project Preparation and Co-financing

70. Effective implementation of sustainable development strategies calls for effective monitoring and evaluation (M&E) in order to determine that processes are on track and that interventions, policies, and strategies are leading to desired change (Uitto, Kohlitz, and Todd). Establishing effective M&E systems requires systematic effort and overcoming capacity constraints. An earlier IEO evaluation in the Pacific found that all GEF projects have M&E protocols, and that the systems have been used effectively for adaptive management in the context of the projects. Yet institutionalizing M&E within the regular operations of the involved ministries and departments has proven challenging, primarily due to limited capacity (IEO, 2015). An evaluation in the Caribbean had similar conclusions: while project-level M&E has improved over time and has clearly contributed to adaptive management, environmental monitoring and the assessment of impact-level results have been extraordinarily challenging (IEO 2012). The reasons for this include a lack of baseline data as well as systematic monitoring data for assessing environmental trends over time. Other evaluations confirm these findings. For instance, in Timor-Leste and Jamaica, M&E has played a very limited role in managing the GEF portfolio and in providing environmental data to aid decision making. In interviews in Vanuatu, national staff have mentioned their lack of satisfaction with the monitoring and supervision system which is focused on reviewing compliance instead of strengthening the partnership and providing support to the implementation.

71. Many SIDS find it difficult to prepare projects within the 12-month timeframe, especially multifocal projects that are thematically more complicated and often involve more national institutions. Projects in some SIDS (e.g. Dominican Republic, St Lucia) demonstrate a limited understanding of global environmental benefits in the design of GEF projects. Some SIDS (e.g. Maldives, Mauritius) consider the process for preparation of GEF projects is relatively complicated compared with projects of the same size financed by other bilateral funding agencies. The PPG for project preparation is very important for complex projects, but the maximum time for implementing a PPG is not always necessary, however the Agencies often stick with the maximum time even when it could have been done in much shorter time.

72. The sources of co-financing are difficult to know in advance, because ongoing projects and activities that could co-finance would often have finished before the GEF project is approved and the activities started. Often the process of assuring co-financing also results in delays. One option is to develop a Strategic Action Programme (SAP) to facilitate partnerships and trust building with potential partners during the design phase and for future projects. A SAP process was carried out for example in the recently approved regional FAO project Towards Sustainable Management of the Canary Current Large Marine Ecosystem – CCLME (GEF ID 9940), which includes the SIDS countries Guinea-Bissau and Cabo Verde.

Relevance of GEF interventions in SIDS

73. GEF-financed projects in SIDS are normally strongly aligned with the government's priorities and reflect the heterogenous needs of the various countries. The Ministers of Environment and other government officials in charge of these areas highlight that GEF is an important source of funding that fits into their planning. GEF projects are most often well aligned with the strategies for the Agencies and the GEF focal areas, e.g., for climate change adaptation and mitigation, biodiversity, sustainable forest management, and hazardous waste.

74. Despite many common challenges, the 39 SIDS are a rather heterogeneous group of countries, which also affects which environmental challenges are most important in each country. One important difference is population pressure, another is the difference between volcano islands and atolls, and a third important difference is between countries consisting of one or a few islands versus countries consisting of many (sometimes thousands) of islands. A clear difference is also noted between the group of Caribbean countries that on average have higher population and less distance to neighboring countries than the SIDS in the Pacific and Indian Ocean.

75. More than 90 percent of the GEF project documents describe the project's relevance to the country's specific priorities and consider these priorities in the design. Some examples include the UNEP-implemented Support to the Alignment of Jamaica's National Action Programme to the UNCCD [United Nations Convention to Combat Desertification] 10 Year Strategy (GEF ID 5893); the UNDP-implemented Mainstreaming Global Environmental Priorities into National Policies and Programmes (GEF ID 5655) in Vanuatu; the UNDP-implemented Renewable energy technology development and application (GEF ID 1029) in Maldives, which supported the national strategy in the area of renewable energy; and the UNDP-implemented Sustainable management of POPs in Mauritius (GEF ID 3205), which was designed to comply with the priorities in the Mauritius National Implementation Plan on hazardous waste. The threats have been addressed by the GEF projects reviewed to different degrees (see table 6), where the governments have prioritized areas consistent with the country challenges, complemented by financing of the priority areas also from several other sources, including the state budget, development banks and climate financing mechanisms such as GCF and CIF. An example of a GEF project that was scaled up through a GCF project was the UNDP implemented "Economy-wide Integration of Climate Change Adaptation and Disaster Risk Management to Climate Vulnerability of Communities in Samoa" (GEF ID 5417). The total number in the table 7 is higher than the number of projects reviewed because several projects cover two or more challenges. The numbers in the table however only consider thematic areas that were selected as important areas in the projects.

			Environmental challenge					
Country	Sea level	Deforest-	Coastal/reef	Threats to	Over-	Waste/water	Climate	invasive alien
	rise	ation	degradation	biodiversity ¹	fishing	management	change	species
Belize	1	1		4			1	
Comoros		1	2	1	2	1	2	
Dominican Republic	1	3	2	4			1	1
Guinea-Bissau	1	1	4	5		1	3	
Jamaica		2	2	3			3	1
Kiribati	1		1	1			3	
Maldives				1		1	4	
Mauritius		1	2	4		1	1	
St. Lucia	1	1	1	1	1		2	1
Vanuatu			2	2			4	
Total	5	10	16	26	3	4	24	3

Table 7: Number of projects reviewed dealing with the main environmental challenges by country

1 There has been a move towards umbrella projects that allow countries to work directly with UNDP and UNEP and not submit national projects

76. Regarding sea level rise, the projects have mostly been dealing with the future problems this can cause, especially through improved costal protection (covered by column 3). Sea level rise is just in its initial stage, but coastal erosion is a related issue that has increased due to frequency and intensity of climate-related disasters. This has been one of the priority areas in many projects, such as the regional UNDP-implemented program Adaptation to climate change—Responding to shoreline change and its human dimensions in West Africa through integrated coastal area management (GEF ID 2614); the World Bank–implemented Kiribati Adaptation Program (GEF ID 2543); and the UNDP-implemented Integrating climate change risks into resilient island planning in the Maldives (GEF ID 3847).

77. The many environmental challenges on land and in the ocean are interconnected, with both linear and circular relationships, and the GEF projects to confront these challenges have also been interconnected. It is not possible to see one challenge separately, since both soil and water management and waste management are impacting the ocean, and thereby human economic activities, especially fisheries. This was an important issue e.g., in the UNDP-implemented regional program "Combating living resource depletion and coastal area degradation in the Guinea current LME through ecosystem-based regional actions" (GEF ID 1188); the IFAD-implemented "Integrated Ecological Planning and Sustainable Land Management in Coastal Ecosystems of Comoros" (GEF ID 3363); and the IADB-implemented "Integrated Management of the Yallahs River and Hope River Watersheds" (GEF ID 4454). Other examples of projects addressing interconnected issues are the bi-national programme
(Dominican Republic-Haiti) "Reducing Conflicting Water Uses in the Artibonite River Basin through Development and Adoption of a Multi-focal Area Strategic Action" (GEF ID 2929), which combined the International Waters and Land Degradation Focal areas; the ongoing "Integrating Water, Land and Ecosystems Management in Caribbean SIDS" (IWEco), GEF ID 4932, covering 10 SIDS, which combines International Waters, Biodiversity and Land Degradation; and the recently approved International Water program "An Integrated Approach to Water and Wastewater Management Using Innovative Solutions and Promoting Financing Mechanisms in the Wider Caribbean Region" (CReW+), (GEF ID 9601), covering 18 countries including 12 SIDS.

78. All projects reviewed have been found to have a satisfactory rating for relevance to the national environmental challenges and are also relevant for the environmental priorities in relation to national priorities. Many projects reviewed are also relevant and suited for rural communities, while some are relevant at the national and regional level. All regional programs reviewed have national components, and some even support local community development. The UNDP-implemented project "Facilitating and Strengthening the Conservation Initiatives of Traditional Landholders and their Communities to Achieve Biodiversity Conservation Objectives in Vanuatu" (GEF ID 1682) was a national project clearly focused on direct support to selected rural communities; while the UNEP-UNDP regional program "Integrating Watershed and Coastal Area Management in the Small Island Developing States of the Caribbean" (GEF ID 1254) was a regional program consisting of national projects with locally implemented pilot projects.

Project Outcomes

79. Based on a detailed review of 45 closed SIDS projects with terminal evaluation reports, 34 (75.6 percent) had positive environmental outcomes or resulted in a change in environmental trends.5 The main positive impacts were in the areas of biodiversity, deforestation/land degradation, and water quality/quantity. Only a few terminal evaluation reports mentioned the risks that these results could be reversed, however there is no mention of the time horizon. The number of projects shown in table 8 is higher than the projects with terminal evaluations because several projects had more than one environmental outcome. Forty projects (88.9 percent) reported positive socioeconomic changes or trends, particularly in the areas of income generation/diversification (45 percent), private sector engagement (37.5 percent) and civil society engagement (25 percent). All the projects, except one, (97.8 percent) reported improvements in institutional capacity or governance.

⁵ This set of projects was selected if they met the following criteria: Completed between 2007 and 2014 and have TE evaluations available and were not part of CBIT or Biosafety.

Area of positive environmental outcome	Projects	%
Threats to terrestrial biodiversity	18	51.4
Deforestation and land degradation, including SLM	13	37.1
Water quality and quantity	10	28.6
Waste management	8	22.9
Threats to marine resources	7	20.0
Coastal and coral reef degradation	5	14.3
Climate change mitigation, emission reduction	5	14.3
Renewable energy and energy efficiency	5	14.3
Climate change adaptation; sea level rise	2	5.7

Table 8: Positive environmental outcomes mentioned in the terminal evaluation reports in SIDS

Table 9: Areas of positive changes in institutional capacity/governance in the GEF projects in SIDS

Area of capacity building, institutional development, or improved governance	Projects	%
Capacity and skills development	38	86.4
Awareness raising	32	72.7
Development of plans, policies, codes, covenants, laws and regulations	25	56.8
Knowledge management, information-sharing and knowledge systems	24	54.5
Institutional and decision-making processes, structures and systems	17	38.6
Environmental monitoring systems	14	31.8
Decision makers' information and access to information	6	13.6

Box 3: Case Study: ST LUCIA

The \$7.3 million Iyanola—Natural Resource Management of the NE Coast project (GEF ID 5057) was launched in 2015 to improve the effective management and sustainable use of the natural resource base of the NE Coast of Saint Lucia and generate multiple global environmental benefits. The region hosts Iyanola dry forests that are classified as the key biodiversity areas and important bird areas. The forest region is also endowed with a variety of environmental resources which form an important and potential socioeconomic and cultural asset base of the island's national economy. Forest loss and forest degradation has been an issue in this important ecosystem before the project started. Thus, the GEF support to the fragile Iyanola forest ecosystem through an integrated approach, was relevant in addressing the drivers of ecosystem degradation both through national level planning and regulatory changes, and site-specific activities.

Results: Overall there is an increase in vegetation productivity at all the restoration sites since project implementation. There has been a rapid increase in vegetation between 2015 and 2016. The average NDVI at the three sites before the project start in 2015 was 0.3 which increased to 0.5 in 2018, a total increase of 20 percent. The productivity has tapered down in 2018 compared to the previous two years perhaps due to a decrease in precipitation. The plantation



of native and non-native trees together with the understory has led to the increased vegetation productivity, also verified during the site visit (Annex 3 includes details).

3. Project sustainability

80. Sustainability is understood as the likelihood of continuation of project benefits after completion of project implementation (IEO 2019). Sustainability ratings were provided for 45 closed projects with a terminal evaluation. Of these projects 65 percent had an overall sustainability rating of likely or moderately likely, slightly higher than the results observed in the overall portfolio of the SIDS at 59 percent. There were relatively small differences across the different dimensions of sustainability. The main contextual factors contributing to higher sustainability included government and stakeholder support, while project-specific factors such as stakeholder involvement in project design, good project implementation and adaptive management were positively related with sustainability of outcomes.

Factor	Projects	%
National government support (e.g., budget allocated, supporting policies adopted)	16	35.6
Links to previous/current related initiatives (by government, donors, global events, etc.)	10	22.2
Other stakeholder support (e.g., donors, civil society organizations)	8	17.8
"Champions" (individuals who pushed strongly for outcomes to be achieved)	7	15.6
Private sector involvement and support	6	13.3

Table 10: Context-related factors contributing to sustainability of project outcomes

Factor	Projects	%
Strong buy-in and strong sense of project ownership among key stakeholders	21	46.7
Good engagement of key stakeholders/stakeholders involved in design and decision making	21	46.7
Good project management (e.g., strong project team or engaged steering committee)	14	31.1
Timely adaptive project management to changing contexts	13	28.9
Extended implementation period (e.g., midterm review led to project extension)	10	22.2

Table 11: Project-related factors contributing to sustainability of project outcomes

81. Field visits confirmed the findings from the desk reviews of terminal evaluations reported above, shed light on other important factors and provided rich and valuable insights into the situation on the ground. There are differences between the countries, but the following factors are those that were found as predominant. The discussion of these factors is based on what was observed in country, as well as the consideration of the opportunity for future sustainability, so the results from these field visits to individual projects sometimes varied from what was reported in the terminal evaluation reports. This difference is also influenced by the political and institutional situation at project completion as compared with the situation when this post completion assessment was carried out for this evaluation.

Context-related factors affecting sustainability

82. The most important context-related factor is the national level legal and regulatory framework for environment and protected areas, and the extent to which the laws are respected and enforced. For instance, in the Comoros, unsustainable forest and agricultural practices, including slash-and-burn, and overexploitation for firewood and timber, have greatly reduced the possibility for regeneration of natural forest ecosystems. The government has developed policies and incentives to promote agricultural production and self-sufficiency of food products, through the UNDP project Enhancing Adaptive Capacity and Resilience to Climate Change in the Agriculture Sector in Comoros (GEF ID 4974).

83. Other SIDS countries, such as Guinea-Bissau, have developed a policy for protected areas where the communities established inside the areas can sustainably use the natural resources (fish, fruit, nuts) if they participate in the co-management and protection of the areas. The World Bank–implemented Coastal and Biodiversity Management Project (GEF ID 1221) that was completed in 2010 established a Fund for Local Environment Initiatives, supporting investments prioritized by local communities inside and near the national parks. This was a very important and influential national project from a sustainability point of view,

because it created mechanisms and lessons learned that were incorporated in many other GEF operations, e.g., the UNDP-implemented project Support for the consolidation of a protected area system in Guinea-Bissau forest belt (GEF ID 3575). Even though the fund ended, it has influenced the modus-operandi of IBAP, where IBAP is supporting the communities inside the parks and is often the only face of the state. Based on local observations and discussions, the communities often seem to assure technical and financial sustainability on issues like maintenance of wells and water pumps, and there has been a clear improvement in sustainable management of natural resources that generates direct income, such as exploitation of oysters, shrimps and palm oil.

84. National ownership of the projects is an important contributing factor for sustainability, which is reflected in local stakeholder participation and government support and budget allocation. Strong national ownership was confirmed for most of the GEF supported projects in all pilot countries visited. For instance, in Maldives the UNDPimplemented project Atoll ecosystem-based conservation of globally significant biodiversity in the Maldives Baa Atoll (GEF ID 1099) that was implemented 2003–14 reported strong project ownership and government support as factors contributing to sustainability of the project outcomes. There was also strong buy-in and sense of ownership among the national and local key stakeholders. Ownership of the project was found to be high in all line-ministries that had a relation with the project during implementation or currently have anything to do with achieving sustainability of the Baa atoll. This is because biodiversity conservation and marine ecosystems management have been elevated to a national priority, and a proposal is being presented to make the whole country of Maldives a UNESCO Biosphere area. Significant efforts are therefore being made to manage the environment and conserve the county's exceptional marine and coastal biodiversity and mainstream it in policies and programs.

85. Ownership by national institutions is also clearly demonstrated in the Mauritius Partnership for Marine Protected Areas (GEF ID 1246). It is reflected in the government's provision of sustained budgeting for the conservation of marine resources and biodiversity since the early 1990's. After the project closed in 2012, the total annual budget for marine conservation was estimated at \$5.2 million and increased up to an average of approximately \$9.9 million, however with a peak funding of \$12.4 million in 2016 due to the construction of the Blue Bay Marine Park Centre. It should be noted that other departments involved in marine conservation such as the Mauritius Oceanography Institute, Department for Continental Shelf, Maritime Zones Administration & Exploration and the Ministry of Environment are also supporting this financially, and there is income generation through a permit system within marine protected areas that has consistently increased since 2013.

86. In projects focused on stimulating policy formulations for a number of countries, achieving country ownership through a single investment is a greater challenge. The sustainability of the World Bank regional project Western Indian Ocean Marine Highway

Development and Coastal and Marine Contamination Prevention (GEF ID 2098) was undermined by the lack of ownership in many countries, which caused delays. The eight participating countries were not equally involved in the design and preparation phase, and some technical agencies were not aware of the project until after approval; there were changes in responsible personnel during the long preparation period, and new staff were not given any means to influence the project's scope. The project was often endorsed by national governments without adequate consultation at the technical level. Now, long after the project closed, there is still a lack of commitment in the region (reflected in low budgets) for mechanisms to integrate oil spill prevention in country operations to ensure sustainability of the project efforts.

87. The UNIDO-implemented project Promoting investments in small and medium scale renewable energy technologies in the electricity sector in Guinea-Bissau (GEF ID 5331) would have been more relevant and with improved expectations of sustainability if it had defined better its development strategy. The master plan for the energy sector that was developed with support from the project did not achieve enough ownership from the energy sector and the government.

88. The establishment of national environmental funds is important for sustainable development financing. The GEF has supported the establishment of many such funds, which later provide co-financing for the GEF and other agencies. In Guinea-Bissau the World Bank supported the government in establishing the Guinea-Bissau Biodiversity Conservation Trust Fund, through GEF ID 3817. It was able to achieve sustainable results, particularly in capacity building and institutional strengthening. Its most important result was the creation of the Bio Guinea Foundation through GEF ID 5368, with an initial funding of EUR 1 million from the government. It is a public fund but managed autonomously with its own board. The fund is registered in the United Kingdom and must comply with UK rules on financial markets. The goal is that when there are enough funds the interest should cover the cost of the protected areas system and could also support other biodiversity conservation initiatives.

89. The project could achieve the outcome of financial sustainability for the protected areas of Guinea-Bissau, but it is being jeopardized by another initiative that was designed to strengthen it. The Bio Guinea Foundation is to be capitalized with \$1.7 million including \$0.9 million from the UNDP-implemented GEF project 5368. This project will soon end its implementation, but UNDP at the central level has still not resolved the mechanism for transferring the funds. Co-financing from other sources (Noe Conservation and Fondation Internationale du Banc d'Arguin) for a total of \$2.4 million requires the GEF funds to be in place; it also sends a negative signal to other agencies that have promised a total of nearly EUR 8 million. However, in Jamaica the UNDP-implemented Strengthening the Operational and Financial Sustainability of the National Protected Area System (GEF ID 3764) has been able to establish a foundation and transfer funds to it from abroad. The Jamaica fund management

team offers to advise Guinea-Bissau on how to resolve the problems with the fund established under GEF ID 5368.

90. **Strategic institutional partnerships, including public-private-partnerships, have been another key contributing factor.** Long-term partnership with national NGOs for protected areas management has been fundamental for social, environmental and financial sustainability of protected areas. In Guinea-Bissau the co-management of protected areas between the Institute for Biodiversity and Protected Areas and local communities is using a partnership approach for planning and implementation of activities in the national parks, with support from several GEFfunded projects, including GEF IDs 1221, 3575, 3817, and 5368.

91. In Seychelles the protected area site Vallée de Mai is situated within the Praslin National Park managed by the National Parks Authority but is managed separately from the rest of the park by the NGO Seychelles Islands Foundation. The site has the highest concentration of the endemic coco-de-mer palm (*Lodoicea maldivica*), found only on the islands of Praslin and Curieuse. The entrance fees from tourists visiting the site are used to co-finance the UNESCO World Heritage Sites of the Aldabra Atoll more than 1,000 km away, where income from tourism is not so easy to achieve. In 2011–16 SIF had funding from the project Strengthening Seychelles' protected area system through NGO management modalities (GEF ID 4190) focused on Aldabra's ecosystems; the project also supported several other national NGOs.

92. In Jamaica there is also an established structure of collaboration between the public sector, especially between the National Environmental Protection Agency and national NGOs, e.g., for protected areas management and watershed management. As a result of the UNEP-UNDP regional project Integrating Watershed and Coastal Area Management in the Small Island Developing States of the Caribbean (GEF ID 1254), all relevant government agencies, ministries, and NGOs/civil society organizations in 2010 signed a memorandum of understanding that "shall govern the manner in which Sustainable Watershed Management is implemented in Jamaica's Watersheds using the GEF—Integrating Watershed and Coastal Area Management Model." This model was the basis for design of the ongoing project Integrated Management of the Yallahs River and Hope River Watersheds (GEF ID 4454) which is implemented by the Inter-American Development Bank.

93. **Overall low institutional capacity has adverse effects especially in the smallest and poorest SIDS countries.** There is often little institutional memory, and the best staff members often leave for other opportunities. A similar situation is found in the relation between the Caribbean and the United States, with severe brain drain of students and professionals. There is also high turnover at the national level in many SIDS, especially in countries with a dynamic private sector such as Mauritius and the Dominican Republic.

94. A weakness in the opportunity for sustainable project development is the low technical capacity and limited direct influence on decision making of national and local environmental

NGOs. This situation exists in the Comoros, Kiribati, and Mauritius. It limits the opportunities for a national dialogue on sustainable development, and reduces opportunities for partnerships, for example, on support to local communities. At the other end of the spectrum are countries such as Jamaica and Seychelles, where the environmental NGOs are technically strong and with much influence on political decisions.

95. Low levels of environmental awareness are reflected in the public's attitude to waste and to renewable energy sources. This is a challenge for GEF projects and was noted, for example, in the attitude to the use of disposable plastic. During country visits huge amounts of solid waste were observed along the coast line, along roads and even in protected areas. Many GEF supported projects have dealt with this challenge. Awareness raising is a slow process, especially in countries with high poverty rates.

96. In Guinea-Bissau the lack of public awareness is observed where large amounts of garbage are found directly in front of schools established inside national parks, even though they have environmental education on the curriculum. The problem is however addressed through local and national awareness raising through the UNDP-implemented Strengthening the financial and operational framework of the national protected areas system in Guinea-Bissau (GEF ID 5368), which is still under implementation. The general lack of environmental awareness is also clearly shown in the Comoros, where solid waste is found all over the country and there is limited waste collection and handling even in urban areas and tourist resorts.

97. Some governments have however taken effective measures to forbid single use plastic bags (e.g., Mauritius, Samoa, and Seychelles) and conduct awareness campaign through public media. Projects such as the UNEP-implemented Addressing land-based activities in the Western Indian Ocean (GEF ID 1247) have done a great job to reduce the threats of waste to the health of marine and coastal ecosystems. The national component of the project in Mauritius installed waste incinerators and grids in the four main streams to prevent solid waste from entering the Port waters in the Municipality of Port Louis. A national ban of single use plastic bags was approved to reduce pollution of the marine environment. On the Island of Rodrigues they have taken another step forward, prohibiting polystyrene and all plastic bags. Public awareness building on Rodrigues has been supported through the project Mainstreaming Biodiversity into the Management of the Coastal Zone in the Republic of Mauritius (GEF ID 5514), which is a second phase of Partnership for Marine Protected Areas Project (GEF ID 1246).

98. Another common challenge is pressure from economic sectors such as agriculture and tourism to exploit environmentally sensitive areas. This could lead to trade-offs, but arguments of short-term profitability would often be given strong weight. Even though deforestation is a great problem in SIDS, it has slowed down on many smaller islands due to lack of roads in the interior, steep hills on the volcanic islands, and soils not suited for agriculture in atoll islands.

99. The impacts of agricultural activities on coastal ecosystems are substantial for most coastal nations, and in particular this is true in SIDS. Historically, GEF has been investing in testing different approaches to curb the impact from agricultural activities through investments, such as IWCAM, Pacific IWRM, WIOLAB, COAST, Contaminated Bays (614) and reducing pesticide run off to the Caribbean. On the other hand, natural habitats such as mangroves and wetlands in coastal areas have often been eliminated due to shrimp farming and construction of coastal tourist resorts. The UNDP project Mainstreaming Biodiversity into the Management of the Coastal Zone in the Republic of Mauritius (GEF ID 5514) supports the government's use of geographic information systems (GIS) and development of land use maps for the coastal zone. A local NGO is however arguing that the results of these projects should be considered before any new resort permits are given.

Project-related factors affecting sustainability

Training and institutional capacity building is a key factor for achieving sustainability 100. of the outcomes of nearly all GEF-funded projects. In GEF 5, 32% of countries covered by capacity building projects were SIDS, representing 29% of the resources for such national projects; and in GEF 6, 30% of the countries covered by the Cross-Cutting Capacity Development (CCCD) window were SIDS, representing 32% of resources for national CCCD projects. Among the projects reviewed, the UNDP-implemented Partnership for Marine Protected Areas in Mauritius (GEF ID 1246) achieved the outcome of strengthened governance on marine protected areas. The training included a study tour for ministry staff to many marine parks in Kenya, with work sessions together with Park wardens and rangers. Exchange visits were carried out between the Blue Bay, Balaclava, and SEMPA marine parks, including officers of the Environment Ministry, representatives of NGOs and local stakeholders from civil society organizations and the private sector. Officers of the ministry received training in the use of underwater drilling equipment and fixing of helix anchors for the setting up of an underwater trail at the Blue Bay Marine Park, and 10 ministry officers were trained in GIS. A Sandwatch workshop was held on A Combined Approach to Climate Change, Adaptation and Education for Sustainable Development and Training in Marine Protected Areas Management.

101. In Vanuatu, the UNDP-implemented project Mainstreaming Global Environmental Priorities into National Policies and Programmes (GEF ID 5655), achieved the outcome of strong national management and governance on biodiversity. The program focused on interdisciplinary training that supported preparation of the National Biodiversity Strategy and Action Plan. Similar projects, often under the previously mentioned CCCD umbrella, have been focused on training and institutional development, e.g., the UNDP-implemented projects Enhancing Capacity to Develop Global Environment Projects in the Pacific (GEF ID 5160), which strengthened the Secretariat of the Pacific Regional Environment Programme with the outcome that the national governments in the region were strengthened in their environmental governance; and Capacity for Implementing the Rio Conventions in Samoa (GEF ID 5164), which supported the Ministry of

Natural Resources and Environment and other public and private agencies in Samoa where the main outcome ensured national compliance with the Rio conventions.

102. In Maldives the UNDP-implemented project Renewable Energy Technology Development and Application (GEF ID 1029) was developed clearly in line with government priority to renewable energy, which had been expressed since before the design phase. This ensured national ownership and priority given by national stakeholders. Technical reports from the project and energy balances on country level for 2001–09 were important for Maldives' reporting to the United Nations Framework Convention on Climate Change and IPCC. It laid the groundwork for newer government energy initiatives financed by other sources of funding.

103. Adaptive project management is often necessary to ensure project outputs and outcomes are on time and with required quality. This was highlighted as one of the main factors for the success of the Jamaica national component of the regional program Integrating Watershed and Coastal Area Management in the Small Island Developing States of the Caribbean (GEF ID 1254). The Jamaica demonstration project An Integrated Approach to Managing the Marine, Coastal and Watershed Resources of East-Central Portland was selected as the best pilot project within the program, presented at the World Water Forum in Istanbul and the World Water Week in Stockholm. The project has been replicated and is still being managed by e.g., (1) local beneficiaries who are implementing soil conservation measures; (2) a tourism and dive company that is struggling against invasive alien species; and (3) a womenmanaged micro enterprise that is using recycled paper to make artisan paper and other gift products.

104. The project produced many lessons and detailed proposals for replication and upscaling, such as (1) early stakeholder consultations are important for sustainability, and to not assume in advance that you know what the communities want; (2) it is necessary to identify the right stakeholders; (3) be opportunistic, e.g., use existing events to come out with the message; (4) implement an early communications strategy and tailor material to the stakeholder groups; (5) engage the community to ensure local ownership; (6) be accessible for consultations and dialogue; (7) take people out from their daily settings (e.g., excursions); (8) it is not enough with national engagement—core funding must be ensured for local activities; and (9) build capacity in existing agencies. These factors were also pointed out as important for scaling up in the IEO evaluation on scaling up (IEO 2018).

105. Strong project teams are always important for projects' outcome and sustainability, but it is also important to have the support and collaboration from an engaged steering committee. In the project Golden Stream Watershed (GEF ID 2068) in Belize, one of the identified factors that contributed to sustainability was the ownership achieved through four Steering Committee members from the communities, supported by a local NGO grassroot organization. The original institutional set-up however faced challenges because the international consultants tried to impose an organizational arrangement as in Costa Rica but is was redesigned to ensure decision-making mechanisms adapted to Belize's priorities and context.

106. **Strategic institutional partnerships are mentioned as a context factor but is can also be developed through active project management.** In Maldives the UNEP-implemented project Strengthening low-carbon energy island strategies (GEF ID 4629) developed a successful partnership with Maldives Energy Authority on energy labelling and with Maldives National University about green concepts, which has been integrated into the curriculum. Other innovative partnerships for the same project are with the Scout Association of Maldives (both genders) and Maldives Girl Guides Association. The project distributed 10,000 energy efficiency badges for a price which makes the system financially sustainable. The two organizations expressed that it is the first time someone from outside have helped them develop a badge.

107. The UNDP-implemented project Sustainable management of POPs in Mauritius (GEF ID 3205) demonstrated alternative strategies for malaria management through public-privatepartnerships and a Corporate Social Responsibility Fund. The project encouraged an attracted active participation of the private sector and industrial associations involved in the import, distribution, use and handling of pesticides and hazardous chemicals to put the Responsible Care Program into practice, thereby strengthening the capacity and capability of the private sector in addressing hazardous waste.

108. In Vanatu the UNDP project Facilitating and Strengthening the Conservation Initiatives of Traditional Landholders and their Communities to Achieve Biodiversity Conservation Objectives (GEF ID 1682) worked with the Department of Forests in six provinces. An awareness process for the Penoru Community Conservation Area on the Santo Island started in 2006 with the Global Biodiversity Expedition, which brought much national and international attention. World Vision had their own project in the area and was able to complement the GEF project with a water supply system. Nasuneta Conservation Area on Tanna Island received parallel financing from Critical Ecosystem Partnership Fund through Live and Learn Australia to help with ecotourism activities, which improved local financial sustainability.

109. In the Dominican Republic the interaction between the Ministry of Environment and several local NGOs was identified as a factor that contributed toward sustainability of projects outcomes, such as for the UNDP project Demonstrating Sustainable Land Management in the Upper Sabana Yegua Watershed System (GEF ID 2512) where the NGO Fundación Sur Futuro has continued executing the activities in the area, and the UNEP project Mitigating the Threats of Invasive Alien Species in the Insular Caribbean (GEF ID 3183) where NGO SOH Conservación has continued the activities after the project closed.

110. **Replication and scaling-up based on lessons learned has been fundamental in sustainability of GEF projects.** During the country visits it was found that a single GEF phase for project implementation is seldom enough for sustainability. Since the GEF normally does not finance several phases of the same project governments and implementing Agencies have been quite innovative in presenting new phases under new names. An exception is the Kiribati Adaptation Program which has been implemented by the World Bank through three phases and is a clear example of the opportunity to ensure longer-term sustainability and relevance of GEF projects through multiphase programs. The IEO evaluation on scaling up clearly highlights the factors that play an important role in scaling up and provides examples of lessons learned.

111. In Guinea-Bissau it was found that implementation of GEF projects provided lessons learned and useful information for the design and implementation of several replication projects, including small-scale local investments financed by the GEF SGP and NGOs in local communities. Some of the projects reviewed have been replicated or scaled up through other projects with or without GEF funding. The models for replication were components of the World Bank Coastal and Biodiversity Management Project (GEF ID 1221) and the UNDP regional programs Combating Living Resource Depletion and Coastal Area Degradation in the Guinea Current LME through Ecosystem-based Regional Actions (GEF ID 1188) and Adaptation to Climate Change—Responding to Shoreline Change and its human dimensions in West Africa through integrated coastal area management (GEF ID 2614).

SUSTAINABILITY	Contributing Factors	Hindering Factors
Context related	Legal and institutional framework for environment and protected areas Government policies supporting environmental conservation, climate change mitigation and adaptation	Low institutional capacity, especially in the smallest countries, with low ownership, little institutional memory, high turnover and brain drain Unfavorable political conditions and events in some countries (coup d'etat, corruption, civil
	National ownership of projects, reflected in government support and budget allocation	protests) Often weak national and local environmental
	Strategic institutional partnerships Public-Private-Partnerships in the key	NGOs with low technical capacity and limited influence on decision making and low capacity on local level to implement planned activities
	sectors Sustainable national financing mechanisms, e.g., environmental funds,	Low level of environmental awareness, reflected in the public's attitude to waste and to renewable energy sources
	to co-finance projects General institutional capacity, especially in the public sector	Pressure from the agricultural and tourism sectors to exploit sensitive areas, from a land, coastal and marine environment perspective
		Waste management is a serious problem. Solid waste is often disposed on landfills close to the ocean, which means it ends up in the sea during

 Table 12: Observed contributing and hindering factors influencing the sustainability of outcomes

		storms, and sewage water most often goes directly out to the sea		
		Natural disasters and unfavorable environmental conditions (hurricane, drought, earthquake, tsunami)		
		Difficult and costly communication and transport between many small islands		
	Training and institutional capacity building, including introduction of new	Project design does not consider previous projects in the sector and lessons learned		
	technology and new techniques	Little consideration of impact and sustainability		
	Buy-in and sense of ownership among key project stakeholders Adaptive project management	in the project design		
		Insufficient involvement of main stakeholders		
		during design and implementation		
Project related	Strength of project teams and	Weak project monitoring and risk management		
	engagement of steering committees	Insufficient national and local capacity building to		
	Strategic institutional partnerships	ensure continuation of activities		
	Replication and scaling-up based on lessons learned, including small-scale local investments financed by GEF SGP, NGO/civil society organization and the private sector	Lack of exit strategy and future financing to sustain the projects' momentum		

112. The most important project-related hindering factor was found to be the quality of project design, sometimes with little consideration of longer-term impact and sustainability. Many projects have a short time horizon for planned outcomes and impact, and the issue of sustainability is often considered only from a financial point of view. There is also not enough consideration of previous projects in the same sector (e.g., biodiversity, energy) and even though the project documents always list former projects there is seldom a deep analysis of lessons learned that could help avoid repeating errors from the past. These lessons are also guarded in the experience of national and local stakeholders, both those that were involved in previous projects and other key persons with experience from the sector. A high share of international consultants to design the projects often gives a theoretical approach without on-the-ground technical and social knowledge, however in most SIDS there is limited capacity in project design and therefore necessary that national specialists work together with international counterparts.

113. An example of a project were lessons learned were not sufficiently considered was the UNEP-implemented project Strengthening low-carbon energy island strategies in Maldives (GEF ID 4629). The project is mainly focused on energy efficiency, and therefore helps to comply with the nationally determined contributions. The project spent much time on design and preparation through the project preparation grant (PPG) phase, and they got access to studies from the UNDP-implemented project Renewable energy technology development and

application (GEF ID 1029) too late. If they had known about these studies sooner, they would have been able to start up directly. After a long recruitment period for project management unit staff, they discovered that the project design was not good. Many components had overlaps between them, with the same activity repeated in different components but to be implemented in different ways. The outputs were not clearly defined, and the project management unit did not get all details from those engaged in the project design who had moved on to other organizations and did not respond.

114. Another example of limitations in design that influenced sustainability was the World Bank–implemented regional project Western Indian Ocean Marine Highway Development and Coastal and Marine Contamination Prevention. The functional establishment of the Regional Coordination Centre was designed as one of the key outputs of the project to ensure sustainability of the outcomes. The center should ideally have been operational one year before the project ended to allow for necessary adjustments, but it has still not been established six years after the project closed. The South African Marine Safety Authority was selected to host the Regional Coordination Centre based on recommendation from the World Bank, considering that this organization had the best capacity and infrastructure. Since it requires parliament approval in South Africa the agreement with the host country is still not signed. This is the second attempt to establish a regional center on oil spill. A previous project (GEF ID 533) from 1998 to 2004 established such a center in Madagascar, which is no longer operational, but the government of Madagascar expressed an interest in hosting the Regional Coordination Centre a few years ago.

115. Co-financing can be challenging for many SIDS. As a result the co-financing presented is often from other projects that only support the same general goals but do not strengthen the project. An example is the UNEP-implemented project Promoting energy efficiency and renewable energy in buildings in Jamaica (GEF ID 4167), which has a very good design but unclear co-financing. The project coordinator expressed that co-financing was not raised in discussions about the project since the government has rejected other projects due to high co-financing requirements. Co-financing letters for the project mentioned only lump sums, mostly in-kind and with no details given.

116. Lack of national and local capacity building can impact continuation of activities. Many projects rely completely on the Project Management Unit, consisting mostly of people contracted as consultants. When the project ends—and if there is no new phase—the capacity and institutional memory is often lost. For example, in the World Bank–implemented Increasing Resilience to Climate Change and Natural Hazards (GEF ID 3798) in Vanuatu, the budget for capacity building of national staff was removed, even though it was part of the project design. Limited funds were left in this area and were used to send people abroad for training.

117. Often mentioned as an impeding factor is the lack of an exit strategy and future financing to sustain the projects' momentum. Here it must be highlighted that an exit strategy has often been used by international financing agencies as a code word for closing their financial commitments and assuring that someone else takes over. This is not a reflection of sustainability and has often led to local organizations (e.g., public agencies and NGOs) seeking financing from a new funding source for their permanent day-to-day activities. An exit strategy that considers sustainability should therefore be based on training and institutional strengthening during implementation and supporting the national agency's planning of sustainable financing that could come from government budgets, national environmental funds, or income-generating activities. Some examples of sustainable financing are the previously mentioned national environmental and protected areas funds in Jamaica and Guinea Bissau. The TDA/SAP methodology has provided SIDS with long term planning of interventions and longer-term financing strategies. Another positive example was the UNDP project Expanding Coverage and Strengthening Management Effectiveness of the Terrestrial Protected Area Network on the Island of Mauritius (GEF ID 3526), where the government took charge of paying 100 protected areas workers that had previously been paid by the project for the combat of invasive alien species. Such combat is however costly, and to reduce the burden of the state budget one possible exit strategy could include giving priority to the invasive alien species that are causing the most damage, combined with income from sale of some invasive alien species products to at least cover part of the costs. This however would need to be contextualized as some of the small predator species such as mongoose, cats and rats cannot be commercialized.

Integrated approaches

118. The GEF has supported integrated approached such as integrated land management, integrated ecosystems management, integrated forest management, and integrated watershed management. The increased use of ridge to reef, whole island management and blue economy approaches has led to other forms of natural resources management in SIDS, in benefit of both natural ecosystems and the local population. The GEF is encouraging adoption of such integrated approaches and interinstitutional synergies and coordination. In addition, in many cases the private sector, NGOs/ civil society organizations and local stakeholders are brought in. There is however a clear need for more effective coordination between the ministries of environment and all other relevant agencies to ensure conservation and natural resource management at national and local level, as well as collaboration with neighboring countries through regional programs and structures. Examples of Blue Economy projects are the UNEP global project "Standardized methodologies for carbon accounting and ecosystem services valuation of blue forests" (GEF ID 4452) and the UNDP project "Managing multiple sector threats on marine ecosystems to achieve sustainable blue growth", in Cabo Verde (GEF ID 9705). The GEF has so far approved 14 Ridge-to-Reef (R2R) projects in SIDS: in Fiji, Marshall Islands, Federated States of Micronesia, Nauru, Palau, Papua New Guinea, Seychelles, St

Vincent & the Grenadines, Tonga (2 projects), Tuvalu, and Vanuatu, and two regional programs in the Pacific. FAO and UNEP have implemented one R2R project each, and the rest were implemented by UNDP.

Improvement in sustainability ratings over time based on field verification

119. The four dimensions of sustainability were reviewed in all the countries visited based on what happened after project completion. 66.67 percent of the 24 projects reviewed for sustainability had positive (moderately likely or likely) sustainability ratings at the terminal evaluation stage, while the observed sustainability rating for the same projects (moderately likely or likely or likely) was 81.25 percent.

Country	Project ID	Registered rating (based on terminal evaluation)	Observed rating
Belize	2068	Moderately likely	Likely
	3062	Moderately likely	Moderately likely
Comoros	1082	Moderately unlikely	Moderately unlikely
	1247	Moderately likely	Moderately likely
	2098	Unlikely	Unlikely
	3363	Unlikely	Unlikely
Dominican	1254	Moderately likely	Likely
Republic	2512	Moderately likely	Moderately likely
	3183	Likely	Likely
Guinea-Bissau	1188	Moderately unlikely	Moderately likely
	1221	Moderately likely	Likely
	2614	Moderately unlikely	Moderately likely
Jamaica	1254	Moderately likely	Moderately likely
	3049	Moderately unlikely	Unlikely
	3183	Likely	Likely
Kiribati	2543	Moderately likely	Likely
Maldives	1029	Unlikely	Moderately likely
Mauritius	1246	Unlikely	Moderately likely
	1247	Moderately likely	Moderately likely
St. Lucia	1084	Moderately likely	Moderately likely
	1254	Moderately likely	Some outcomes Likely—others Unlikely
	2552	Moderately likely	Moderately likely
	3183	Likely	Moderately likely
Vanuatu	1682	Moderately likely	Likely

Table 13: Registered and observed sustainability ratings according to the review team

120. In Guinea-Bissau several projects have currently more positive expectations of sustainability than at project closing. This can partly be explained by the fact that the country went through unusual institutional circumstances, including a coup d'etat in the period when the projects had their terminal evaluation. This seems to have affected the rating at that time for sociopolitical, institutional and environmental sustainability. Other factors that have influence sustainability include a long term strategy for biodiversity, the creation of a national entity (Institute for Biodiversity and Protected areas) and reinforced for the long term, long term support from various donors (Switzerland, WB, GEF, FIBA, MAVA Foundation), presence of

IUCN on the ground over a long period, and collaboration across the various institutions such as the Ministry, IBAP, IUCN and donors on a long term approach. In Jamaica, in contrast, the results deteriorated over time. The sustainability rating in the terminal evaluation is often influenced by the outcome rating, and there is often a positive correlation between the sustainability and outcome rating. Even though projects with good performance ratings at the output and outcome level on average provide a better expectation of future sustainability, there is no guarantee. For instance, a project that establishes a new institutional structure has complied with this objective, but this structure might not survive for many years. Projects often cannot deliver on their outputs and outcomes in time according to the results framework, even after a no-cost extension, and are thus rated negatively on sustainability during the terminal evaluation. However, when efforts are made by national stakeholders to achieve the targets expost these projects are often more sustainable than others. One example of this is the UNDPimplemented project Facilitating and Strengthening the Conservation Initiatives of Traditional Landholders and their Communities to Achieve Biodiversity Conservation Objectives (GEF ID 1682) in Vanuatu, which had a sustainability rating of "moderately likely" at terminal evaluation but was upgraded after the field visit to a "likely" rating. After the project was completed in 2011 the communities continued with the promoted land use and management activities, and many of them still maintain the same practices.

121. Sustainability is often achieved over time and is seldom achieved within a single GEF phase. Multiphase projects, such as the Kiribati Adaptation Program implemented by the World Bank has a higher likelihood of sustainability. The preparation phase was implemented in 2003–05, and the Pilot Implementation Phase (GEF ID 2543) during 2006–11; this was followed by the Expansion Phase. The project's expected outcome is strengthened climate resilience for Kiribati, especially on the main islands. As an alternative to several phases, replication and scaling-up of project activities will most often strengthen the sustainability of outcomes. These follow-up interventions are often not GEF funded but financed through other national or international sources.

Trade-offs

122. Only 14 percent of all the GEF project documents in SIDS mention trade-offs between environmental and socioeconomic outcomes of the project activities. Even fewer (1.75 percent) mention mitigation strategies for potential trade-offs. For the projects visited during country missions very few project documents have analyzed possible trade-offs between an environmental-ecologic approach to resource management and political decision making on investments. Sometimes the documents state that a balance must be found, and trade-offs are often made on local decision making on land use, e.g., for the coastal zone. In Mauritius such a trade-off has been mentioned in policy documents but not in the GEF project documents. The SIDS governments are however more frequently than before acknowledging that conservation

of the natural resource base and preserving the pristine beauty is good investment, thereby reducing the need for trade-offs.

123. Without clear information and understanding, stakeholders are often not adequately prepared to judge ecosystems' productive capacity, to recognize trade-offs that are being made as part of the normal decision-making process, to assess the long-term consequences of those trade-offs, and to design and implement effective policies to address the issues. Efficient land use planning with state-of-the-art technology and GIS tools is therefore important to ensure fact-based long-term planning and decision making.

4. Cross-cutting issues

As discussed in the approach paper, a few cross-cutting themes were addressed in the evaluation, such as gender and private sector, which are important considerations in GEF projects.

Project risk management

124. Most of the projects reviewed in the desk review (67.4 percent) considered climatic and/or non-climatic risks and their possible impact in project design. Most of these risks were for the population and the risk mitigation measures are often described as actions to reduce the risk for the population.

125. The document review and country visits confirmed that risk had been variably managed. Even for the projects with a clearly defined risk matrix in the project documents, the risks had often been managed on an 'ad-hoc' basis during implementation and sometimes another set of risks than those mentioned in the matrix had been considered. For example, the project Partnership for Marine Protected Areas in Mauritius (GEF ID 1246), Addressing land-based activities in the Western Indian Ocean (GEF ID 1247), and the Jamaica project Piloting Natural Resource Valuation within Environmental Impact Assessments (GEF ID 3049) considered only institutional risks, while the regional project Mitigating the Threats of Invasive Alien Species in the Insular Caribbean (GEF ID 3183) was the only project in this country to consider environmental risks, based on projects reviewed. In Guinea-Bissau financial risk had only been considered in one project, Guinea-Bissau Biodiversity Conservation Trust Fund (GEF ID 3817). The Kiribati Adaptation Program (GEF ID 2543) had a complete risk analysis. In Maldives all risk categories were considered for the Renewable energy technology development and application project (GEF ID 1029) and all except environmental risk for the project Atoll ecosystem-based conservation of globally significant biodiversity in the Maldives Baa Atoll (GEF ID 1099).

126. In table 7 which summarizes the most frequent risks to projects, project risks are considered as factors outside project management's direct control that could negatively impact a project's expected results. A climate risk is therefore only a project risk if it might impact the project's performance. Risks mentioned in the project documents that are directly controlled by project management are not included. The environmental risk of sea level rise is also not

included because it is well known and has a relatively low impact during a project's lifetime. Other risks regarded as low according to the project documents are also not included in the table.

Type of Risk	Risks according to project documents	Additional observed risks
Institutional/governance	Potential for a sudden shift in governmental priorities	Change of institution in charge of the project Change of project manager and/or key staff
Financial	Fund borrowers delayed or defaulting in their loan repayments Financing for climate change adaptation is inaccessible	Some foundations have problems with accessing their core funding, and establishing functional procedures Financing for climate change adaptation is inexistent, too costly, or too short-term
Institutional/social	Poor coordination among the key stakeholders Poor coordination and inadequate attention to maintenance and continuation of project units	Short-term institutional changes affecting sustainability Lack of knowledge in key Agencies about other projects Interinstitutional committees without decision power
Environmental	Natural calamities damage components in the resource assessments and demo projects	Large natural disasters put projects on hold for long periods, causing delay

Table 14: Summary of common project risks according to project documents and observed risks

Gender

127. Attention to gender as a cross-cutting issue has improved in recent projects; collection of gender disaggregated data is now a requirement for projects under implementation. Ministries that work on gender issues could be good partners if involved substantively in project design.

128. Gender equality and women's empowerment has been considered as a cross-cutting area in 6 percent of all the projects in SIDS and monitored through project implementation. The projects that did consider this aspect were mostly newer projects, where there are examples of gender disaggregated indicators in the monitoring system. In 71 percent of the projects there was no gender analysis completed at the time of CEO endorsement as this was not required in projects in earlier GEF phases, but approximately 50 percent of these projects still presented a gender mainstreaming plan or strategy in the request for CEO endorsement. Twenty five percent of the projects incorporated a gender responsive results framework with gender disaggregated indicators. In a few additional projects there were a gender analysis, mainstreaming or monitoring developed during implementation. For the projects that did have gender disaggregated monitoring, it was found that 96.5 percent had women participating in

the project design, 54 percent of the lead project management roles were executed by women and women were 57.5 percent of the beneficiaries.

129. All projects reviewed during the country reviews had an open gender policy for participation and as beneficiaries, but how this has been applied varied a lot. Only 46 percent of the projects had any evidence of women's inclusion and empowerment mentioned in the terminal evaluation. Gender participation is often viewed simply as a headcount. Very few projects however collected gender disaggregated information on participation in project activities to prove gender participation. Except for a few recent projects, gender mainstreaming has been nearly nonexistent. Many projects have however experienced that women's strong role in the social issues of the communities have been key for sustainability of the investments after project closing. A positive example is the World Bank project Coastal and Biodiversity Management (GEF ID 1221) in Guinea-Bissau, which supported local investments through the Fund for Local Environment Initiatives. The ex-post evaluation confirmed that the outcome of drinking water and improved local health had been achieved in nearly all the communities where the women groups were in charge of the water pumps and their maintenance.

130. Most SIDS countries have a progressive legislation regarding gender equality but change of culture and traditions go much slower than change of laws. Maldives is a clear example of that. Gender equality is guaranteed by law, but several aspects of the legislation (e.g., divorce law) does not follow this general rule. All projects reviewed in Maldives had an open gender policy for participation and as beneficiaries, but how this has been applied varies a lot, often based on the argument of working in male dominant sectors. Only the project GEF4629 in Maldives collected gender segregated information.

131. Many SIDS have a ministry in charge of gender issues. In Kiribati there is a Ministry of Youth, Women and Social Security Affairs; in the Maldives there is a Ministry of Gender, Family & Social Services; in Mauritius there is a Ministry of Gender Equality, Child Development and Family Welfare; and in St. Lucia there is a Ministry of Education, Innovation, Gender Relations and Sustainable Development. In the other countries gender is normally covered by a lower ranking public agency, such as the Social Inclusion Directorate in the Dominican Republic. These gender ministries and agencies have an increasingly important role in development, and most development agencies consider them. These ministries participate in preparing national development plans and strategies and they also focus on mainstreaming gender during the project design phase. A problem is however that they often get informed about a project on a very late stage, sometimes the last days before finalizing the project document, and then it is not easy to make important changes. Another problem is the lack of gender disaggregated data and the quality of this data.

132. In many SIDS countries the national stakeholders experience that the donor agencies are driving the gender issue, including UN Women and bilateral agencies, while the GEF implementing Agencies have not supported this issue very strongly. UNDP recognizes that

gender analysis was not given priority before, when it was supported strongly at the international level, but they now have a dedicated gender review during the design of all projects.

Resilience and fragility

Half the projects reviewed had resilience built into project design. Project activities improved resilience in different ways, including in sustainable energy and food security.

133. Resilience and fragility are related in the sense that a state's weak capacity or legitimacy leaves citizens vulnerable to a range of shocks and improving resilience will generally reduce vulnerability of the people or systems targeted. Most SIDS have high fragility due to limited public resources to confront shocks and high vulnerability to natural disasters, which can make a difference in a population's living situation from one year to another. This is especially an issue in countries situated in regions with frequent hurricanes such as the Caribbean, and in the atolls that are extremely vulnerable to tsunamis.

134. Only 26 percent of the 285 projects reviewed were in countries considered as fragile as of this review and another 8 percent were in countries considered as fragile during the last 10 years. The GEF projects were very seldom put on hold during the countries' fragility status. However, nearly no terminal evaluation discussed the impact of the country's fragility on the outcomes and sustainability of the project, even though some of those evaluations were carried out during periods of political unrest.

135. An example of a fragile country is the Comoros in the West Indian Ocean. The country is prone to hydrological natural disasters that often have severe impacts on the country's population and infrastructure. Three of the projects reviewed (GEF IDs 1082, 3857, and 4974) had resilience-thinking in the design. The last two were both implemented by UNDP and specifically designed for climate change adaptation, in the water and agricultural sectors respectively. The UNEP-implemented project 1247 achieved the outcome of improved local resilience through beach erosion control. The projects were expected to strengthen the resilience of the country and local communities to climate change and natural disasters to certain degree, however the impact of such small projects is very limited compared with the needs. Another example from Africa is in Guinea-Bissau where four of the projects reviewed (GEF IDs 1188, 2614, 4019 and 5331) have reduced the country's fragility and improved national resilience, especially to climate change.

136. St. Lucia is situated in the hurricane belt of the Caribbean and is therefore often affected by natural disasters. Three of the regional GEF projects St. Lucia participated in focused on improving the resilience to climate change and related natural disasters. The MAAC project (GEF ID 1084) and the SPAAC project (GEF ID 2552) specifically focused on climate change adaptation, the second example being a Strategic Priority on Adaptation (SPA) funded project. IWCAM (GEF ID 1254) achieved the outcome of reduced vulnerabilities to climate change

especially based on the restoration of riverbanks as protection against flooding, and provision of water. This project also identified sources of geothermal energy, included resilience considerations as part of the protection of infrastructure.

137. In Jamaica, three projects reviewed (GEF IDs 1254, 3049 and 3183) had resiliencethinking in the design. The outcomes of Project 3049 supported the Jamaica 2012-1016 UNDAF Outcome 1: National, local authorities and most vulnerable communities island-wide improve natural resource management and resilience to disasters. This aimed at effective management of natural resources, enhanced disaster risk reduction and better preparedness and response measures. In project 3183, an important outcome was a less vulnerable and more resilient country due to removal of invasive alien species from the island's ecosystems, both on land and in the ocean.

138. Kiribati is an atoll and therefore especially vulnerable to sea level rise and natural disasters. The Kiribati Adaptation Program (GEF ID 2543) focused on climate resilience and disaster risk management as important in the design, including strengthening of local resilience. The program's next phase, Increasing Resilience to Climate Variability and Hazards, (GEF ID 4068) continued this process, strengthening climate resilience based on the strategies and designs developed during the previous phase, with special focus on the water resources. The project also supported the government in developing a new Act on disaster risk management, since the old Act from 1999 was outdated. A successful solar energy project (GEF ID 4282) reduced the country's vulnerability to price volatility on imported oil and strengthened resilience of the local population based on renewable energy.

139. Another fragile atoll country is Maldives, which despite strong economic resources from tourism is relatively vulnerable, which could influence its possibilities to manage risks and confront moments of crisis such as natural disasters. Since all the Maldives islands have an atoll origin, they have an altitude of not more than 3 m and are very vulnerable to sea level rise, beach erosion, storms and typhons, as well as tsunamis. Several of the projects reviewed in Maldives had climate change resilience-thinking in the design (e.g., GEF ID 1029, 3847, 4431 and 4629). The UNDP implemented "Integrating climate change risks into resilient island planning in the Maldives" (GEF ID 3847) prepared a valuable knowledge base in upcoming projects including the survey of soft adaptation measures guidelines for climate risk resilient coastal protection.

Private sector engagement and financing

140. In the design of new projects, private sector stakeholders are often involved, especially in sectors which have a clear interest for new development, such as the agricultural, tourism and renewable energy sectors. GEF SGP projects engage with the private sector, especially with community-based enterprises.

141. Half of the projects consulted with the private sector during project design. During the country visits it was found that where GEF projects did not consider private sector engagement in the design, it was due to a weak national private sector. Many of the smaller and poorest SIDS have nearly no industrial production and value chain development, and the main productive sectors are agriculture and fishery, sometimes complemented by tourism.

142. During the desk review it was found that 16.5 percent of all the GEF projects in SIDS had private sector co-financing and 31.2 percent had a public-private-partnership during implementation. Only one project had any evidence of private sector financing beyond the project's timeframe. The country visits concluded that some of the projects reviewed had an active engagement and collaboration with the private sectors, as partners and beneficiaries. Other projects had sporadic contacts, while most of the projects had a relation with firms only during the procurement process.

The following paragraphs cite examples of engagement with the private sector, predominantly as project participants or beneficiaries.

In the Comoros, where the private sector is not very strong, the national component of 143. the regional program 1247 was able to establish public-private partnerships in several community-based micro-enterprise demonstration projects. The IFAD project 3363 involved the private sector in public fora to observe, discuss and evaluate the results, experience and lessons learned from project supported activities. The UNDP project Adapting Water Resource Management in Comoros to Increase Capacity to Cope with Climate Change (GEF ID 3857) involved a private sector representative in the central Steering Committee, with the role to validate activities and budget. This project had in kind co-financing from the private sector, e.g., in-kind support of pipes that a firm had got from China and were not in use. The only private company in the Comoros involved in water supply (SOGEM) had a role in the project, while two other local firms produced and tested pipes, with backstopping from international consultants. The UNDP project Enhancing Adaptive Capacity and Resilience to Climate Change in the Agriculture Sector (GEF ID 4974) is expected to achieve the outcome of strengthened climate change resilience, partly due to involvement of the private sector in construction of infrastructure for rural development centers and rural roads, as well as production of cash crops.

144. Mauritius has a relatively strong private sector, especially in tourism and agriculture, and much private sector involvement in UNDP-implemented GEF projects. Partnership for Marine Protected Areas (GEF ID 1246) designed management plans and agreements for marine protected areas with involvement of private sector partners such as hotels, dive shops, windsurfer firms, etc. In Rodrigues, the SEMPA marine protected area provides incentives to the private sector to support sustainability. The project Sustainable management of POPs (GEF ID 3205) strengthened the capacity of the private sector in addressing hazardous waste. Training was provided on the Stockholm and Basel conventions and other international agreements, and guidelines were provided for appropriate health and safety, and implementation on future chemicals disposal. A Responsible Care Programme provided training workshops and guidance for the private sector, industrial and agricultural associations on safe and sustainable handling and disposal of chemicals. The project Expanding coverage and strengthening management effectiveness of the terrestrial protected areas network on the island of Mauritius (GEF ID 3526) developed a regulatory framework to enable the creation and management of private reserves that contribute to the conservation of biodiversity and ecosystem services while providing benefits to private land owners. Project 4099, Removal of barriers to solar PV power generation involved private firms that are members of the Association of Mauritian Manufacturers. They however would have liked more opportunities for small businesses.

145. St. Lucia involved the private sector in the national component of the World Bank project Implementation of Pilot Adaptation Measures in coastal areas (GEF ID 2552). One of the pilot projects was specifically on a private hotel, based on the logic that the hotel had the infrastructure and the investment capacity to implement the pilot activity of re-plumbing to manage rain water in larger proportions, and that the majority of employees who lived in the nearby village would indirectly benefit from the training on different ways to save water. The project however resulted in complaints from the community. A more recent World Bank project Geothermal Resource Development (GEF ID 5812) ensured direct involvement of the private sector with the goal to provide exploratory results to any private investor to produce electrical energy from a geothermal source.

146. Jamaica has had private sector involvement in several GEF-financed projects. The regional UNEP-UNDP project IWCAM (GEF ID 1254) engaged firms through demonstration projects on regional and national level, and a regional partnership forum had strong private sector participation. The UNDP project Piloting Natural Resource Valuation within EIA [Environmental Impact Assessment] (GEF ID 3049) included two workshops per year for the private sector, to improve sensitization and public awareness on the utility and importance of natural resource valuation. Environmental Codes of Practice were developed and adopted by sectoral clusters such as the sugar industry, the coffee industry and the Motor Repairers Association, enhancing environmental performance by these industrial clusters through reductions in solid waste and discharges to soil, air and waterways.

147. For the UNDP project "Strengthening the Operational and Financial Sustainability of the National Protected Area System (GEF ID 3764), the Board of Directors governing the Trust consisted of members from both the private and public sectors, with a majority from the private sector. This allowed the trust to maintain critical linkages with the government without being unduly influenced by politics. Private sector partners such as Digicel and Wisinco supported specific project activities. In the UNEP project Promoting Energy Efficiency and Renewable Energy in Buildings (GEF ID 4167), important private sector partners included the Jamaica Public Service Company Ltd (JPSCo) where the private sector has majority of the

shares, and the Jamaica Hotel and Tourist Association (JHTA). JPSCo provided co-financing inkind for \$100,000. The UNDP project Deployment of Renewable Energy and Improvement of Energy Efficiency in the Public Sector (GEF ID 5843) aims to encourage private sector participation in the Renewable Energy sector, including pilot projects. There is a partnership relation with the Jamaica Solar Energy Association, which is giving advice to the PMU. In the UNEP alignment activity Support to the Alignment of Jamaica's National Action Programme to the UNCCD 10 Year Strategy (GEF ID 5893), the private sector is involved in preparation of the National Action Programme.

IV. CONCLUSIONS AND RECOMMENDATIONS

1. Conclusions

148. **SIDS face many severe challenges, especially from climate change.** The effects of climate change include sea level rise, increased impacts from natural disasters and invasive alien species, problems relating to non-sustainable use of land and water affecting productive sectors, and natural resource management issues. SIDS also face economic and institutional challenges. Most are middle-income countries, which makes them ineligible for concessional finance from IDA, and a low aid priority for donors. They have high current account deficits and are often highly indebted. The environment in SIDS is often affected by governance issues, limited institutional capacity, and brain drain. Further, SIDS with a large number of islands with sparse human populations on each incur high costs on basic services such as access to school systems, clean drinking water, sewage systems, garbage collection, and communication.

149. Against this background of constraints, this evaluation examined the relevance, performance, and sustainability of GEF interventions based on a desk review of the GEF project portfolio in 39 SIDS and thematic country case studies in 10 SIDS from GEF-4 to GEF-6. The evaluation questions were answered through a mixed-methods approach using both quantitative and qualitative analytical tools. The sustainability analysis focused on national and regional interventions completed between 2007 and 2014 to allow for sufficient time after completion to evaluate outcome sustainability.

GEF support to SIDS has been increasingly important for the GEF and is reflected in 150. increased commitment over the replenishment periods. There has been an increase in GEF support for SIDS from 8 to 9 percent from GEF-5 to GEF-6, and further to 12 percent in GEF-7. During the significant shortfall in GEF-6 efforts were made to ensure SIDS had sufficient funds and incurred no major delays in approval. During GEF-6 most of the SIDS spent all their STAR allocation. The current GEF-7 funding cycle (2018–22) continues to provide strong support to, and to emphasize the needs of, SIDS. The GEF is allocating \$233 million in GEF-7 for countries within the GEF SIDS constituency as national STAR allocations to address pressing sustainable development challenges. In addition, SIDS have participated in a significant number of regional and global projects and programs that overall totaled an additional \$810 million. GEF finance has leveraged several times that amount in additional resources for sustainable development. Beyond country allocations, there are other resources available via the GEF Trust Fund, such as from a special window for SIDS and LDCs under the chemicals and waste focal area, regional funds available under the international waters focal area, resources via the SGP, and support for fulfilling convention obligations. In addition, LDCF/SCCF funds are available to SIDS. For GEF-7, the Council has approved projects in Guinea Bissau, Timor Leste, Kiribati, Solomon Islands, Tuvalu and Vanuatu. The single SCCF project approved in GEF-7 is supporting seven Caribbean SIDS.

151. **GEF-financed projects in SIDS are normally strongly aligned with the government's priorities and reflect the heterogenous needs of the various countries.** The ministers of environment and other government officials in charge of these areas note that the GEF is an important source of funding that fits into their planning. The GEF has, for more than 25 years, supported projects in critical areas for SIDS such as biodiversity protection on land and in the ocean, resilience to climate change and related disaster risk management, increased energy access through renewable energy and energy efficiency, halting and reversing land degradation, cooperation on international waters, and improved chemicals management.

152. **GEF interventions are relevant to national environment challenges and are aligned with the GEF focal areas.** The main outcomes of the projects address issues to deal with the main environmental challenges facing SIDS. Even though all GEF focal areas are relevant for SIDS, the thematic areas that are especially relevant are climate change adaptation and mitigation (including energy) and integrated resource management for land, water, and biodiversity; followed by chemicals and waste. To improve climate resilience and reduce disaster risks, the GEF supports land use planning with an integrated and sustainable natural resource management approach, and disaster risk management with a focus on the prevention and mitigation of natural disasters. The adaptation portfolio, inter alia, also supports resilient infrastructure, ecosystembased adaptation and health. However, climate change adaptation projects and mitigation projects are often seen as separate issues, even though there are some opportunities for efficiencies in combining adaptation and mitigation in the same project (e.g., in the energy and forestry sectors).

153. The GEF is promoting ridge to reef, an integrated watershed management approach to sustainably manage soil, water, and biodiversity, while considering renewable energy resources and productive sectors such as agriculture, forestry, fisheries, and tourism. The GEF assists SIDS in identifying sustainable public and private national investments within the blue economy space, through funding of collective management of coastal and marine systems and implementation of integrated ocean policies and legal and institutional reforms. GEF support to SIDS in land degradation seeks to ultimately halt and reverse land degradation, restore degraded ecosystems, and sustainably manage resources. The GEF continues to support strengthening of protected areas systems in SIDS, both terrestrial and marine. The GEF has also been successful in combating invasive alien species, one of the main causes of ecosystem degradation and species sound management of chemicals and waste through strengthening the capacity of subnational, national, and regional institutions and strengthening the enabling policy and regulatory framework in SIDS.

154. Three Agencies (UNDP, UNEP, and the World Bank) have implemented more than 85 percent of the GEF SIDS portfolio; the benefits of expansion are still to be realized. UNDP is the dominant GEF Agency in SIDS, with 147 (51.4 percent) of the projects reviewed. Most of the GEF Agencies—with the exceptions of UNDP, the World Bank, and regional development banks—rarely have an in-country presence in SIDS. The governments often work with more thematically specialized Agencies such as FAO and UNEP for highly technical projects and to develop new sector strategies through enabling activities. Some countries have shown interest for IUCN in situations where this Agency already has an established collaboration with the government. The expansion of the GEF partnership to 18 Agencies has so far not made much difference to Agency presence in SIDS. This finding is consistent with the IEO evaluation of the expansion of the GEF partnership. It remains to be seen whether and how this opportunity of expansion is utilized by SIDS.

155. In most SIDS the governments and other stakeholders have accessed funding from a variety of modalities including full- and medium-size projects, as well as small grants; programmatic approaches have had limited traction. The GEF SGP is frequently used in SIDS, often in collaborations between communities and national NGOs. SIDS in the Caribbean, Pacific and Indian Ocean also favor regional projects with South-South sharing of knowledge and expertise, which yields important benefits for the smallest and poorest countries. The GEF has a growing focus on programmatic approaches and the ridge to reef approach is gaining traction. SIDS governments have expressed that, because of their small size, they do not have access to some large programs, such as Sustainable Forest Management (SFM); however, in reality SIDS could have access, but it takes time to develop projects in SIDS and most of the PIFs were submitted late in the GEF 6 cycle, when the SFM resources were no longer available. Several SIDS governments expressed that they hope a programmatic approach especially for SIDS could be established to get access to funds beyond their STAR allocation. One such program in the pipeline is "Implementing Sustainable Low and Non-Chemical Development in SIDS (ISLANDS), GEF ID 10185. Many SIDS do have access to the LDCF, and for SIDS that no longer qualify as LDCs, the SCCF is an alternative funding source.

156. This evaluation confirms that GEF funding has been and remains relevant in the development of SIDS. GEF-financed projects are relevant for the recipient countries and considered as co-financing for government priority sectors. This has become even more relevant in the SIDS government's policies during recent years due to climate change, with increased impact of natural disasters and other challenges that are especially important in SIDS. For the smallest of the SIDS, GEF funds often signify an important share of the public sector budget, especially for the environment ministries. In the oldest projects reviewed, it was noted that GEF funds often was the only or one of the few alternatives for international financing. For these projects, biodiversity was the most important focal area, both on land and in the ocean, complemented by support in multiple other areas.

157. Even though there are now more alternatives for environmental financing than a decade ago—especially in the climate change area—GEF financing continues to be highly relevant in most SIDS. GEF financing has been, and still is, highly appreciated by governments and other stakeholders in SIDS. In the past, GEF-financed projects supported activities in

geographic and thematic areas where stakeholders did not have many alternatives, and they therefore made a difference. Also, GEF projects have functioned as pilots for larger initiatives that were scaled up through permanent government-funded programs and larger development projects financed through development banks, the Green Climate Fund, or other sources. Components of GEF projects have also been replicated by other projects, including small projects implemented by communities and NGOs, often with support from the GEF SGP. And, increasingly, GEF projects are being used as pilot initiatives for other established climate financing mechanisms.

158. The performance of SIDS projects was lower than for the overall GEF portfolio on the dimensions of outcome performance, and project implementation and execution. Regional projects have significantly higher ratings on outcomes and sustainability. Seventy-one percent of projects in the SIDS portfolio have performance outcome ratings in the satisfactory range lower than the overall GEF portfolio average of 79 percent; 88 percent of regional projects have satisfactory outcomes, and 66 percent are likely to be sustainable. Performance of regional projects on outcomes and sustainability has improved by almost 10 percentage points between GEF-3 and GEF-6. Land degradation, climate change and multi focal projects had a higher percentage of projects with satisfactory outcomes and a lower percentage of projects with "likely" sustainability ratings. The trend is reversed in the case of International Waters where a higher percentage of projects are likely to be sustainable as compared with the percentage of projects with satisfactory outcome ratings.

159. Factors impacting performance include limited project preparation time particularly for multifocal projects, variability in addressing project risks and weak national institutional capacity resulting in procurement delays. Finally, nearly all GEF projects are implemented during a single phase with a duration of four to five years. New projects with similar or complementing goals to those of completed projects are often approved instead of designing a coherent next phase for the older project based on results and lessons learned. Monitoring information, including the availability of baseline data, continues to be a challenge.

160. Positive environmental institutional capacity building and socioeconomic outcomes were observed in at least 75 percent of the projects reviewed. The main positive impacts were found with regards to biodiversity, deforestation/land degradation, and water quality/quantity. Socioeconomic outcomes were observed with regards to income generation/diversification, private sector engagement, and civil society engagement. Over 95 percent of the projects reported improvements in institutional capacity or governance.

161. The GEF has supported the long-term sustainability of outcomes in the SIDS through a variety of interventions, and post-completion sustainability ratings of several projects have improved since project completion. The GEF has supported the formulation and implementation of national policies and of legal and regulatory frameworks, helped establish national environmental funds, raised environmental awareness, aided developing institutional

capacity, encouraged the formation of strategic institutional partnerships, implemented adaptive management measures, and assisted in the scale-up and replication of projects based on lessons learned. GEF projects have not fully utilized opportunities for cross-fertilization between projects and capacity building through South-South knowledge exchange, but there are a few successful examples. The regional program "Combating Living Resource Depletion and Coastal Area Degradation in the Guinea Current LME through Ecosystem-based Regional Actions", was implemented in 16 West African countries. Priority actions included reversing coastal area degradation and living resources depletion, relying heavily on regional capacity building. The project also implemented six national and three regional demonstration projects. Another example was "Integrating Watershed and Coastal Area Management in the Small Island Developing States of the Caribbean" wherein the South-South capacity building had support from the regional PMU situated in Saint Lucia and national agencies in 13 countries and disseminated information and experiences between governments and pilot projects. Sustainability was negatively affected when projects were designed with a focus on outcomes as opposed to long-term impact, financing, and sustainability, or with the absence of a clear exit strategy.

162. Country visits shed light on several context and project related factors which influence the sustainability of outcomes and are not often reported in terminal evaluations. Context related factors which support sustainability include legal and regulatory reforms, national ownership, establishment of national environment funds, institutional and public private partnerships. Weak institutional capacity, low levels of environmental awareness, pressure from agriculture and tourism sectors impede sustainability. Project related factors which have a positive influence on sustainability include training and building capacity, adaptive project management, strong project teams with a good steering committee, and scaling up and replication based on lessons learned. Limited attention to the quality of project design, inadequate investment in building local and national capacity and lack of a clear exit strategy and future financing, are project related factors which negatively impact sustainability.

163. The GEF has been given increasing attention to cross-cutting issues including gender mainstreaming, resilience and fragility, and private sector engagement and financing in project design; challenges exist in accessing private sector financing. Gender mainstreaming was non-existent in the oldest projects, but attention to gender as a cross-cutting issue has improved in recent projects as awareness has increased across stakeholders. Collection of gender-disaggregated data though still limited for projects under implementation, should improve with the implementation of the gender policy. Ministries that work on gender issues could be good partners if involved substantively in project design. In terms of resilience, half of the projects reviewed had resilience built into their design. Private sector stakeholders are often involved in the design of new projects, especially in sectors that have a clear interest for new development, such as the agricultural, tourism, and renewable energy sectors. While it is possible that parallel resources from the private sector are being used, based on interviews and documents accessing financing has been a challenge.

164. The GEF's main areas of additionality are strengthening institutions and assistance with legal and regulatory frameworks. This analysis draws on the IEO's recent framework for additionality (GEF IEO 2018). Results have been achieved to varying degrees across the countries in terms of other areas of additionality, with the weakest area being accessing private sector financing. In terms of broadening impact, the most important mechanism is mainstreaming activities in biodiversity, international waters and climate change through legal agreements, policies, strategies, and country activities. The second most important mechanism is through sustaining progress in environmental outcomes. Replication and scale-up are often done by others, based on the GEF projects.

Additionality Elements	Project Design	Results Achieved							
Innovation Additionality									
Focus on solar technology									
Ridge-to-Reef approach	\checkmark	\checkmark							
invasive alien species	\checkmark	\checkmark							
Socioeconomic Additionality									
Encouraging of Local Solutions	\checkmark	\checkmark							
Social Inclusiveness	\checkmark	0							
Social and Economic Benefits	\checkmark	0							
Institutional/Governance Additionality									
Strengthening of institutions	\checkmark	\checkmark							
Environmental governance	\checkmark	\checkmark							
Financial Additionality									
Access to private sector financing	\checkmark	0							
Policy/Regulatory Additionality									
Strengthening of the Policy and Regulatory \checkmark									
Environmental Additionality									
Adaptation	\checkmark	\checkmark							

Table 15: Main GEF areas of additionality in the SIDS

2. Recommendations

- (1) Derive greater benefits from the expanded GEF partnership. GEF Agencies should focus their efforts in SIDS based on their thematic and geographic competence and establish a permanent presence to strengthen dialogue with the respective government and key stakeholders.
- (2) Increase the number of integrated interventions. GEF Agencies should respond to the SIDS demand by designing more integrated projects, in line with the ridge to reef, whole island, and blue economy approaches. When justified, multiphase projects should be a prioritized model for GEF projects to improve outcome sustainability.
- (3) Promote innovation and knowledge exchange. The GEF project portfolio in SIDS should include a combination of innovative (e.g., income-generating products from invasive alien species) and scaling-up approaches that have shown to be effective. Innovation should be supported even if it has a higher risk. Regional programs should encourage a transfer of knowledge to the poorest SIDS through a South-South capacity-building approach.
- (4) Strengthening institutional capacity. GEF Agencies and projects should continue to build institutional capacity in the SIDS and assist in improving project design with due consideration to sustainability (exit strategy, stakeholder engagement, national and local capacity building to ensure continuation, M&E) and in the use of financial resources.
- (5) Within the context of the climate change mitigation projects, build on the GEF's comparative advantage. When considering interventions in the climate change mitigation area, the GEF should strategically explore the opportunity to address two of the main challenges facing SIDS—deficient waste management and the lack of sustainable energy. GEF financing should continue to explore the various alternatives for renewable energy in SIDS possibly including wind, tidal and ocean wave power, and geothermal energy resources.

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VI. ANNEXES

Annex1: List of projects reviewed

Project ID	Implementing Agency	Country	Project Name	GEF Replenishment	Project type	Project Status (as of January 2018)	Type of Review
3591	ADB	Regional	PAS: Strengthening Coastal and Marine Resources Management in the Coral Triangle of the Pacific - under the Pacific Alliance for Sustainability Program	GEF-4 (2006- 2010)	Full- sized project	Under implementation	Relevance
3641	ADB	Regional	PAS: Promoting Energy Efficiency in the Pacific	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance
5773	ADB	Timor Leste	Upscaling Climate-Proofing in the Transport Sector in Timor-Leste: Sector Wide Approaches	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
9052	ADB	Timor Leste	CPDP: Enhancing Climate Resilience of the Urban Services Sector in Timor Leste	GEF-5 (2010- 2014)	Full- sized project	CEO approved / endorsed	Relevance
9067	ADB	Cook Islands	Renewable Energy Sector Project	GEF-6 (2014- 2018)	Full- sized project	Under implementation	Relevance
9197	ADB	Vanuatu	Protecting Urban Areas Against the Impacts of Climate Change in Vanuatu	GEF-5 (2010- 2014)	Full- sized project	CEO approved / endorsed	Relevance
9512	ADB	Tuvalu	Climate Resilience in the Outer Islands of Tuvalu	GEF-5 (2010- 2014)	Medium- sized project	CEO approved / endorsed	Relevance
4274	AfDB	Sao Tome and Principe	Strengthening the Adaptive Capacity of Most Vulnerable Sao Tomean's Livestock-keeping Households	GEF-5 (2010- 2014)	Full- sized project	CEO approved / endorsed	Relevance

9113	AfDB	Sao Tome and Principe	Strengthening Resilience and Adaptive Capacity to Climate Change in São Tomé and Príncipe's Agricultural and Fisheries Sectors	GEF-6 (2014- 2018)	Full- sized project	CEO approved / endorsed	Relevance
1909	FAO	Regional	Protection of the Canary Current Large Marine Ecosystem (LME)	GEF-4 (2006- 2010)	Full- sized project	Under implementation	Relevance
3619	FAO	Regional	CTI Strategies for Fisheries Bycatch Management	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance
3819	FAO	Regional	PAS: Forestry and Protected Area Management	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance
4447	FAO	Haiti	Strengthening Climate Resilience and Reducing Disaster Risk in Agriculture to Improve Food Security in Haiti Post Earthquake	GEF-5 (2010- 2014)	Full- sized project	Completed / closed	Relevance
4740	FAO	Regional	Disposal of Obsolete Pesticides including POPs and Strengthening Pesticide Management in the Permanent Interstate Committee for Drought Control in the Sahel (CILSS) Member States	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
4769	FAO	Trinidad and Tobago	Improving Forest and Protected Area Management	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5122	FAO	Solomon Islands	Integrated Forest Management in the Solomon Islands	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5304	FAO	Regional	Sustainable Management of Bycatch in Latin America and Caribbean Trawl Fisheries (REBYC-II LAC)	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5397	FAO	Vanuatu	R2R: Integrated Sustainable Land and Coastal Management	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance

5578	FAO	Tonga	R2R Integrated Land and Agro- ecosystem Management Systems	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5667	FAO	Regional	Climate Change Adaptation in the Eastern Caribbean Fisheries Sector	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5768	FAO	Regional	Enabling Transboundary Cooperation for Sustainable Management of the Indonesian Seas	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
9720	FAO	Regional	Developing Organizational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean Small- Scale Fisheries (StewardFish)	GEF-6 (2014- 2018)	Medium- sized project	Under implementation	Relevance
3132	IADB	Haiti	SFM Sustainable Land Management of the Upper Watersheds of South Western Haiti	GEF-4 (2006- 2010)	Full- sized project	Under implementation	Relevance
3626	IADB	Regional	PAS: The Micronesia Challenge: Sustainable Finance Systems for Island Protected Area Management - under the GEF Pacific Alliance for Sustainability	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance
3766	IADB	Regional	Testing a Prototype Caribbean Regional Fund for Wastewater Management (CReW)	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance
3891	IADB	Barbados	Sustainable Energy Framework for Barbados	GEF-4 (2006- 2010)	Medium- sized project	Completed / closed	Relevance
4454	IADB	Jamaica	Integrated Management of the Yallahs River and Hope River Watersheds	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
4497	IADB	Suriname	Development of Renewable Energy, Energy Efficiency and Electrification of Suriname	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
4520	IADB	Guyana	Sustainable Energy Program	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5312	IADB	Regional	Sustainable Energy for the Eastern Caribbean (SEEC) Program	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
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5476	IADB	Jamaica	Third National Communication (TNC) and Biennial Update Report to the UNFCCC	GEF-5 (2010- 2014)	Enabling activity	Under implementation	Relevance
9803	IADB	Haiti	Managing the Human-Biodiversity Interface in the Southern Marine Protected Areas of Haiti - MHBI	GEF-6 (2014- 2018)	Medium- sized project	CEO approved / endorsed	Relevance
3363	IFAD	Comoros	SIP: Integrated Ecological Planning and Sustainable Land Management in Coastal Ecosystems in the Comoros in the Three Island of (Grand Comore, Anjouan, and Moheli)	GEF-4 (2006- 2010)	Medium- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
4494	IFAD	Sao Tome and Principe	Integrated Ecosystem Approach to Biodiversity Mainstreaming and Conservation in the Buffer Zones of the Obo and Principe Natural Parks	GEF-5 (2010- 2014)	Full- sized project	Completed / closed	Relevance
195	UNDP	Dominican Republic	Biodiversity Conservation and Management in the Coastal Zone of the Dominican Republic	Pilot Phase (1991-1994)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
243	UNDP	Regional	Establishment of a Programme for the Consolidation of the Meso- American Biological Corridor	GEF -1 (1994- 1998)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
1029	UNDP	Maldives	Renewable Energy Technology Development and Application Project (RETDAP)	GEF-3 (2002- 2006)	Medium- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
1060	UNDP	Regional	Capacity building for Stage II Adaptation to Climate Change (Central America, Mexico and Cuba)	GEF-2 (1998- 2002)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)

1099	UNDP	Maldives	6. Atoll Ecosystem-based Conservation of Globally Significant Biological Diversity in the Maldives' Baa Atoll	GEF-3 (2002- 2006)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
1124	UNDP	Cabo Verde	Integrated Participatory Ecosystem Management in and Around Protected Areas, Phase I	GEF-3 (2002- 2006)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
1188	UNDP	Regional	Combating Living Resource Depletion and Coastal Area Degradation in the Guinea Current LME through Ecosystem-based Regional Actions	GEF-3 (2002- 2006)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
1246	UNDP	Mauritius	Partnerships for Marine Protected Areas in Mauritius	GEF-3 (2002- 2006)	Medium- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
1614	UNDP	Antigua And Barbuda	Demonstrating the Development and Implementation of a Sustainable Island Resource Management Mechanism in a Small Island Developing State	GEF-3 (2002- 2006)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
1682	UNDP	Vanuatu	6. Facilitating and Strengthening the Conservation Initiatives of Traditional Landholders and their Communities to Achieve Biodiversity Conservation Objectives	GEF-3 (2002- 2006)	Medium- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
1904	UNDP	Haiti	Small Scale Hydro Power Development in Haiti	GEF-4 (2006- 2010)	Medium- sized project	Completed / closed	Relevance
2068	UNDP	Belize	Integrating Protected Area and Landscape Management in the Golden Stream Watershed	GEF-3 (2002- 2006)	Medium- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)

2512	UNDP	Dominican Republic	Demonstrating Sustainable Land Management in the Upper Sabana Yegua Watershed System	GEF-3 (2002- 2006)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
2567	UNDP	Palau	Sustainable Economic Development through Renewable Energy Applications (SEDREA)	GEF-4 (2006- 2010)	Medium- sized project	Completed / closed	Relevance
2586	UNDP	Regional	PAS: Implementing Sustainable Integrated Water Resource and Wastewater Management in the Pacific Island Countries - under the GEF Pacific Alliance for Sustainability	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
2614	UNDP	Regional	Adaptation to Climate Change - Responding to Shoreline Change and its human dimensions in West Africa through integrated coastal area management.	GEF-3 (2002- 2006)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
2907	UNDP	Dominican Republic	Re-engineering the National Protected Area System in Order to Achieve Financial Sustainability	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance
2929	UNDP	Regional	Reducing Conflicting Water Uses in the Artibonite River Basin through Development and Adoption of a Multi-focal Area Strategic Action Programme	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance
3049	UNDP	Jamaica	Piloting Natural Resource Valuation within Environmental Impact Assessments	GEF-4 (2006- 2010)	Medium- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
3062	UNDP	Belize	Strengthening Institutional Capacities for Coordinating Multi- Sectoral Environmental Policies and Programmes	GEF-4 (2006- 2010)	Medium- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
3074	UNDP	Seychelles	Capacity Development for Improved National and	GEF-4 (2006- 2010)	Medium- sized project	Completed / closed	Relevance and Sustainability (projects

			International Environmental Management in Seychelles				closed between 2007 and 2014)
3101	UNDP	Regional	Pacific Adaptation to Climate Change Project (PACC)	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
3175	UNDP	Guyana	Assessment of Capacity Building Needs, Preparation of Second and Third National Report (CBD) and the Clearing House Mechanism - ADD ON	GEF-4 (2006- 2010)	Enabling activity	Completed / closed	Relevance
3180	UNDP	Jamaica	Assessment of Capacity Building Needs, Preparation of the Third National Report (CBD) and the Clearing House Mechanism	GEF-4 (2006- 2010)	Enabling activity	Completed / closed	Relevance
3205	UNDP	Mauritius	Sustainable management of POPs in Mauritius	GEF-4 (2006- 2010)	Medium- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
3254	UNDP	Seychelles	Mainstreaming Prevention and Control Measures for Invasive Alien Species into Trade, Transport and Travel Across the Production Landscape	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance
3300	UNDP	St. Kitts And Nevis	Assessment of Capacity Building Needs and Country Specific Priorities (add on)	GEF-4 (2006- 2010)	Enabling activity	Completed / closed	Relevance
3316	UNDP	Haiti	LDC/SIDS Portfolio Project: Capacity Building for Sustainable Land Management	GEF-3 (2002- 2006)	Medium- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
3344	UNDP	Cook Islands	Initial Assistance to enable the Cook Islands to fulfill its obligations under the Stockholm Convention on Persistent Organic Pollutants (POPS). (NIP for Cook Islands)	GEF-4 (2006- 2010)	Enabling activity	Completed / closed	Relevance

3358	UNDP	Samoa	Integrating Climate Change Risks into the Agriculture and Health Sectors in Samoa	GEF-4 (2006- 2010)	Medium- sized project	Completed / closed	Relevance
3360	UNDP	Seychelles	LDC/SIDS Portfolio Project: Capacity Development for Sustainable Land Management in Seychelles	GEF-3 (2002- 2006)	Medium- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
3464	UNDP	Timor Leste	National Adaptation Programme of Action to Climate Change (NAPA) Formulation Project	GEF-4 (2006- 2010)	Enabling activity	Completed / closed	Relevance
3522	UNDP	Regional	CTI Arafura and Timor Seas Ecosystem Action Programme (ATSEA) - under the Coral Triangle Initiative	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance
3526	UNDP	Mauritius	Expanding Coverage and Strengthening Management Effectiveness of the Terrestrial Protected Area Network on the Island of Mauritius	GEF-4 (2006- 2010)	Full- sized project	Under implementation	Relevance
3575	UNDP	Guinea- Bissau	SPWA-BD: Support for the Consolidation of a Protected Area System in Guinea-Bissau's Forest Belt	GEF-4 (2006- 2010)	Medium- sized project	Under implementation	Relevance
3581	UNDP	Cabo Verde	Building Adaptive Capacity and Resilience to Climate Change in the Water Sector in Cape Verde	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance
3607	UNDP	Cuba	Application of a Regional Approach to the Management of Marine and Coastal Protected Areas in Cuba's Southern Archipelagos	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance
3616	UNDP	Haiti	Establishing a Financially Sustainable National Protected Areas System	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance
3662	UNDP	Timor Leste	National Biodiversity Strategy Action Plan, the First & Third National Report to CBD,	GEF-4 (2006- 2010)	Enabling activity	Completed / closed	Relevance

			Establishment of Clearing House Mechanism				
3694	UNDP	Tuvalu	Increasing Resilience of Coastal Areas and Community Settlements to Climate Change	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance
3733	UNDP	Haiti	Strengthening Adaptive Capacities to Address Climate Change Threats on Sustainable Development Strategies for Coastal Communities in Haiti	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance
3764	UNDP	Jamaica	Strengthening the Operational and Financial Sustainability of the National Protected Area System	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance
3847	UNDP	Maldives	Integrating Climate Change Risks into Resilient Island Planning	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance
3857	UNDP	Comoros	Adapting Water Resource Management in Comoros to Increase Capacity to Cope with Climate Change	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance
3861	UNDP	Belize	Strengthening National Capacities for the Consolidation, Operationalization and Sustainability of Belize's Protected Areas System	GEF-4 (2006- 2010)	Medium- sized project	Completed / closed	Relevance
3925	UNDP	Seychelles	Strengthening Seychelles' Protected Area System through NGO Management Modalities	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance
3954	UNDP	Papua New Guinea	PAS: Community-Based Forest and Coastal Conservation and Resource Management in PNG	GEF-4 (2006- 2010)	Full- sized project	Under implementation	Relevance
3955	UNDP	Cuba	Enhancing the Prevention, Control and Management of Invasive Alien Species in Vulnerable Ecosystems	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance
4019	UNDP	Guinea- Bissau	Strengthening Resilience and Adaptive Capacity to Climate	GEF-4 (2006- 2010)	Full- sized project	Under implementation	Relevance

			Change in Guinea-Bissau's Agrarian and Water Sectors				
4099	UNDP	Mauritius	Removal of Barriers to Solar PV Power Generation in Mauritius, Rodrigues and the Outer Islands	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
4131	UNDP	Fiji	PAS: Fiji Renewable Energy Power Project (FREPP)	GEF-4 (2006- 2010)	Medium- sized project	Under implementation	Relevance
4180	UNDP	Suriname	Coastal Protected Area Management	GEF-4 (2006- 2010)	Medium- sized project	Completed / closed	Relevance
4216	UNDP	Samoa	Integration of Climate Change Risk and Resilience into Forestry Management (ICCRIFS)	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance
4344	UNDP	Timor Leste	Promoting Sustainable Bio-energy Production from Biomass	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
4431	UNDP	Maldives	Increasing Climate Change Resilience of Maldives through Adaptation in the Tourism Sector	GEF-5 (2010- 2014)	Medium- sized project	Completed / closed	Relevance
4550	UNDP	Samoa	Strengthening Multi-sectoral Management of Critical Landscapes	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
4585	UNDP	Samoa	Enhancing the Resilience of Tourism-reliant Communities to Climate Change Risks	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance
4689	UNDP	Seychelles	National Biodiversity Planning to Support the Implementation of the CBD 2011-2020 Strategic Plan in Seychelles	GEF-5 (2010- 2014)	Enabling activity	Completed / closed	Relevance
4696	UNDP	Timor Leste	Strengthening the Resilience of Small-Scale Rural Infrastructure and Local Government Systems to Climatic Variability and Risk	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance

4714	UNDP	Tuvalu	Effective and Responsive Island- level Governance to Secure and Diversify Climate Resilient Marine- based Coastal Livelihoods and Enhance Climate Hazard Response Capacity	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
4717	UNDP	Seychelles	Expansion and Strengthening of the Protected Area Subsystem of the Outer Islands of Seychelles and its Integration into the Broader Land and Seascape	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
4725	UNDP	Solomon Islands	Solomon Islands Water Sector Adaptation Project (SIWSAP)	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
4746	UNDP	Regional	Implementation of Global and Regional Oceanic Fisheries Conventions and Related Instruments in the Pacific Small Island Developing States (SIDS)	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
4846	UNDP	Cuba	A Landscape Approach to the Conservation of Threatened Mountain Ecosystems	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
4974	UNDP	Comoros	Enhancing Adaptive Capacity and Resilience to Climate Change in the Agriculture Sector in Comoros	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5004	UNDP	Sao Tome and Principe	Strengthening Climate Information and Early Warning Systems in Sao Tome and Principe for Climate Resilient Development and Adaptation to Climate Change	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5027	UNDP	Belize	National Biodiversity Planning to Support the implementation of the CBD 2011-2020 Strategic Plan	GEF-5 (2010- 2014)	Enabling activity	Completed / closed	Relevance
5045	UNDP	Solomon Islands	Integrating Global Environment Commitments in Investment and Development Decision-making	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance

5048	UNDP	Belize	Capacity Building for the Strategic Planning and Management of Natural Resources in Belize	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance
5049	UNDP	Vanuatu	Adaptation to Climate Change in the Coastal Zone in Vanuatu	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5056	UNDP	Timor Leste	Strengthening Community Resilience to Climate-induced Disasters in the Dili to Ainaro Road Development Corridor, Timor Leste	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5062	UNDP	Comoros	Development of a National Network of Terrestrial and Marine Protected Areas Representative of the Comoros Unique Natural Heritage and Co-managed with Local Village Communities	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5069	UNDP	Grenada	Implementing a "Ridge to Reef" Approach to Protecting Biodiversity and Ecosystem Functions within and Around Protected Areas	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5078	UNDP	St. Kitts And Nevis	Conserving Biodiversity and Reducing Habitat Degradation in Protected Areas and their Buffer Zones	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5084	UNDP	Fiji	National Biodiversity Planning to Support the Implementation of the CBD 2011-2020 Strategic Plan	GEF-5 (2010- 2014)	Enabling activity	Under implementation	Relevance
5088	UNDP	Dominican Republic	Conserving Biodiversity in Coastal Areas Threatened by Rapid Tourism and Physical Infrastructure Development	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5094	UNDP	Belize	Belize Chemicals and Waste Management Programme	GEF-5 (2010- 2014)	Medium- sized project	CEO approved / endorsed	Relevance
5126	UNDP	Suriname	Mainstreaming Global Environment Commitments for Effective National Environmental Management	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance

5130	UNDP	Kiribati	Integrating Global Environmental Priorities into National Policies and Programmes	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance
5149	UNDP	Cuba	Clean Energy Technologies for the Rural Areas in Cuba (CleanEnerg- Cuba)	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5164	UNDP	Samoa	Capacity for Implementing Rio Conventions in Samoa	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance
5166	UNDP	Fiji	Capacity Building for Mainstreaming MEA Objectives into Inter-ministerial Structures and Mechanisms	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance
5170	UNDP	Fiji	Discovering Nature-based Products and Build National Capacities for the Application of the Nagoya Protocol on Access to Genetic Resources and Benefit Sharing	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance
5175	UNDP	Cuba	National Biodiversity Planning for Support in Implementing the CBD Strategic Plan 2011-2020	GEF-5 (2010- 2014)	Enabling activity	Under implementation	Relevance
5178	UNDP	Papua New Guinea	Strengthening Capacities to Measure, Report and Verify Indicators of Global Environment Benefits	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance
5184	UNDP	Sao Tome and Principe	Enhancing Capacities of Rural Communities to Pursue Climate Resilient Livelihood Options in the Sao Tome and Principe Districts of Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL)	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5297	UNDP	St. Vincent and Grenadines	Promoting Access to Clean Energy Services in Saint Vincent and the Grenadines	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance
5316	UNDP	Seychelles	Promotion and Up-scaling of Climate-resilient, Resource Efficient	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance

			Technologies in a Tropical Island Context				
5334	UNDP	Sao Tome and Principe	Promotion of Environmentally Sustainable and Climate-Resilient Grid Isolated Grid Based Hydroelectric Electricity Through an Integrated Approach in Sao Tome and Principe.	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5344	UNDP	Cabo Verde	Cape Verde Appliances & Building Energy-Efficiency Project (CABEEP)	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance
5348	UNDP	Cook Islands	Conserving Biodiversity and Enhancing Ecosystem Functions through a "Ridge to Reef" Approach in the Cook Island	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5368	UNDP	Guinea- Bissau	Strengthening the Financial and Operational Framework of the National PA System in Guinea- Bissau	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5380	UNDP	Haiti	Increasing Resilience of Ecosystems and Vulnerable Communities to CC and Anthropic Threats Through a Ridge to Reef Approach to BD Conservation and Watershed Management	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5381	UNDP	Nauru	R2R: Implementing a "Ridge to Reef" Approach to Protecting Biodiversity and Ecosystem Functions in Nauru (R2R Nauru)	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5398	UNDP	Fiji	Implementing a "Ridge to Reef" Approach to Preserve Ecosystem Services, Sequester Carbon, Improve Climate Resilience and Sustain Livelihoods in Fiji (Fiji R2R)	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5404	UNDP	Regional	R2R: Testing the Integration of Water, Land, Forest & Coastal Management to Preserve	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance

			Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods in Pacific Island Countries				
5405	UNDP	Regional	EAS: Scaling up the Implementation of the Sustainable Development Strategy for the Seas of East Asia	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5414	UNDP	Kiribati	Enhancing National Food Security in the Context of Global Climate Change	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5417	UNDP	Samoa	Economy-wide Integration of Climate Change Adaptation and DRM/DRR to Reduce Climate Vulnerability of Communities in Samoa	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5418	UNDP	Mauritius	National Biodiversity Planning to Support the Implementation of the CBD 2011-2020 Strategic Plan in Mauritius	GEF-5 (2010- 2014)	Enabling activity	Completed / closed	Relevance
5426	UNDP	Micronesia	National Biodiversity Planning to Support the Implementation of the CBD 2011-2020 Strategic Plan	GEF-5 (2010- 2014)	Enabling activity	Under implementation	Relevance
5453	UNDP	Barbados	Disaster Risk & Energy Access Management (DREAM): Promoting Solar Photovoltaic Systems in Public Buildings for Clean Energy Access, Increased Climate Resilience and Disaster Risk Management	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance
5485	UNDP	Seychelles	Seychelles' Protected Areas Finance Project	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5502	UNDP	Jamaica	National Biodiversity Planning to Support the Implementation of the CBD 2011-2020 Strategic Plan	GEF-5 (2010- 2014)	Enabling activity	Completed / closed	Relevance
5510	UNDP	Papua New Guinea	R2R Strengthening the Management Effectiveness of the National System of Protected Areas	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance

5513	UNDP	Regional	Western Indian Ocean Large Marine Ecosystems Strategic Action Programme Policy Harmonization and Institutional Reforms (SAPPHIRE)	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5514	UNDP	Mauritius	Mainstreaming Biodiversity into the Management of the Coastal Zone in the Republic of Mauritius	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5517	UNDP	Micronesia	R2R Implementing an Integrated Ridge to Reef Approach to Enhance Ecosystem Services, to Conserve Globally Important Biodiversity and to Sustain Local Livelihoods in the FSM	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5524	UNDP	Cabo Verde	Mainstreaming Biodiversity Conservation into the Tourism Sector in Synergy with a Further Strengthened Protected Areas System in Cape Verde	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5542	UNDP	Regional	Catalyzing Implementation of the Strategic Action Programme for the Sustainable Management of Shared Living Marine Resources in the Caribbean and North Brazil Shelf Large Marine Ecosystems (CMLE+)	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5550	UNDP	Tuvalu	R2R Implementing a Ridge to Reef Approach to Protect Biodiversity and Ecosystem Functions	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5552	UNDP	Niue	Application of Ridge to Reef Concept for Biodiversity Conservation, and for the Enhancement of Ecosystem Service and Cultural Heritage in Niue	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5579	UNDP	Palau	Mainstreaming Global Environmental Priorities into National Policies and Programmes	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance

5597	UNDP	Guyana	Support the Alignment of the National Action Plan (NAP) for Land Degradation with the UNCCD's 10- Year Strategy	GEF-5 (2010- 2014)	Enabling activity	Completed / closed	Relevance
5613	UNDP	Cook Islands	Strengthening the Implementation of the Nagoya Protocol on Access to Genetic Resources and Benefit Sharing in the Cook Islands	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance
5655	UNDP	Vanuatu	Mainstreaming Global Environmental Priorities into National Policies and Programmes	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance
5663	UNDP	Tonga	R2R Integrated Environmental Management of the Fanga'uta Lagoon Catchment	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance
5671	UNDP	Timor Leste	Building Shoreline Resilience of Timor Leste to Protect Local Communities and their Livelihoods	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5686	UNDP	Dominica	Low Carbon Development Path: Promoting Energy Efficient Applications and Solar Photovoltaic Technologies in Streets, Outdoor areas and Public Buildings in Island Communities Nationwide (LCDP)	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance
5756	UNDP	Cook Islands	National Biodiversity Planning to Support the Implementation of the CBD 2011-2020 Strategic Plan	GEF-5 (2010- 2014)	Enabling activity	Under implementation	Relevance
5761	UNDP	Dominica	Supporting Sustainable Ecosystems by Strengthening the Effectiveness of Dominica's Protected Areas System	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance
5780	UNDP	Antigua And Barbuda	Support NAP Alignment and UNCCD Reporting in Antigua and Barbuda	GEF-5 (2010- 2014)	Enabling activity	Completed / closed	Relevance
5843	UNDP	Jamaica	Deployment of Renewable Energy and Improvement of Energy Efficiency in the Public Sector	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance

5846	UNDP	Guyana	Enhancing Biodiversity Protection through Strengthened Monitoring, Enforcement and Uptake of Environmental Regulations in Guyana's Gold Mining Sector	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance
5847	UNDP	Trinidad and Tobago	Capacity Development for Improved Management of Multilateral Environmental Agreements for Global Environmental Benefits	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance
5858	UNDP	Mauritius	Strengthen National Decision Making Towards Ratification of the Minamata Convention and Build Capacity Towards Implementation of Future Provisions.	GEF-5 (2010- 2014)	Enabling activity	CEO approved / endorsed	Relevance
5874	UNDP	Timor Leste	Second Communication to the UNFCCC	GEF-5 (2010- 2014)	Enabling activity	Under implementation	Relevance
6938	UNDP	Trinidad and Tobago	Preparation of Trinidad and Tobago's Third National Communication and First Biennial Update Report to the UNFCCC	GEF-6 (2014- 2018)	Enabling activity	Under implementation	Relevance
6939	UNDP	Guyana	Minamata Initial Assessment for Guyana	GEF-6 (2014- 2018)	Enabling activity	Completed / closed	Relevance
6973	UNDP	Guyana	Strengthening Technical Capacities to Mainstream and Monitor Rio Convention Implementation through Policy Coordination	GEF-6 (2014- 2018)	Medium- sized project	Under implementation	Relevance
6982	UNDP	Regional	Enhancing Capacity to Develop Global and Regional Environmental Projects in the Pacific	GEF-6 (2014- 2018)	Medium- sized project	Completed / closed	Relevance
9095	UNDP	Fiji	Building Capacities to Address Invasive Alien Species to Enhance the Chances of Long-term Survival of Terrestrial Endemic and Threatened Species on Taveuni Island and Surrounding Islets	GEF-6 (2014- 2018)	Full- sized project	CEO approved / endorsed	Relevance

9112	UNDP	Regional	The Ten Island Challenge: Derisking the Transition of the Caribbean from Fossil Fuels to Renewables	GEF-6 (2014- 2018)	Medium- sized project	Under implementation	Relevance
9220	UNDP	Tuvalu	Facilitation of the Achievement of Sustainable National Energy Targets of Tuvalu (FASNETT)	GEF-6 (2014- 2018)	Full- sized project	Under implementation	Relevance
9251	UNDP	Samoa	Improving the Performance and Reliability of RE Power Systems in Samoa (IMPRESS)	GEF-6 (2014- 2018)	Full- sized project	CEO approved / endorsed	Relevance
9273	UNDP	Papua New Guinea	Facilitating Renewable Energy & Energy Efficiency Applications for Greenhouse Gas Emission Reduction (FREAGER)	GEF-6 (2014- 2018)	Full- sized project	CEO approved / endorsed	Relevance
9314	UNDP	Comoros	Strengthening of Multisector and Decentralised Environmental Management and Coordination to Achieve the Objectives of the Rio Conventions in the Union of Comoros	GEF-6 (2014- 2018)	Medium- sized project	Under implementation	Relevance
9319	UNDP	Cuba	Integrating Rio Global Environmental Commitments into National Priorities and Needs through the Improvement of Information Management and Knowledge for Planning and Decision Making.	GEF-6 (2014- 2018)	Medium- sized project	Under implementation	Relevance
9349	UNDP	Suriname	Minamata Initial Assessment for Suriname	GEF-6 (2014- 2018)	Enabling activity	Under implementation	Relevance
9440	UNDP	Vanuatu	Third National Communication and First Biennial Update Report to the UNFCCC	GEF-6 (2014- 2018)	Enabling activity	Under implementation	Relevance
9489	UNDP	Suriname	Artisanal and Small-Scale Gold Mining (ASGM) National Action Plan (NAP) for Suriname	GEF-6 (2014- 2018)	Enabling activity	Under implementation	Relevance
9505	UNDP	Micronesia	Third National Communication and First Biennial Update Report	GEF-6 (2014- 2018)	Enabling activity	CEO approved / endorsed	Relevance

9635	UNDP	Comoros	Review and update of the national implementation plan for the Stockholm Convention on Persistent Organic Pollutants (POPs) in Comoros	GEF-6 (2014- 2018)	Enabling activity	CEO approved / endorsed	Relevance
9677	UNDP	Belize	Fourth National Communication and First Biennial Update Report to the UNFCCC	GEF-6 (2014- 2018)	Enabling activity	Under implementation	Relevance
9740	UNDP	Dominican Republic	Dominican Republic First Biennial Update Report (fBUR)	GEF-6 (2014- 2018)	Enabling activity	Under implementation	Relevance
9819	UNDP	Cuba	Third National Communication and First Biennial Update Report to the UNFCCC	GEF-6 (2014- 2018)	Enabling activity	Under implementation	Relevance
9821	UNDP	Regional	Support to Eligible Parties to Produce the Sixth National Report to the CBD (LAC)	GEF-6 (2014- 2018)	Medium- sized project	Under implementation	Relevance
1247	UNEP	Regional	Addressing Land-based Activities in the Western Indian Ocean (WIO- LaB)	GEF-3 (2002- 2006)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
1254	UNEP	Regional	Integrating Watershed and Coastal Area Management (IWCAM) in the Small Island Developing States of the Caribbean	GEF-3 (2002- 2006)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
1361	UNEP	Cuba	6. Generation and Delivery of Renewable Energy Based Modern Energy Services in Cuba; the case of Isla de la Juventud	GEF-3 (2002- 2006)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
1604	UNEP	Regional	Sustainable Conservation of Globally Important Caribbean Bird Habitats: Strengthening a Regional Network for a Shared Resource	GEF-3 (2002- 2006)	Medium- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
2129	UNEP	Regional	Demonstrating and Capturing Best Practices and Technologies for the Reduction of Land-sourced Impacts Resulting from Coastal Tourism	GEF-3 (2002- 2006)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)

2364	UNEP	Regional	Integrated and Sustainable Management of Transboundary Water Resources in the Amazon River Basin Considering Climate Variability and Climate Change	GEF-4 (2006- 2010)	Full- sized project	Under implementation	Relevance
2706	UNEP	Regional	Implementing Integrated Water Resource and Wastewater Management in Atlantic and Indian Ocean SIDS	GEF-4 (2006- 2010)	Full- sized project	Under implementation	Relevance
2770	UNEP	Regional	Demonstration of a Regional Approach to Environmentally Sound Management of PCB Liquid Wastes and Transformers and Capacitors Containing PCBs	GEF-4 (2006- 2010)	Full- sized project	Under implementation	Relevance
2861	UNEP	Regional	Mainstreaming Biodiversity Conservation into Tourism through the Development and Dissemination of Best Practices	GEF-4 (2006- 2010)	Medium- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
3183	UNEP	Regional	Mitigating the Threats of Invasive Alien Species in the Insular Caribbean	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
3663	UNEP	Regional	PAS: Supporting the POPs Global Monitoring Plan in the Pacific Islands Region	GEF-4 (2006- 2010)	Medium- sized project	Completed / closed	Relevance
3664	UNEP	Regional	PAS: Prevention, Control and Management of Invasive Alien Species in the Pacific Islands	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance
3673	UNEP	Regional	Supporting the Implementation of the Global Monitoring Plan of POPs in Eastern and Southern African Countries	GEF-4 (2006- 2010)	Medium- sized project	Completed / closed	Relevance
3729	UNEP	Bahamas	Building a Sustainable National Marine Protected Area Network	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance

3853	UNEP	Regional	Building Capacity for Regionally Harmonized National Processes for Implementing CBD Provisions on Access to Genetic Resources and Sharing of Benefits	GEF-4 (2006- 2010)	Medium- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
3855	UNEP	Regional	Strengthening the Implementation of Access to Genetic Resources and Benefit-Sharing Regimes in Latin America and the Caribbean	GEF-4 (2006- 2010)	Medium- sized project	Completed / closed	Relevance
3897	UNEP	Kiribati	PAS: Phoenix Islands Protected Area (PIPA)	GEF-4 (2006- 2010)	Medium- sized project	Completed / closed	Relevance
3969	UNEP	Regional	AFLDC: Capacity Strengthening and Technical Assistance for the Implementation of Stockholm Convention National Implementation Plans (NIPs) in African Least Developed Countries (LDCs) of the ECOWAS Subregion	GEF-4 (2006- 2010)	Full- sized project	Under implementation	Relevance
4000	UNEP	Regional	PAS: Low Carbon-Energy Islands - Accelerating the Use of Energy Efficient and Renewable Energy Technologies in Tuvalu, Niue and Nauru	GEF-4 (2006- 2010)	Full- sized project	Under implementation	Relevance
4066	UNEP	Regional	PAS: Pacific POPs Release Reduction Through Improved Management of Solid and Hazardous Wastes	GEF-4 (2006- 2010)	Full- sized project	Under implementation	Relevance
4158	UNEP	Cuba	Agricultural Biodiversity Conservation and Man and Biosphere Reserves in Cuba: Bridging Managed and Natural Landscapes	GEF-4 (2006- 2010)	Full- sized project	Under implementation	Relevance
4167	UNEP	Jamaica	LGGE Promoting Energy Efficiency and Renewable Energy in Buildings in Jamaica	GEF-4 (2006- 2010)	Full- sized project	Under implementation	Relevance

4171	UNEP	Regional	Energy for Sustainable Development in Caribbean Buildings	GEF-4 (2006- 2010)	Full- sized project	Under implementation	Relevance
4523	UNEP	Regional	Support to Preparation of the Second National Biosafety Reports to the Cartagena Protocol on Biosafety-Africa	GEF-5 (2010- 2014)	Medium- sized project	CEO approved / endorsed	Relevance
4629	UNEP	Maldives	Strengthening Low-Carbon Energy Island Strategies	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
4681	UNEP	Bahrain	Support to Bahrain for the Revision of the NBSAPs and Development of Fifth National Report to the CBD	GEF-5 (2010- 2014)	Enabling activity	Completed / closed	Relevance
4847	UNEP	Bahamas	Pine Islands - Forest/Mangrove Innovation and Integration (Grand Bahama, New Providence, Abaco and Andros)	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
4886	UNEP	Regional	Continuing Regional Support for the POPs Global Monitoring Plan under the Stockholm Convention in the Africa Region	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
4932	UNEP	Regional	Integrating Water, Land and Ecosystems Management in Caribbean Small Island Developing States (IWEco)	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5057	UNEP	St. Lucia	Iyanola - Natural Resource Management of the NE Coast	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5195	UNEP	Regional	Building National and Regional Capacity to Implement MEAs by Strengthening Planning, and State of Environment Assessment and Reporting in the Pacific Islands	GEF-5 (2010- 2014)	Full- sized project	CEO approved / endorsed	Relevance
5197	UNEP	St. Lucia	Increase St. Lucia's Capacity to Monitor MEA Implementation and Sustainable Development	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance

5208	UNEP	Palau	R2R: Advancing Sustainable Resources Management to Improve Livelihoods and Protect Biodiversity in Palau	GEF-5 (2010- 2014)	Full- sized project	CEO approved / endorsed	Relevance
5390	UNEP	Antigua And Barbuda	Sustainable Pathways - Protected Areas and Renewable Energy	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5425	UNEP	Cabo Verde	Support to Alignment of Cape Verde's National Action Programme to the UNCCD 10 Year Strategy and Preparation of the Reporting and Review Process	GEF-5 (2010- 2014)	Enabling activity	CEO approved / endorsed	Relevance
5454	UNEP	Regional	Ratification and Implementation of the Nagoya Protocol on Access and Benefit Sharing (ABS) for the Member Countries of the Central African Forests Commission COMIFAC	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance
5480	UNEP	Tuvalu	Support to Tuvalu for the Revision of the NBSAPs and Development of Fifth National Report to the Convention on Biological Diversity (CBD)	GEF-5 (2010- 2014)	Enabling activity	Under implementation	Relevance
5523	UNEP	Antigua And Barbuda	Building climate Resilience through Innovative Financing Mechanisms for Climate Change Adaptation	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5531	UNEP	Haiti	Ecosystem Approach to Haiti Cote Sud	GEF-5 (2010- 2014)	Full- sized project	CEO approved / endorsed	Relevance
5557	UNEP	Haiti	Developing Core Capacity for MEA Implementation in Haiti	GEF-5 (2010- 2014)	Medium- sized project	CEO approved / endorsed	Relevance
5629	UNEP	Fiji	Review and Update of the National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants (POPs) in Fiji	GEF-5 (2010- 2014)	Enabling activity	CEO approved / endorsed	Relevance

5634	UNEP	Regional	Ratification and Implementation of the Nagoya Protocol in the Countries of the Pacific Region	GEF-5 (2010- 2014)	Medium- sized project	CEO approved / endorsed	Relevance
5649	UNEP	Mauritius	Nationally Appropriate Mitigation Actions for Low Carbon Island Development Strategy for Mauritius	GEF-5 (2010- 2014)	Medium- sized project	CEO approved / endorsed	Relevance
5681	UNEP	Regional	Building Climate Resilience of Urban Systems through Ecosystem- based Adaptation (EbA) in Latin America and the Caribbean.	GEF-5 (2010- 2014)	Full- sized project	CEO approved / endorsed	Relevance
5684	UNEP	Dominica	Support to Dominica for Development of National Action Program Aligned to the UNCCD 10 Year Strategy and Reporting Process under UNCCD	GEF-5 (2010- 2014)	Enabling activity	Completed / closed	Relevance
5694	UNEP	Comoros	Building Climate Resilience through Rehabilitated Watersheds, Forests and Adaptive Livelihoods	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5696	UNEP	St. Lucia	Support to Alignment of Saint Lucia's National Action Programme to the UNCCD Ten-Year Strategy and Reporting Process	GEF-5 (2010- 2014)	Enabling activity	Completed / closed	Relevance
5744	UNEP	Bahamas	Strengthening Access and Benefit Sharing (ABS)	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance
5774	UNEP	Regional	Advancing the Nagoya Protocol in Countries of the Caribbean Region	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance
5883	UNEP	Samoa	Support to Alignment of Samoa's National Action Programme (NAP) to the UNCCD 10 Year Strategy and Preparation of the Reporting and Review process.	GEF-5 (2010- 2014)	Enabling activity	CEO approved / endorsed	Relevance
5885	UNEP	Kiribati	Support to Alignment of Kiribati's National Action Programme to the	GEF-5 (2010- 2014)	Enabling activity	CEO approved / endorsed	Relevance

			UNCCD Ten-Year Strategy and				
			Reporting Process Support to Alignment of Seychelles				
5890	UNEP	Seychelles	National Action Programme to the UNCCD Ten-Year Strategy and Reporting Process	GEF-5 (2010- 2014)	Enabling activity	CEO approved / endorsed	Relevance
5893	UNEP	Jamaica	Support to the Alignment of Jamaica's National Action Programme to the UNCCD 10 Year Strategy and Preparation of the Reporting and Review process	GEF-5 (2010- 2014)	Enabling activity	CEO approved / endorsed	Relevance
6972	UNEP	Papua New Guinea	Preparation of Papua New Guinea's Initial Biennial Update Report to UNFCCC and the Third National Communication Report to the UNFCCC	GEF-6 (2014- 2018)	Enabling activity	Under implementation	Relevance
6978	UNEP	Regional	Continuing Regional Support for the POPs Global Monitoring Plan under the Stockholm Convention in the Pacific Region	GEF-6 (2014- 2018)	Medium- sized project	Under implementation	Relevance
9118	UNEP	Regional	Support to Preparation of the Third National Biosafety Reports to the Cartagena Protocol on Biosafety - AFRICA REGION	GEF-6 (2014- 2018)	Medium- sized project	Under implementation	Relevance
9187	UNEP	Regional	Development of Minamata Convention Mercury Initial Assessment in Pacific	GEF-6 (2014- 2018)	Enabling activity	Under implementation	Relevance
9188	UNEP	Papua New Guinea	Development of Minamata Initial Assessment in Papua New Guinea	GEF-6 (2014- 2018)	Enabling activity	Under implementation	Relevance
9377	UNEP	Cuba	Third National Communication and First Biennial Update Report to the UNFCCC	GEF-6 (2014- 2018)	Enabling activity	CEO approved / endorsed	Relevance
9455	UNEP	Regional	Development of Minamata Initial Assessment in the Caribbean (Trinidad and Tobago, Jamaica, St Kitts and Nevis, St Lucia)	GEF-6 (2014- 2018)	Enabling activity	CEO approved / endorsed	Relevance

9548	UNEP	Maldives	Development of a Minamata Initial Assessment in Maldives	GEF-6 (2014- 2018)	Enabling activity	CEO approved / endorsed	Relevance
9817	UNEP	Regional	Support to Eligible Parties to Produce the Sixth National Report to the CBD (Africa-1)	GEF-6 (2014- 2018)	Medium- sized project	CEO approved / endorsed	Relevance
9823	UNEP	Regional	Support to Eligible Parties to Produce the Sixth National Report to the CBD (Pacific)	GEF-6 (2014- 2018)	Medium- sized project	CEO approved / endorsed	Relevance
9824	UNEP	Regional	Support to Eligible Parties to Produce the Sixth National Report to the CBD (Africa-2)	GEF-6 (2014- 2018)	Medium- sized project	CEO approved / endorsed	Relevance
9860	UNEP	Cuba	Creation of Additional Biosafety Capacities that Lead to A Full Implementation of the Cartagena Protocol on Biosafety in Cuba	GEF-6 (2014- 2018)	Medium- sized project	CEO approved / endorsed	Relevance
9865	UNEP	Regional	Development of Minamata Initial Assessments (MIA) in the Caribbean (Antigua and Barbuda, Dominica, Grenada, St. Vincent and the Grenadines)	GEF-6 (2014- 2018)	Enabling activity	CEO approved / endorsed	Relevance
3923	UNIDO	Cabo Verde	SPWA-CC: Promoting market based development of small to medium scale renewable energy systems in Cape Verde	GEF-4 (2006- 2010)	Full- sized project	Under implementation	Relevance
4178	UNIDO	Regional	SPWA-CC Promoting Coherence, Integration and Knowledge Management under Energy Component of SPWA	GEF-4 (2006- 2010)	Medium- sized project	Under implementation	Relevance
4747	UNIDO	Dominican Republic	Stimulating Industrial Competitiveness Through Biomass- based, Grid-connected Electricity Generation	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5234	UNIDO	Maldives	Enabling Activities to Facilitate Early Action on the Implementation of the Stockholm Convention on POPs	GEF-5 (2010- 2014)	Enabling activity	Under implementation	Relevance

5331	UNIDO	Guinea- Bissau	Promoting Investments in Small to Medium Scale Renewable Energy Technologies in the Electricity Sector	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance
5869	UNIDO	Comoros	Minamata Convention Initial Assessment in the Comoros	GEF-5 (2010- 2014)	Enabling activity	Under implementation	Relevance
9308	UNIDO	Regional	Minamata Convention: Initial Assessment in Cabo Verde and Sao Tome and Principe	GEF-6 (2014- 2018)	Enabling activity	Under implementation	Relevance
1082	WBG	Regional	Southwest Indian Ocean Fisheries Project - SWIOFP	GEF-3 (2002- 2006)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
1084	WBG	Regional	Caribbean: Mainstreaming Adaptation to Climate Change	GEF-2 (1998- 2002)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
1092	WBG	Regional	Integrated Ecosystem Management in Indigenous Communities	GEF-3 (2002- 2006)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
1204	WBG	Regional	OECS Protected Areas and Associated Sustainable Livelihoods	GEF-3 (2002- 2006)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
1221	WBG	Guinea- Bissau	Coastal and Biodiversity Management Project	GEF-3 (2002- 2006)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
1471	WBG	Seychelles	 6. Improving Management of NGO and Privately-Owned Nature Reserves and High Biodiversity Islands in Seychelles 	GEF-3 (2002- 2006)	Medium- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
1571	WBG	Regional	EcoEnterprises Fund	GEF-2 (1998- 2002)	Medium- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)

2098	WBG	Regional	Western Indian Ocean Marine Highway Development and Coastal and Marine Contamination Prevention Project	GEF-3 (2002- 2006)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
2543	WBG	Kiribati	Kiribati Adaptation Program - Pilot Implementation Phase (KAP-II)	GEF-3 (2002- 2006)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
2552	WBG	Regional	Implementation of Pilot Adaptation Measures in coastal areas of Dominica, St. Lucia and St. Vincent & the Grenadines	GEF-3 (2002- 2006)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
2812	WBG	Papua New Guinea	Teacher's Solar Lighting Project	GEF-3 (2002- 2006)	Medium- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
3227	WBG	Guyana	Conservancy Adaptation Project	GEF-3 (2002- 2006)	Full- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
3798	WBG	Vanuatu	Increasing Resilience to Climate Change and Natural Hazards	GEF-4 (2006- 2010)	Full- sized project	Under implementation	Relevance
3817	WBG	Guinea- Bissau	SPWA-BD: Guinea Bissau Biodiversity Conservation Trust Fund Project	GEF-4 (2006- 2010)	Medium- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)
3858	WBG	Regional	Sustainable Financing and Management of Eastern Caribbean Marine Ecosystems	GEF-4 (2006- 2010)	Full- sized project	Completed / closed	Relevance
4068	WBG	Kiribati	Increasing Resilience to Climate Variability and Hazards	GEF-4 (2006- 2010)	Full- sized project	Under implementation	Relevance
4219	WBG	Haiti	Emergency program for solar power generation and lighting for Haiti, as a consequence of the Earthquake in Port au Prince.	GEF-4 (2006- 2010)	Medium- sized project	Completed / closed	Relevance and Sustainability (projects closed between 2007 and 2014)

4282	WBG	Kiribati	PAS: Grid Connected Solar PV Central Station Project	GEF-4 (2006- 2010)	Medium- sized project	Under implementation	Relevance
4283	WBG	Papua New Guinea	PAS: PNG Energy Sector Development Project	GEF-4 (2006- 2010)	Medium- sized project	Under implementation	Relevance
4284	WBG	Solomon Islands	SB Development of Community- based Renewable Energy Mini- Grids	GEF-4 (2006- 2010)	Medium- sized project	CEO approved / endorsed	Relevance
4605	WBG	Belize	Management and Protection of Key Biodiversity Areas	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
4940	WBG	Regional	Implementation of the Strategic Action Programme for the Protection of the Western Indian Ocean from Land-based Sources and Activities (WIO-SAP)	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
4966	WBG	Regional	Sustainable Groundwater Management in SADC Member States	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5581	WBG	Solomon Islands	Community Resilience to Climate and Disaster Risk in Solomon Islands Project	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5687	WBG	Belize	Energy Resilience for Climate Adaptation	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5812	WBG	St. Lucia	Geothermal Resource Development in Saint Lucia	GEF-5 (2010- 2014)	Medium- sized project	Under implementation	Relevance
5814	WBG	Regional	Pacific Resilience Program	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance
5905	WBG	Regional	First South West Indian Ocean Fisheries Governance and Shared Growth Project (SWIOFish 1)	GEF-5 (2010- 2014)	Full- sized project	Under implementation	Relevance

6970	WBG	Regional	Pacific Islands Regional Oceanscape Program (PROP)	GEF-6 (2014- 2018)	Full- sized project	Under implementation	Relevance
9451	WBG	Regional	Caribbean Regional Oceanscape Project	GEF-6 (2014- 2018)	Full- sized project	CEO approved / endorsed	Relevance
9563	WBG	Seychelles	Third South West Indian Ocean Fisheries Governance and Shared Growth Project (SWIOFish3)	GEF-6 (2014- 2018)	Full- sized project	Under implementation	Relevance
5765	WWF-US	Regional	Integrated Transboundary Ridges- to-Reef Management of the Mesoamerican Reef	GEF-5 (2010- 2014)	Full- sized project	CEO approved / endorsed	Relevance

Annex 2: List of Projects Visited in Caribbean

DOMINICAN REPUBLIC

Dominican Republic sustainability cohort

GEF ID	Agency	Focal Area	Title	Project type	Outcome rating	Sustainability rating	Change rating
2512	UNDP	LD	Demonstrating Sustainable Land Management in the Upper Sabana Yegua Watershed System	FSP / Country- level	5- Satisfactory	3- Moderately Likely	Positive
1254	UNEP / UNDP	IW	Integrating Watershed and Coastal Area Management (IWCAM) in the Small Island Developing States of the Caribbean	FSP / Regional	4 - Moderately Satisfactory	3 - Moderately Likely	Positive
3183	UNEP	BD	Mitigating the Threats of Invasive Alien Species in the Insular Caribbean [MTIASIC]	FSP / Regional	5- Satisfactory	4- Likely	Positive

Dominican Republic Relevance Cohort

GEF ID	Agency	Focal Area	Title	Project type	Project status	Environmental challenges addressed
2907	UNDP	BD	Re-engineering the National Protected Area System in Order to Achieve Financial Sustainability	FSP / Country-level	Completed	Threats to land-based biodiversity
4747	UNIDO	сс	Stimulating Industrial Competitiveness Through Biomass-based, Grid- connected Electricity Generation	FSP / Country-level	Under imple- mentation	Climate change; Sea level rise, Other challenge not mentioned: Renewable energy and energy efficiency
5088	UNDP	BD	Conserving Biodiversity in Coastal Areas Threatened by Rapid Tourism and Physical Infrastructure Development	FSP / Country-level	Under imple- mentation	Threats to land-based biodiversity
2929	UNDP	Multi Focal	Reducing Conflicting Water Uses in the Artibonite River Basin through Development and Adoption of a Multi-focal Area Strategic Action Programme	FSP / Regional	Completed	Deforestation and Land Degradation, Water quality and quantity

BELIZE Belize sustainability cohort

GEF ID	Agency	Focal Area	Title	Project type	Outcome rating	Sustainability rating	Change rating
2068	UNDP	BD	Integrating Protected Area and Landscape Management in the Golden Stream Watershed [GSW]	MSP / Country- level	3- Moderately unsatisfactory	3- Moderately likely	Neutral
3062	UNDP	Multi Focal	Strengthening Institutional Capacities for Coordinating Multi-Sectoral Environmental Policies and Programmes	MSP / Country- level	4- Moderately satisfactory	3- Moderately likely	Positive

Belize Relevance Cohort

GEF ID	Agency		Title	Project type	Project status	Environmental challenges addressed
3861	UNDP	BD	Strengthening National Capacities for the Consolidation, Operationalization and Sustainability of Belize's Protected Areas System	MSP / Country- level	Completed	Other challenge not mentioned above: capacity building
4605	World Bank	BD	Management and Protection of Key Biodiversity Areas	FSP / Country- level	Under imple- mentation	Climate change; Sea level rise Threats to land- based biodiversity
5048	UNDP	Multi Focal	Capacity Building for the Strategic Planning and Management of Natural Resources in Belize	MSP / Country- level	Under imple- mentation	Other challenge not mentioned above: capacity building

ST. LUCIA

St. Lucia's sustainability cohort

GEF ID	Agency	Focal Area	Title	Project type	Outcome rating	Sustainability rating	Change rating
1084	World Bank	СС	Caribbean: Mainstreaming Adaptation to Climate Change	FSP / Regional	4 - Moderately Satisfactory	3 - Moderately Likely	Positive
1254	UNEP / UNDP	IW	Integrating Watershed and Coastal Area Management (IWCAM) in the Small Island Developing States of the Caribbean	FSP / Regional	4 - Moderately Satisfactory	3 - Moderately Likely	Positive
2552	World Bank	СС	Implementation of Pilot Adaptation Measures in coastal areas of Dominica, St. Lucia and St. Vincent & the Grenadines	FSP / Regional	4 - Moderately Satisfactory	3 - Moderately Likely	Positive
3183	UNEP	BD	Mitigating the Threats of Invasive Alien Species in the Insular Caribbean [MTIASIC]	FSP / Regional	5- Satisfactory	4- Likely	Positive

St. Lucia's relevance cohort

GEF ID	Agency	Focal Area	Title	Project type	Project status	Environmental challenges addressed
5057	UNEP	Multi Focal	Lyanola - Natural Resource Management of the NE Coast	FSP / Country- level	Under imple- mentation	Threats to marine resources Threats to land-based biodiversity
5197	UNEP	Multi Focal	Increase St. Lucia's Capacity to Monitor MEA Implementation and Sustainable Development	MSP / Country- level	Under imple- mentation	Other challenges not mentioned above: capacity building
5812	World Bank	СС	Geothermal Resource Development in St. Lucia	MSP / Country- level	Under imple- mentation	Other challenges not mentioned above: capacity building

PACIFIC REGION

Vanuatu projects reviewed – Sustainability Cohort

GEF ID	Agency	Title	Project type	GEF Phase	Status	Focal area
1682	UNDP	Facilitating and Strengthening the Conservation Initiatives of Traditional Landholders and their Communities to Achieve Biodiversity Conservation Objectives	MSP	GEF-3	Completed (2011)	BD

Vanuatu projects reviewed – Relevance Cohort

GEF ID	Agency	Title	Project type	GEF Phase	Status	Focal area
3798	World Bank	Increasing Resilience to Climate Change and Natural Hazards	FSP	GEF-4	Completed (2018)	СС
5049	UNDP	Adaptation to Climate Change in the Coastal Zone in Vanuatu	FSP	GEF-5	Under impl. (from 2014)	СС
5655	UNDP	Mainstreaming Global Environmental Priorities into National Policies and Programmes	MSP	GEF-5	Under impl. (from 2015)	Multi focal
9197	ADB	Protecting Urban Areas Against the Impacts of Climate Change in Vanuatu	FSP	GEF-5	Approved (2015)	СС

Kiribati projects reviewed - Sustainability Cohort

GEF ID	Agency	Title	Project type	GEF Phase	Status	Focal area
2543	World Bank	Kiribati Adaptation Program - Pilot Implementation Phase (KAP-II)	FSP	GEF-3	Completed (2011)	сс

Kiribati projects reviewed – Relevance Cohort

GEF ID	Agency	Title	Project type	GEF Phase	Status	Focal area
3897	UNEP	PAS: Phoenix Islands Protected Area (PIPA)	MSP	GEF-4	Completed (2016)	BD
4068	World Bank	Increasing Resilience to Climate Variability and Hazards	FSP	GEF-4	Completed (2017)	СС
4282	World Bank	PAS: Grid Connected Solar PV Central Station Project	MSP	GEF-4	Completed (2016)	СС
5130	UNDP	Integrating Global Environmental Priorities into National Policies and Programmes	MSP	GEF-5	Approved (2014)	Multi- focal

AFRICA AND INDIAN OCEAN

Guinea-Bissau projects reviewed – Sustainability Cohort

GEF ID	Agency	Title	Project type	GEF Phase	Status	Focal area
1221	World Bank	Coastal and Biodiversity Management Project	FSP/Contry level	GEF- 3	Completed (2010)	BD
3817	World Bank	SPWA-BD: Guinea-Bissau Biodiversity Conservation Trust Fund	MSP/Country level	GEF- 4	Completed (2014)	BD
1188	UNDP	Combating living resource depletion and coastal area degradation in the Guinea current LME through ecosystem-based regional actions	FSP/ Regional	GEF- 3	Completed (2011)	IW
2614	UNDP	Adaptation to climate change – Responding to shoreline change and its human dimensions in West Africa through integrated coastal area management	FSP/ Regional	GEF- 3	Completed (2011)	СС

Guinea-Bissau projects reviewed – Relevance Cohort

GEF ID	Agency	Title	Project type	GEF Phase	Status	Focal area
3575	UNDP	SPWA-BD Support for the consolidation of a protected area system in Guinea-Bissau forest belt	MSP	GEF-4	Completed (2014)	BD
4019	UNDP	Strengthening resilience and adaptive capacity to climate change in Guinea-Bissau agrarian and water sectors	FSP	GEF-4	Completed (2015)	CC
5331	UNIDO	Promoting investments in small and medium scale renewable energy technologies in the electricity sector	MSP	GEF-5	Under impl. (from 2014)	СС
5368	UNDP	Strengthening the financial and operational framework of the national protected areas system in Guinea-Bissau	FSP	GEF-5	Under impl. (from 2015)	BD

Comoros projects reviewed – Sustainability Cohort

GEF ID	Agency	Title	Project type	GEF Phase	Status	Focal area
3363	IFAD	SIP: Integrated Ecological Planning and Sustainable Land Management in Coastal Ecosystems in the Comoros in the Three Island of (Grande Comore, Anjouan, and Moheli)	MSP / Country- level	GEF-4	Completed	Multi
1082	World Bank	Southwest Indian Ocean Fisheries Project – SWIOFP	FSP / Regional	GEF-3	Completed	IW
1247	UNEP	Addressing Land-based Activities in the Western Indian Ocean (WIO-LaB)	FSP / Regional	GEF-3	Completed	IW
2098	World Bank	Western Indian Ocean Marine Highway Development and Coastal and Marine Contamination Prevention Project	FSP / Regional	GEF-3	Completed	IW

Comoros projects reviewed – Relevance Cohort

GEF ID	Agency	Title	Project type	GEF Phase	Status	Focal area
3857	UNDP	Adapting Water Resource Management in Comoros to Increase Capacity to Cope with Climate Change	FSP / Country- level	GEF-4	Completed	СС
4974	UNDP	Enhancing Adaptive Capacity and Resilience to Climate Change in the Agriculture Sector in Comoros	FSP / Country- level	GEF-5	Under imple- mentation	СС

Mauritius projects reviewed - Sustainability Cohort

GEF ID	Agency	Title	Project type	GEF Phase	Status	Focal area
1246	UNDP	Partnership for Marine Protected Areas in Mauritius	MSP / Country- level	GEF-3	Completed	BD
1247	UNEP	Addressing land-based activities in the Western Indian Ocean (WIO-LAB)	FSP / Regional	GEF-3	Completed	IW

Mauritius projects reviewed – Relevance Cohort

GEF ID	Agency	Title	Project type	GEF Phase	Status	Focal area
3205	UNDP	Sustainable management of POPs in Mauritius	MSP / Country- level	GEF-4	Completed	POPs
3526	UNDP	Expanding coverage and strengthening management effectiveness of the terrestrial protected areas network on the island of Mauritius	FSP / Country- level	GEF-4	Completed	BD
4099	UNDP	Removal of barriers to solar PV power generation in Mauritius, Rodrigues and the outer islands	FSP / Country- level	GEF-4	Completed	СС
5514	UNDP	Mainstreaming biodiversity into the management of the coastal zone in the Republic of Mauritius	FSP / Country- level	GEF-5	Under imple- mentation	BD/ LD

Maldives projects reviewed – Sustainability Cohort

GEF ID	Agency	Title	Project type	GEF Phase	Status	Focal area	
1029	UNDP	Renewable energy technology development and application project	MSP / Country- level	GEF-3	Completed	СС	
1099	UNDP	Atoll ecosystem-based conservation of globally significant biodiversity in the Maldives Baa Atoll	FSP / Country- level	GEF-3	Completed	BD	

Maldives projects reviewed – Relevance Cohort

GEF ID	Agency	Title	Project type	GEF Phase	Status	Focal area
3847	UNDP	Integrating climate change risks into resilient island planning in the Maldives	FSP / Country- level	GEF-4	Completed	СС
4431	UNDP	Increasing climate change resilience of Maldives through adaptation in the tourism sector	MSP / Country- level	GEF-5	Completed	СС
4629	UNEP	Strengthening low-carbon energy island strategies	FSP / Country- level	GEF-5	Under imple- mentation	сс
5234	UNIDO	Enabling Activity to facilitate early action on the implementation of the Stockholm Convention on POPs	EA / Country- level	GEF-5	Under imple- mentation	POPs

CARIBBEAN

Jamaica projects reviewed - Sustainability Cohort

GEF ID	Agency	Title	Project type	GEF Phase	Status	Focal area
1254	UNEP / UNDP	Integrating Watershed and Coastal Area Management (IWCAM) in the Small Island Developing States of the Caribbean	FSP / Regional	GEF-3	Completed	IW
3049	UNDP	Piloting Natural Resource Valuation within Environmental Impact Assessments	MSP / Country- level	GEF-4	Completed	Multi
3183	UNEP	Mitigating the Threats of Invasive Alien Species in the Insular Caribbean [MTIASIC]	FSP / Regional	GEF-4	Completed	BD

¹The project is mentioned in the evaluation guidance note as multi-focal, but project documents show IW

Jamaica projects reviewed – Relevance Cohort

GEF ID	Agency	Title	Project type	GEF Phase	Status	Focal area
3764	UNDP	Strengthening the Operational and Financial Sustainability of the National Protected Area System	FSP / Country- level	GEF-4	Completed	BD
4167	UNEP	LGGE Promoting Energy Efficiency and Renewable Energy in Buildings in Jamaica	FSP / Country- level	GEF-4	Completed	СС
4454	IADB	Integrated Management of the Yallahs River and Hope River Watersheds	FSP / Country- level	GEF-5	Under imple- mentation	BD/LD

5476	UNDP	Third National Communication (TNC) and Biennial Update Report to the UNFCCC	EA / Country- level	GEF-5	Under imple- mentation	CC
5843	UNDP	Deployment of Renewable Energy and Improvement of Energy Efficiency in the Public Sector	MSP / Country level	GEF-5	Under imple- mentation	CC
5893	UNEP	Support to the Alignment of Jamaica's National Action Programme to the UNCCD 10 Year Strategy and Preparation of the Reporting and Review process.	EA / Country- level	GEF-5	Completed	LD

Annex 3: Case study: Geospatial analyses demonstrate GEF relevance and effectiveness in St. Lucia

Background

165. This case study demonstrates the relevance and effectiveness of GEF interventions using geospatial analysis. The \$7.3 million Iyanola—Natural Resource Management of the NE Coast project (GEF ID 5057) was launched in 2015 to improve the effective management and sustainable use of the natural resource base of the NE Coast of Saint Lucia and generate multiple global environmental benefits. The region hosts Iyanola dry forests (Figure 1 and 2) that are classified as the key biodiversity areas and important bird areas. These dry forests are unique to the region and an important habitat for hosting a combination of rare and endemic flora and fauna species, and ecosystems rich in biodiversity and unique dry scrub forests and pristine beaches. The forest region is also endowed with a variety of environmental resources which form an important and potential socioeconomic and cultural asset base of the island's national economy.



Figure 1: Iyanola Dry Forests, St. Lucia;

Figure 2: (right) Location of the Project sites; (Source: GEF IEO)

166. The Iyanola dry forests area is threatened mainly by agriculture expansion, logging, and forest fire due to slash and burn practices. This is because a major part of the region is privately owned by farmers who practice agriculture (Figure 7; a-d). To address these threats the project adopted a cross-sectoral strategic approach to integrated landscape management involving

forest, coastal and land use management. The main activities included developing a regulatory framework, enhancing capacity to produce biodiversity-friendly goods and services, restoration, and piloting land use plans.



Figure 3: (a) Top left (b)Top right (c) Bottom left—Slash and burn, and (d) Bottom right forest clearing (Source: GEF IEO)

Geospatial analysis

167. The geospatial analysis consisted of (1) forest change analysis to examine the long-term trends of forest loss in the protected area and its surrounding areas, (2) the long-term vegetation productivity trend analysis within the protected area and the select restoration sites visited by the evaluation team. (Figure 3).

168. Government-generated data was used as there are inconsistencies in globally available data sets for SIDS. The IEO attempted to leverage the existing World Database on Protected Areas and satellite data to retrieve data for geospatial analysis. However, the boundary data and the satellite products were inconsistent and the global database for SIDS are relatively less accurate. Therefore, the data available from the Ministry of Environment, government of St. Lucia was used for the boundary and additional satellite data products was generated by the IEO for geospatial analysis. The island has taken a big step forward in making data available.

Working with UNEP on a GEF-funded project, the Saint Lucia government launched its first national environmental information system. Information on the three big treaties is available to ministries, the private sector, academia, multilateral environmental treaty focal points and the public. For each convention, indicators related to broader policy goals and objectives are being integrated to support reporting and translate data into useful and actionable information.

Forest Cover Loss (2001-2018)

Figure 4: Spatial distribution of forest loss—the concentric boundaries represent the Iyanola boundary and 2 Km buffer and the red areas are sites of forest loss; (Source: GEF IEO)

169. Forest loss analysis show that overall forest rate loss within the national park between 2001- 2018 is comparable to that of the entire country and is concentrated near the boundaries, in privately owned estates and the buffer area. The total land area within the lyonalola protected area is 52.09 km² of which 47.47 km² or 91 percent was classified as forest in 2000. The satellite data analysis reveals that between 2001- 2018 that area lost an estimated 0.48 km² of forest, about 1 percent of the total. The overall forest rate loss within the protected area for the same period is about the same as the entire country. The total forest area in St. Lucia was about 514.36 km² in 2000 which is about 86.7 percent of its total land area. The forest loss within lyanola NP is mostly confined to the estates and near the boundaries (Figure 8). The forest loss is almost double in the 2 km buffer of the protected area. This indicates the need for a landscape-based spatial planning that the project is focusing on through Component 1 which was to Enhance Land Use Planning and Regulatory Framework. Time series forest loss data (Figure 5) shows an increase in forest loss in the protected area before the project implementation started. However, the forest loss has decreased slightly down during the project period (Figure 1). Latest data for 2018 point that the percent loss has further decreased to 0.05 percent in the protected area and about 0.04 percent in the buffer areas.



Figure 5: Percent Forest Loss (2001–18); (Source: GEF IEO)

170. **Overall, the forest change analysis reveals that buffer area has much more loss compared to the protected area due to anthropogenic pressure (Figure 10).** The project is still under implementation and the restoration efforts would take time to show results and will not captured satellites. The field visit also corroborated that besides forest loss, forest degradation is a major environmental factor affecting the health of the ecosystem in the region. We therefore, conducted additional dense time series vegetation productivity to analyze and highlight the long- term trends of vegetation health.

171. Dense time series vegetation productivity analysis to assess the spatial and temporal extent of vegetation trends shows that overall there is a small increase in vegetation productivity since 2018 (Figure 6). Sixteen-day Moderate Resolution Imaging Spectroradiometer (MODIS) was used to derive normalized difference vegetation index (NDVI), a widely used proxy for vegetation health. The range of NDVI data varies between -1 and 1, higher values indicate high vegetation productivity. The NDVI data were temporally aggregated to produce monthly time series for the project duration. Precipitation data was also used to untangle the link between vegetation productivity and precipitation. In recent years, the vegetation has slightly increased (Figure 6, left) even though there is a minor decrease in precipitation (Figure 10, right) indicating that either restoration efforts are underway, or an increase in agricultural intensity.



Figure 6: (left) Average Vegetation Productivity Trend; and (right) Monthly precipitation trend; (Source: GEF IEO)

172. The average NDVI between 2010 and 2014 was 0.76 (+-0.17) which increased to 0.77 (+-0.16) between 2015 and 2019 (Figure 7). This minor increase can't be fully attributed to the intervention because these are dry forests and are sensitive to changes in precipitation.



Figure 7(right): Average Vegetation Productivity; (Source: GEF IEO)

173. Both analyses on forest loss, and vegetation productivity highlight that forest loss and forest degradation has been an issue in this important ecosystem before the project started. Thus, the GEF support to the fragile lyanola forest ecosystem through an integrated approach,

was relevant in addressing the drivers of ecosystem degradation both through national level planning and regulatory changes, and site- specific activities.

174. **Early Effectiveness: Positive Vegetation productivity at the restoration sites.** Overall there is an increase in vegetation productivity at all the restoration sites since project implementation. The evaluation team visited three restoration sites that were in early stages of growth (Figure 8, right). On an average the reforested plants were about 2-3 meters in height. The evaluation team also noticed growth in the understory around the plantations (Fig 8, left).



Figure 8: A forest restoration site inside the Iyanola National Park (left); Map showing the location of the three restoration sites (right); (Source: GEF IEO)

175. There has been a rapid increase in vegetation between 2015 and 2016 (Figure 9). The average NDVI at the three sites before the project start in 2015 was 0.3 which increased to 0.5 in 2018, a total increase of 20 percent. The productivity has tapered down in 2018 compared to the previous two years perhaps due to a decrease in precipitation (Figure 8, right). The plantation of native and non-native trees together with the understory has led to the increased vegetation productivity, also verified during the site visit. The result, therefore, highlights the early outcome of the GEF supported intervention in increasing the vegetation cover at select restoration sites. In the future a similar follow up exercise using satellite data analysis could reveal the impact of the GEF intervention for the entire lyanola forest habitat and on the effectiveness of the land use planning and policy changes in addressing the drivers of ecosystem degradation.



Figure 9: Landsat derived vegetation productivity at the restoration sites. NDVI before and during the project; (Source: GEF IEO)

176. This case study and exercise points out to the need for better locally validated data as the global data sets such as the World Database on Protected Areas might not be consistent. This is particularly important in SIDS which are smaller in spatial extent and have highly uneven coastlines that calls for a more accurate boundary delineation in order to carry out spatial analysis or planning.