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**STRATEGIC COUNTRY CLUSTER EVALUATION:
SAHEL AND SUDAN-GUINEA SAVANNA BIOMES
VOLUME II— TECHNICAL DOCUMENTS**

(Prepared by the Independent Evaluation Office of the GEF)

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TECHNICAL DOCUMENT 1: APPROACH PAPER

August 2018

1. Background

1. The Global Environment Facility (GEF) was created in 1991 to serve as a financial mechanism that would ensure the achievement of global environmental benefits in the process of countries meeting their commitments to global environmental conventions. From its 4th replenishment phase (2006–10) onwards, the GEF has been moving toward more integrated programming as a strategy to tackle the main drivers of environmental degradation and to achieve impact at scale ([GEF IEO 2018a](#)). In the programming directions for the 7th replenishment period (2018–22), the GEF proposes to increase its investments in integrated programming ([GEF 2018](#)). Tackling the main drivers of environmental degradation through integrated programming is justified by the fact that many of these drivers extend their influence beyond national boundaries. To participate in integrated multiple country initiatives, governments need to find a balance between their national sustainable development priorities and their commitments to contribute to the global goals of the international environmental conventions that they participate in. In this context, the way GEF support is operationalized at the country level is increasingly a key area of inquiry for the Independent Evaluation Office (IEO) of the GEF.

2. The concept of the Strategic Country Cluster Evaluations (SCCEs) was introduced in the IEO work program for GEF-6 and subsequently approved by the Council ([GEF IEO 2015](#)). SCCEs focus on common themes across clusters of countries and/or portfolios involving a critical mass of GEF investments toward comparable or shared environmental challenges, and over the years have gained a substantial experience with GEF programming. Starting from aggregate portfolio analysis to identify trends as well as cases of positive and absent or negative change, SCCEs intend to deep dive into those themes and unpack them through purposive evaluative inquiry. As was the case for their predecessor Country Portfolio Evaluations (CPEs),¹ SCCE design is based on the same conceptual analysis framework to enable comparing findings across geographic regions and/or portfolios. In addition to the aggregate portfolio analysis, SCCEs plan to use geospatial analysis to identify change on key environmental outcome indicators over time. Targeted field verifications will follow in specific hot spots selected based on the findings of the geospatial and portfolio analyses. The purpose of field verifications is to identify and understand the determinants of the observed change, or the lack thereof.

3. This SCCE covers two Sub-Saharan Africa (SSA) biomes,² the Sahel and the Sudan-Guinea Savanna. Selection of the Sahel and the Sudan-Guinea Savanna biomes is based on the

¹ From 2006 to 2016, the GEF IEO has conducted 26 country portfolio evaluations and studies, which used the country as the unit of analysis to examine the totality of GEF support across all GEF Agencies and programs. The new strategic country cluster evaluations build on this experience.

² A biome is an ecological zone sharing similar habitats or vegetation types. Its uniformity is defined by the type of plant life in relation to temperature and rainfall patterns. Each biome consists of several terrestrial ecoregions (a smaller class). An

countries' comparable land-based environmental challenges. These countries also face challenges related to governance, demographics, migration, conflict, and fragility, working as drivers for the environmental issues at hand. Most countries in the two biomes are LDCs, and half are fragile ([World Bank 2018](#)). The SCCE will assess some of the key issues that emerged from the main findings and conclusions of the 6th Comprehensive Evaluation of the GEF (OPS6) ([GEF IEO 2017a](#)), deserving further exploration. These include the sustainability of outcomes, the relevance of GEF support to countries, and their responsiveness to convention guidance. These are important issues in the SSA. The SCCE will also assess gender, resilience, and performance in fragile situations as cross-cutting issues. The SCCE will be conducted in parallel with two other SCCEs, one covering the Small Island Developing States (SIDS) and the other the Least Developed Countries (LDC). The three SCCEs will be harmonized in terms of questions, approach, and process.

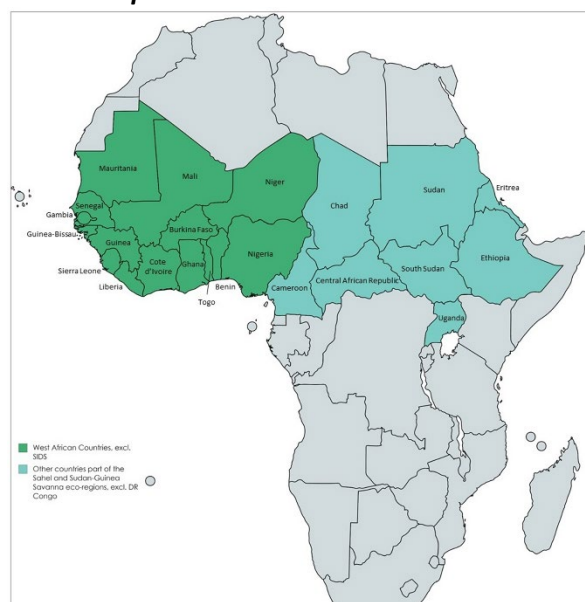
2. The Sahel and Sudan-Guinea Savanna Biomes

4. The Sahel and Sudan-Guinea Savanna cover a 12.2 million square kilometer land area, stretching from the African east coast to the west coast. Countries in the two biomes include Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Eritrea, Ethiopia, Gambia, Ghana, Guinea, Guinea-Bissau, Ivory Coast, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, South Sudan, Sudan, Togo, and Uganda. The Sahel includes parts of 10 countries. The Sudan-Guinea Savanna covers large parts of 16 countries. Eight countries are part of both biomes (maps 1 and 2).

Map 1: Sub-Saharan Africa biomes



Map 2: Countries in the two biomes



Source: [Riley 2012](#)

ecoregion covers a realm of land/water having geographically distinctive communities, sharing the same environmental conditions and ecological dynamics ([Data Basin 2010](#)).

5. Despite experiencing strong economic growth in recent years, most countries in the Sahel and Sudan-Guinea Savanna are still low-income countries. The Gross Domestic Product (GDP) per capita is US\$ 1,396.³ The 604-million population has growth expectations that are in line with those of the LDCs, in other words, a doubling of population between 2010 and 2050. Over 60 percent of the population live in rural areas. Although the population density is relatively low at 49 people per square kilometer, the average urban growth rate is close to four percent per year. Urban spaces are characterized by extremes of prosperous centers and poor, informal settlements. Many governments in these regions struggle to provide basic social services, especially access to water and sanitation ([UN DESA 2014](#)). Other challenges relate to achieving food and energy security and managing environmental risks.

6. A large portion of the two biomes is characterized by arid and semiarid climates with strong climatic variations and irregular rainfalls. Forty-one percent of the land area is marked as agricultural land, of which approximately 12 percent is designated as arable land. Approximately 12 percent is classified as forest area, and approximately 13 percent is designated as terrestrial protected area. Rain-fed subsistence agriculture is the main source of household livelihoods in many parts of the African drylands, especially the Sahel ([Kumssa and Jones 2010](#)). The drylands, grasslands, and savannas in the two biomes experience high spatial and temporal variability in rainfall, resulting in dramatic differences in plant growth, habitats, and human livelihoods ([UNEP 2007](#)).

3. Environmental Challenges in the Two Biomes

7. Countries in Africa's Sahel and Savanna face complex environmental challenges, the most common of which are deforestation, land degradation, desertification, and biodiversity loss (table 1). These challenges are compounded by the pressing socioeconomic needs of a rapidly growing population. Degradation of agricultural lands coupled with the high variability of rainfall poses obstacles to the food security and poverty reduction efforts in the region ([UN 2013](#)).

8. A significant part of the Sahel is classified as desert, and the remaining part is highly vulnerable to desertification. This vulnerability is prone to increase with prolonged droughts and an increasing human pressure on water and land resources. Biomass burning, a common practice to all African savannas, is among the contributing factors. Controlled fires are used in the two biomes to manage grasslands and savannas for livestock production and wildlife, control pests, clear dying vegetation, and convert wild lands to cropland ([Trollope and Trollope 2004](#)). Poor agricultural practices are the primary human cause for desertification in the two biomes due to their role in deforestation, soil erosion, and pollution.

9. The two biomes also face issues of pressure on water availability, accessibility, and demand. In these predominantly arid and semiarid lands, water consumption for agriculture

³ At constant 2010 US\$.

highly exploits both surface and groundwater resources. Combined with climate variability and drought, this adds further pressure on the already limited water resources in the biomes. Because of decreased rainfall and increased water usage, the extent of Lake Chad decreased by 95 percent over roughly 35 years ([UNEP 2008](#)). Lake Chad and the Nile River basin provide most of the available freshwater resource coming from transboundary watercourses. Groundwater in West Africa is difficult to access and is only approximately 1 percent of the water used. Fuelwood and charcoal demand for household energy consumption puts pressure on forests and poses an additional threat to biodiversity. The balance between environment and development needs becomes central to sustainability, sustainable development, and livelihoods ([Biggs et al 2015](#)).

10. The Sahel and Soudan-Guinea Savanna face important threats to biodiversity loss. Hosting two of Africa’s eight biodiversity hotspots—the Guinean Forests of West Africa and the “W” biosphere reserve—these areas act as a buffer against advancing desertification. Human-induced activity, such as agricultural expansion, uncontrolled fires, and poaching, poses a threat to the biodiversity and wildlife in these hotspots. Species are also threatened by logging, mining, and hunting. Increasing household demand for fuelwood and charcoal puts further pressure of forest resources, threatening biodiversity. Marine and coastal biodiversity is under stress due to overharvesting and unsustainable fishing in the coastal areas of West Africa ([USAID 2013](#)).

Table 1: Main environmental challenges in the 23 countries

Benin	• Deforestation • Desertification • Threats to biodiversity		Liberia	• Deforestation and rubber plantations • Threats to biodiversity • Water pollution
Burkina Faso	• Water scarcity • Land degradation and desertification • Deforestation		Mali	• Desertification and drought • Water availability and pollution • Threats to biodiversity
Cameroon	• Land degradation and deforestation • Overharvesting of biological resources • Degradation of coastal and marine ecosystems		Mauritania	• Desertification and deforestation • Iron Mining • Fisheries and coastal ecosystems
Central African Republic	• Subsistence and commercial poaching • Deforestation and land degradation • Diamond mining and pollution		Niger	• Desertification and deforestation • Threats to wildlife • Environmental consequences of mining
Chad	• Drought • Desertification and land degradation		Nigeria	• Desertification • Deforestation and threats to biodiversity • Oil pollution

	• Access to water and sanitation		
Eritrea	• Water stress • Land availability and degradation • Deforestation and threats to biodiversity	Senegal	• Urban pollution • Deforestation • Coastal wetlands and fisheries overexploitation
Ethiopia	• Water availability and access to a safe source • Livestock, soil erosion, and land degradation • Threats to biodiversity and endemism	Sierra Leone	• Deforestation • Land degradation • Overfishing
Gambia	• Drought and agricultural productivity • Threats to forest and wetland ecosystems • Overfishing and coastal erosion	South Sudan	• Soil erosion and land degradation • Poaching and the ivory trade • Forests and fisheries
Ghana	• Deforestation • Land degradation and coastal erosion • Overfishing and reduced water in Lake Volta	Sudan	• Soil erosion and land degradation • Poaching and the ivory trade • Forests and fisheries
Guinea	• Deforestation and refugees • Overfishing and destruction of mangroves • Land degradation	Togo	• Land degradation and deforestation • Threats to aquatic ecosystems • Threats to biodiversity
Guinea-Bissau	• Deforestation • Cashew farming and soil erosion • Threats to the Bijagos biosphere reserve	Uganda	• Land degradation and deforestation • Habitat degradation and threats to biodiversity • Water availability and pollution
Ivory Coast	• Deforestation • Threats to biodiversity • Threats to coastal ecosystems		

Source: [UNEP 2008](#)

11. Faced with severe environmental challenges, most countries in the two biomes have become party to the main international and regional environmental agreements. The convention to combat desertification (UNCCD), the convention on biological diversity (CBD), and the Stockholm convention have been ratified by all the 23 countries in the two biomes, except for South Sudan, which still has not ratified the climate change convention (UNFCCC) and the Stockholm convention. Most countries are also party to the newly established Minamata convention. Some countries joined other region-specific environmental agreements, such as the Permanent Inter-State Committee for Drought Control in the Sahel (CILSS) and the Abidjan Convention for the Cooperation in the Protection, Management, and Development of

the Marine and Coastal Environment of the Atlantic Coast of the West, Central, and Southern Africa Region (table 2).

Table 2: Countries' ratification of international environmental agreements

	<i>UNFCC C</i>	<i>UNCC D</i>	<i>CB D</i>	<i>Stockhol m</i>	<i>Rotterda m</i>	<i>Base l</i>	<i>Minamat a</i>	<i>CILS S</i>	<i>Abidja n</i>
Benin	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Burkina Faso	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A
Cameroon	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Yes
Central African Republic	Yes	Yes	Yes	Yes	No	Yes	Yes	N/A	N/A
Chad	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	N/A
Eritrea	Yes	Yes	Yes	Yes	Yes	Yes	No	N/A	N/A
Ethiopia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A
Gambia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ghana	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Yes
Guinea	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Guinea-Bissau	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ivory Coast	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Liberia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Yes
Mali	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A
Mauritania	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Niger	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A
Nigeria	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Yes
Senegal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sierra Leone	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Yes
South Sudan	No	Yes	Yes	No	No	No	No	N/A	N/A
Sudan	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	N/A
Togo	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Uganda	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A

Source: Convention websites

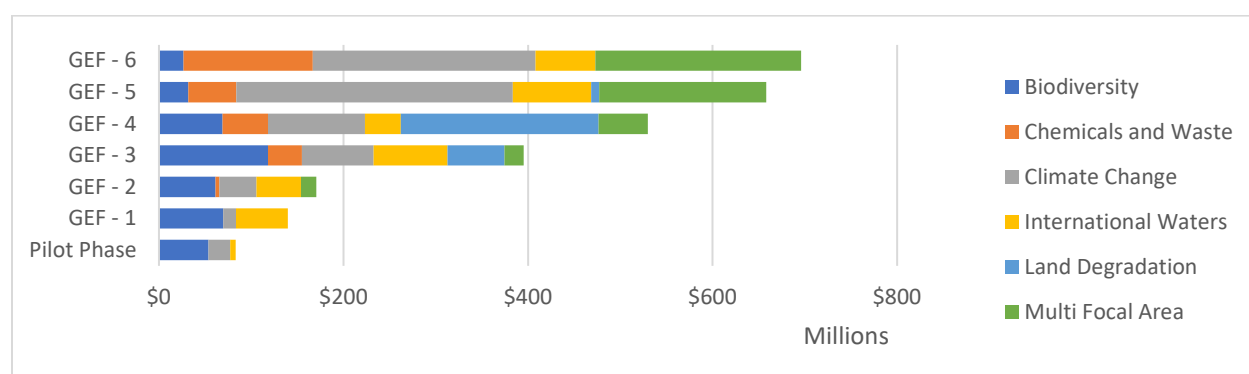
12. To comply with convention obligations, several countries in the two biomes have developed sound national environmental policy and legal frameworks. These frameworks are often not enforced either due to lack of funding, limited technical capacity, and/or political will in terms of different government priorities. According to UNEP, "Although some [African] countries have incorporated the MEAs into national policies and framework laws, few have succeeded in achieving the enforcement of policies and laws" ([UNEP 2006, 501](#)).

4. GEF Support in the Two Biomes

13. Overall, since its pilot phase to date, the GEF has invested \$2.67 billion in grants accompanied by \$17.7 billion in cofinancing through 783 national and regional interventions

that are relevant to the countries in the two biomes (figure 1).⁴ The 23 countries are also part of 84 global projects and programs totaling \$683.3 million, among which is the Small Grants Programme (SGP). Countries' participation in the SGP started in GEF-4 and continues to this day. A total of \$209 million funding for the global SGP has been provided twice in each replenishment phase from GEF-4 to GEF-6.

Figure 1: Focal area grants by GEF phase in the two biomes



Note: This figure excludes global interventions

14. As seen in figure 1, in GEF-5, climate change became by far the highest share of the GEF portfolio. Most climate change interventions fall under the adaptation category. Land degradation projects started in GEF-3 with the establishment of the land degradation focal area. These projects increased from 16 percent in GEF-3 to 40 percent of the total in GEF-4 and decreased in GEF-5. As in the case of the GEF overall, multifocal area projects in this portfolio started growing during GEF-4, a trend that is still observable today. GEF-6 sees a substantial increase in the chemicals and waste investment.

15. Table 3 presents the breakdown of projects by GEF support modality since GEF-4 (2006) to date, including both national and relevant regional interventions. Most child projects are full-size, which add to the high number of standalone full-size projects.⁵ This is by large the most used support modality in the 23 countries during the last three GEF replenishment periods.

Table 3: Projects and funding by support modality (GEF-4 to GEF-6)

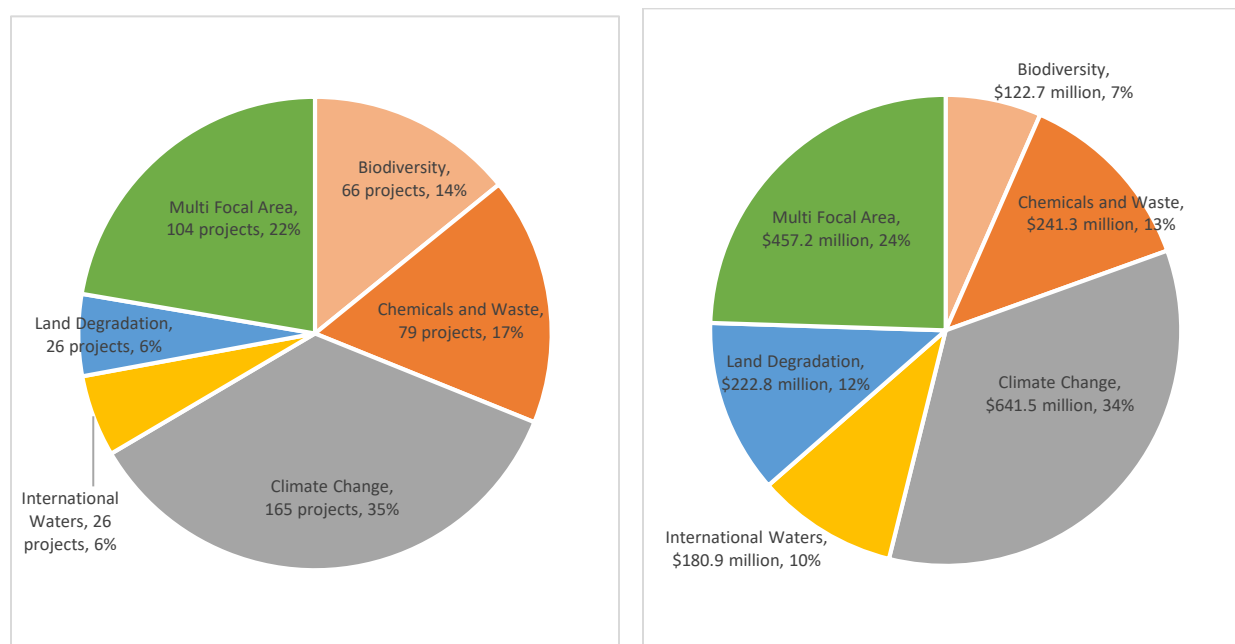
Support Modality	Number of Projects/Programs	GEF Grant Amount (US\$)
Parent program	14	-
Child project	120	678,187,691
Enabling activity	65	29,533,577
Full-size project	198	1,074,895,899
Medium-size project	69	83,897,483
Grand Total	466	1,866,514,650

⁴ The cut-off date for this analysis is January 31, 2018.

⁵ GEF programming through programmatic approaches is delivered through a variable number of "child projects" that form part of a parent program and are designed to contribute to the overall program objective.

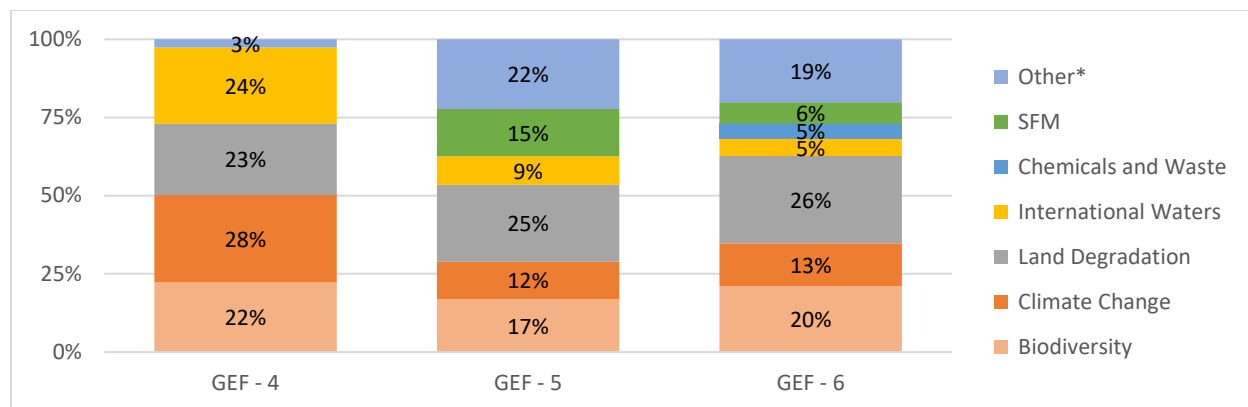
16. Climate change and multifocal support takes up most of the portfolio in the GEF-4 to GEF-6 period in terms of both the number of projects and funding (figures 2 and 3). The climate change adaptation portfolio makes up 81 percent of all the climate change focal area support in the two biomes. The remaining 19 percent is dedicated to mitigation. Funding for climate change adaptation comes exclusively from the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF), while most of the funding for mitigation interventions originates from the GEF trust fund.

Figure 2: Projects by focal area (GEF-4 to GEF-6) **Figure 3: Grants by focal area (GEF-4 to GEF-6)**



17. Funding for multifocal projects, amounting at \$457.2 million, originates from several sources. Overall, in the GEF, multifocal projects show an increasing share of the land degradation component ([GEF IEO 2017b](#)). In the two biomes, the main share originates from the funds earmarked to the traditional GEF focal areas of biodiversity, climate change, land degradation, international waters, and chemicals and waste. Contrary to the GEF overall portfolio trends, in the two biomes portfolio, the land degradation share in multifocal funding maintained comparable levels from GEF-4 to GEF-6 (figure 4).

Figure 4: Multifocal area support by funding component (GEF-4 to GEF-6)



*This category includes funding for the Integrated Approach Pilots (IAPs), LDCF, SCCF, and funding for multifocal projects not disaggregated by focal area.

18. In GEF-4, when the programmatic approach modality was formally introduced, programs constituted approximately 75 percent of the total programming in the two biomes. Funding for programs decreased substantially, to 23 percent in GEF-5 and 20 percent in GEF-6 (table 4). Overall, programs are becoming larger in size and move toward multifocal interventions.

Table 4: Programmatic versus nonprogrammatic support by GEF phase (GEF-4 to GEF-6)

Replenishment Phase	Programmatic Support			Nonprogrammatic Support through Full- and Medium-Size Projects, and Enabling Activities		Totals	
	No. of Programs	No. of Child Projects	US\$	n	US\$	n	US\$
GEF-4	7	77	384,490,477	47	128,278,859	131	512,769,336
GEF-5	5	21	152,401,510	147	505,277,526	173	657,679,036
GEF-6	2	22	141,295,704	138	554,770,574	162	696,066,278

19. Thirty-three percent of GEF support in the two biomes is constituted by projects or programs under implementation, the majority of which are GEF-5 interventions. Most of the projects completed in the last three replenishment periods belong to GEF-4, while most of GEF-6 interventions have yet to start implementation (table 5). Completed interventions include the TerrAfrica program, a strategic investment program for sustainable land management. The program, with a GEF grant investment of over \$150 million and over \$1 billion in cofinancing, included 36 child projects in 29 countries.

Table 5: Project status by GEF phase (GEF-4 to GEF-6)

Project Status	GEF-4		GEF-5		GEF-6		Totals	
	<i>n</i>	<i>US\$</i>	<i>n</i>	<i>US\$</i>	<i>n</i>	<i>US\$</i>	<i>n</i>	<i>US\$</i>
Pending approval	-	-	-	-	46	169,007,369	46	169,007,369
PIF/PPG approval/clearance	-	-	-	-	15	27,460,109	15	27,460,109
Council approved	7	124,073,091	6	27,923,935	44	286,495,739	57	438,492,765
CEO approved/endorsed	1	915,000	55	235,842,014	39	173,527,195	95	410,284,209
Under implementation	60	209,257,037	92	362,754,384	17	38,575,866	169	610,587,287
Completed/Closed	63	178,524,208	20	31,158,703	1	1,000,000	84	210,682,911
Total	131	512,769,336	173	657,679,036	162	696,066,278	466	1,866,514,650

5. Available Evaluative Evidence

20. Evidence from evaluations conducted by the IEO helps to identify issues to be covered by this evaluation. OPS6 found that although the GEF has a strong track record in delivering overall good project performance, likely sustainability of outcomes remains the greatest challenge. Country context, quality of implementation, and quality of execution influence project sustainability ratings. As is the case of projects funded by multilateral development banks, GEF projects in Africa have comparatively lower ratings for outcomes and sustainability than in other regions. Limited institutional capacity has been identified as the greatest issue to be addressed. OPS6 also found that one of the conditions for transformational change to occur is the establishment of mechanisms for future financial sustainability through the market, government budgets, or both. Another possible approach is to move from projects to long-term programs. The Integrated Approach Pilots (IAPs) initiative, a programmatic approach introduced in GEF-6, has been designed for long-term sustainability ([GEF IEO 2017c](#)). These OPS6 findings stimulated GEF-7 Replenishment Group discussions on sustainability, highlighting the need to further unpack the factors enabling or hindering the sustainability of outcomes.

21. OPS6 also reports that GEF focal area objectives are strongly aligned with country priorities, and that the expansion of the GEF partnership to 18 Agencies has increased GEF relevance in countries through greater choice and focal area coverage. However, it has not always been the case. For example, past evaluations identified a disconnect between GEF support and countries' demands for land degradation support ([GEF IEO 2009b](#)). The Fifth Overall Performance Study of the GEF (OPS5) concluded that the land degradation focal area drew more resources than expected, exceeding its original allocation under GEF-5 ([GEF IEO 2014](#)). Part of this gap was later fulfilled through multifocal support. As for the expansion of the partnership, it was intended to increase choice, access, and availability for numerous underserved countries, especially LDCs and SIDS, based on Agency comparative advantage. For

sure, the expansion has increased competition among the GEF Agencies, a positive development. However, whether the expanded partnership translates in more relevant support to developing countries' needs and priorities is still to be demonstrated. Importantly, OPS6 did not provide an in-depth assessment of responsiveness to the conventions from a country perspective. This is especially relevant to the current and foreseen GEF transitioning toward more integrated multicountry programming in GEF-7 and beyond.

22. Other evaluations besides OPS6 provide evidence on the issues at hand. The Joint GEF/UNDP Evaluation of the SGP ([GEF IEO 2015](#)) found that the small grants outcome sustainability ratings are comparable to those for other GEF projects. The SGP has always given significant attention to community level benefits and livelihoods. This attention has yielded positive results. In addition, SGP results on the ground in terms of promoting gender equality and contributing to gender empowerment are evident. No evidence or perception of a trade-off between the SGP's gender and global environmental objectives was found. To note, from 2008 to 2010, the SGP increased its focus in SIDS, LDCs, and countries in fragile or conflict-affected situations.

23. A sizeable amount of funding in the 23 country portfolios (27 percent) originates from LDCF resources. According to the LDCF program evaluation ([GEF IEO 2016a](#)), the main area of potential concern for the LDCF portfolio is the financial sustainability of project activities beyond the scope of project-related funding. Added to that is the need to integrate climate change adaptation with national policies and programs (institutional sustainability), and the need for country ownership to ensure sustainability (sociopolitical sustainability). On gender, the performance of the LDCF portfolio has improved considerably in response to enhanced requirements from the GEF, although there seems to be confusion as to what it means to be "gender mainstreamed."

24. Evaluative evidence collected by IEO from 2008 to 2014 through country-level evaluations in the two biomes has confirmed that long-term sustainability of outcomes remains a challenge. In 2008, the IEO found that the results of GEF support to Cameroon were at risk because of weak financial, institutional, and socioeconomic sustainability. The Cameroon CPE recommended the GEF to further support trust funds as an approach to improving the financial sustainability of protected areas ([GEF IEO 2009a](#)). Some positive results were also reported though. The GEF portfolio in Benin developed local structures for co-managing natural resources and their related benefits, resulting in positive socioeconomic sustainability. At the time of that CPE, several years after the projects ended, the GEF-supported village-based co-management structures were still playing a central role in the success and sustainability of agreed efforts through these initiatives ([GEF IEO 2008](#)). More recently, reporting on GEF portfolios in Eritrea, Sierra Leone, and Tanzania consolidated in the seventh Annual Country Portfolio Evaluation Report (ACPER) ([GEF IEO 2014](#)) concludes that the likelihood of sustainability is mixed. It has been most successful when pursued through the fostering of institutional and individual capacity development and the promotion of livelihood activities

through community-based approaches (e.g., the SGP). The ACPER confirmed that the most successful efforts have been those aimed at developing local capacities as well as linking local community benefits to improved environmental management.

6. Purpose, Objectives and Audience

25. The main purpose of this evaluation is to assess some of the main issues emerged from OPS6 main findings and conclusions, which deserve further exploration. The overarching objectives are twofold:

- To provide a deeper understanding of the determinants of the sustainability of the outcomes of GEF support in the two biomes; and
- To assess the relevance and performance of the GEF toward the two biomes' main environmental challenges from the countries' perspective.

Gender, resilience, and GEF operations in fragile situations will be assessed as cross-cutting issues. Any other important issues emerging from country visits will also be considered.

26. The primary audience of this SCCE is the GEF Council, who expressed concerns regarding the weak sustainability of GEF support in SSA, an issue to address in the context of GEF-7 and beyond. The evaluation will also provide evidence that could be used to inform the GEF Secretariat's appraisal of project proposals coming from the two biomes' countries, and inform the broader constituency of GEF Agencies and to GEF member countries as well as non-governmental partners engaged in project and program design.

7. Scope, Issues and Questions

27. The Sahel and Sudan-Guinea Savanna biomes, characterized by comparable land-based environmental challenges, delineate the geographic scope of the evaluation. Portfolio-wise, the SCCE includes enabling activities, projects, and programs in the 23 countries that are part of the two biomes. All the global and those regional interventions that are set up as umbrella arrangements for administrative convenience are excluded from the evaluation scope. SGP interventions in the two biomes will be covered, as the SGP constitutes for many of those countries an important modality of GEF support.

28. The analysis will focus on biodiversity, Climate Change Adaptation and Mitigation, the latter specifically focusing on carbon sequestration from forestry and other land management practices. It will also cover land degradation, international waters (only for freshwater interventions), POPs/chemicals (particularly the stockpiles/elimination of pesticides projects), and the multifocal interventions composed of biodiversity, climate change adaptation and land degradation.

29. For most evaluation components, the SCCE will cover the period from GEF-4 (started in 2006) to GEF-6. The sustainability analysis, including both the TE/TERs portfolio and geospatial

analysis components, will focus on national and regional interventions that have been completed between 2007 and 2014, to provide sufficient time after completion, allowing to observe the sustainability of outcomes for these completed projects in the long term.

30. Based on the evaluation purpose and objectives, as well as on the scope defined in the preceding paragraphs, this SCCE will seek to answer the following five key questions (KQs):

KQ1) *What are the key factors influencing sustainability of outcomes in the two biomes?*

31. OPS6 has confirmed once more the limited sustainability of outcomes from completed projects, with likelihood of sustainability rated at 63 percent. This average is not unique to the GEF. Members of the GEF-7 Replenishment Group expressed an interest in having a deeper understanding of the factors contributing as well as the factors hindering the sustainability of outcomes. Although OPS6 points at limited institutional and financial sustainability as hindering factors, it does not discuss other possible factors. Sustainability of outcomes will be assessed in more depth, with the aim of understanding what are the most important hindering as well as the main contributing factors at play in the two biomes, beyond the institutional and financial ones.

KQ2) *In what way, if any, does the environment and socioeconomic development/livelihoods nexus (or lack thereof) help explain the sustainability of outcomes in the two biomes?*

32. The environment versus socioeconomic development/livelihoods nexus, a concept that is central to sustainable development, is too often neglected in development interventions, both by donors and developing countries alike. Efforts to integrate socioeconomic development with environment conservation/sustainable use both at national and local levels depend on the interest of country governments. Many governments in the two biomes believe it is difficult to achieve both at the same time, considering that rather than a nexus, major trade-offs exist between environment and socioeconomic/livelihoods objectives. Country differences exist on: (1) reliance on natural resources, (2) susceptibility to natural disasters, (3) the poor's dependence on the environment, and (4) the governments' economic development and other priorities. The analysis of the nexus (or absence thereof) linkages to the identified factors of weak sustainability will be contextualized in the environmental and socioeconomic outcomes related to the relevant Sustainable Development Goals (SDGs) to which the GEF contributes in the two biomes ([GEF 2015](#)).

KQ3) *To what extent has GEF support been relevant to the main environmental challenges the countries face in the two biomes, and are there any gaps?*

33. Integrated programming provides flexibility in the set of interventions to be implemented, which allows the national environmental priorities to be achieved alongside those of the GEF and the national socioeconomic development priorities. In the two biomes, a

large part of the portfolio is composed of multifocal projects and programmatic approaches. The analysis will focus on these and other factors influencing the relevance of GEF support to the two biomes departing from the specific environmental challenges they face (described in table 1), and reviewing the countries' access to and use of GEF finance windows, support modalities and intervention typologies they have available to tackle these issues. In short, the analysis will assess how country environmental priorities translate into GEF programming in the two biomes.

34. The analysis will also look at the relevance of GEF services offered to countries. OPS6 confirmed that the range of expertise and targeted financial support the GEF offers to countries has greatly increased recently with the expansion of the GEF partnership to the current 18 Agencies. It remains to be seen whether and how this opportunity is being captured by the small recipient and/or least developed countries. The expansion is relatively recent and needs time to produce the expected increased relevance of GEF support to developing countries and small economies. This specific part of the analysis will build on the findings of the evaluation of the expansion of the GEF partnership ([GEF IEO 2016b](#)) and apply a formative approach because the expansion is relatively recent.

KQ4) *To what extent have gender and resilience been taken into consideration in GEF programming in the two biomes?*

35. Gender mainstreaming will be a key component in GEF-7 due to the approval of a new policy on gender equality. Furthermore, gender analysis is increasingly a cross-cutting area of enquiry in all IEO's evaluations. While it is too early to see the effectiveness of the new GEF policy on gender equality ([GEF 2017](#)), it is still possible to critically assess the performance on gender and women's empowerment in the two biomes based on the available data. Gender will be analyzed through both desk review, portfolio analysis and case studies. The latter will review if gender performance on paper also translates into real women's empowerment on the ground.

36. Resilience is a key aspect in the geographic region covered by this evaluation, as demonstrated by the large and growing number of adaptation interventions in the two biomes. In the absence of a GEF definition of resilience, two resilience considerations will be used. First, the analysis will look at how resilience is considered, being either as: (1) risk management, (2) a cobenefit, or (3) integrated into a multiple benefits framework ([STAP 2014](#)). Secondly, the analysis will look at the core component of the resilience concept in resilience-focused projects, identifying whether resilience is viewed: (1) in a static system/engineering sense, (2) as incremental change, or (3) as transformational change ([Béné et al. 2012, 2017](#)).

KQ5) *To what extent has GEF support performed in the 13 fragile countries in the two biomes, and how have the results obtained from completed GEF projects and programs been affected in those situations that have become fragile?*

37. The GEF does not have a definition of fragility in an operational context nor does it have a policy or special procedure for working in fragile states. The GEF's work on fragility is supported primarily through SIDS and LDCs ([AusAid 2012](#)). As seen, the SGP is one of the tools the GEF uses to provide support to fragile countries. OPS6 reported that compared to GEF-5 funding, support for fragile states increased from 8 to 10 percent, but did not provide an assessment of the performance and results of such support. This evaluation will use the World Bank's harmonized list of fragile situations. The analysis will aim at identifying the most common factors having affected the performance and results of GEF support in fragile contexts.

8. Evaluation Design, Quality Assurance and Limitations

38. The evaluation questions will be answered through a mixed-methods approach encompassing both quantitative and qualitative analytical tools. An evaluation matrix composed of the five key questions, relevant indicators, sources of information and methods is presented in annex 1. Synergies with the other two SCCEs will be sought by coordinated data gathering, analysis, and cross-fertilization. As part of the evaluation design, a scoping mission has been conducted to Senegal to probe the main questions and evaluation approach. Senegal was selected as it is composed by ecoregions that are representative of both biomes.

39. The IEO has recently completed a study on the sustainability of GEF project benefits in the latest APR ([GEF IEO 2018b](#)). The study analyzes IEO datasets on TEs and Progress to Impact (P2I) ratings to assess correlations among sustainability, outcomes, implementation, broader adoption, project design features, country characteristics and other variables. The analysis takes stock of projects for which field verifications were conducted by IEO at least two years after project completion. This study provides the aggregate findings that—together with the portfolio level geospatial analysis—will inform the design of the case studies for this evaluation. The results of the IEO sustainability study on factors driving sustainability will be explored in depth in a limited yet as representative as possible set of case studies. The plan is to conduct six case studies, identified based on the results of the portfolio and the geospatial analyses and given the need to cover projects as well as program sites. To select them, the aggregate analysis will help identifying hot spots of sustained (or absent) environmental change to which the GEF contributed in the two biomes.

40. In addition to standard evaluation components such as documentation review, portfolio analyses and interviews, this SCCE will pilot dyadic interviews (box 1). This is a qualitative

Box 1: Dyadic Interviews

The dyadic interview format allows each pair of participants to build on each other's comments through a process of sharing and comparing. By sharing their points of view, the participants expand their coverage of the evaluation topic. By comparing their points of view, the participants differentiate their thoughts about the same evaluation topic. Compared to individual interviews, dyadic interviews bring a high level of engagement in the interview itself. Compared to focus groups, dyadic interviews enable deeper and more informative storytelling while being much easier to moderate.

interviewing technique based on the creation of a conversation between two stakeholders sharing either a preexisting relationship or a common interest, knowledge and participation experience ([Morgan et al. 2016](#)). Dyadic interviews will be applied to pairs of child and standalone national project managers from similar countries in the two biomes to inquire about evidence or examples of positive, negative and absent long-term environmental change and the related underlying factors in each example.

41. Desk review techniques (through document review protocols) will be used for answering the relevance as well as the cross-cutting questions on gender, resilience and fragility. The resilience analysis will use the methodologies developed by STAP and by Béné et al., mentioned earlier. A quality-at-entry approach will be applied to formative analyses, as for example the relevance to the countries of the expanded network of GEF Agencies, due to its recent introduction. The case study phase will benefit from the overall portfolio level analyses and desk review results, from which to deep dive into the factors emerged more frequently.

42. Portfolio level geospatial analysis will be used for KQs 1 and 2. It will benefit from the geocoding and related geospatial analysis being conducted for an evaluation of the GEF support to Sustainable Forest Management (SFM). This analysis will focus on projects which outcomes are observable geospatially. These include projects in the following focal areas: land degradation, climate change adaptation, forests and biodiversity. Multifocal projects and regional programs composed of two or more of these focal areas will also be included in this analysis. Change of local environmental conditions will be measured using indicators such as: (1) forest area as a proportion of the total land area; and (2) Normalized Difference Vegetation Index (NDVI) as a proxy indicator to examine the long-term spatial and temporal patterns of land productivity measured as vegetation density, among others. Socioeconomic indicators will be part of this analysis, and other indicators may be identified in coordination with the SFM evaluation.

43. Triangulation of the information and qualitative as well as quantitative data collected will be conducted at completion of the data analysis and gathering phase to determine trends and identify the main findings, lessons and conclusions. Different stakeholders will be consulted during the process to test preliminary findings.

44. In line with IEO's quality assurance practice, two quality assurance measures have been set up for this evaluation. The first is a Reference Group, composed of representatives from the GEF Secretariat, GEF Agencies, and STAP. The Reference Group will: (1) provide feedback and comments on the approach paper, the preliminary findings and the evaluation report; (2) help ensuring evaluation relevance to ongoing as well as future operations; (3) help identifying and establishing contact with the appropriate individuals for interviews/focus groups; and (4) facilitate access to information. On June 6, 2018 the Reference Group met for the first time to discuss jointly the draft approach papers of the three SCCEs. The feedback from that meeting was incorporated in this approach paper.

45. The second quality assurance measure is an external Peer Reviewer, identified either from GEF Agency Evaluation Offices or from other recognized evaluation institutions, with experience in country-level and/or environmental evaluation. Her/his role is to advise throughout the evaluation process on: (1) the soundness of evaluation design, scope, questions, methods and process described in the approach paper; and (2) implementation of the methodology and implications of methodological limitations in the formulation of the conclusions and recommendations in the draft and final reports. The IEO invited Dr. Michael Spilsbury, Director of UNEP's Evaluation Office, who kindly accepted. On August 1st, 2018, Dr. Spilsbury provided a few insightful inputs contributing to sharpen the evaluation design and approach. These inputs have been incorporated in this approach paper.

46. Two limitations can be identified at this stage: (1) the unreliability of PMIS data on programs as it is not regularly updated, especially on status; and (2) limited number of field visits that will be possible to conduct in the timeframe allowed for this evaluation. The first limitation has been addressed by cross-checking PMIS portfolio information with the management information systems of GEF Agencies as a priority before undertaking any analysis. This process was completed in July 2018. The second limitation will be mitigated by conducting field missions to countries jointly with those that will be conducted in the SIDS and LDCs SCCEs as well as other evaluations either conducted by IEO or by the evaluation units of GEF Agencies, to increase field coverage. The team will report on how these as well as other emerging limitations will be dealt with during the evaluation data gathering and analysis phase.

9. Process, Deliverables and Dissemination

47. The SCCE is being conducted between March 2018 and December 2019. The evaluation is conducted in two phases: (1) aggregate analysis (portfolio, geospatial, quality at entry, other); and (2) field verifications (case studies). Geospatial analysis will be conducted in October 2018, once the projects datasets geolocation task will be completed. Field verifications for the six case studies will start in December 2018, once the results of the aggregate portfolio and geospatial analyses will be available. An initial work plan is presented here below. The work plan will be revised and fine-tuned as part of further preparations (table 6).

Table 6: Timetable

Year		2018											2019											
Task	Month	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Approach Paper																								
Background information & portfolio data gathering		x	x	x	x																			
Approach Paper discussed with the reference group					x																			
Mission to Senegal to probe the evaluation design					x																			
Finalizing the approach paper							x																	
Data gathering and analysis																								
Desk review/Portfolio analysis (PRT design and filling)								x	x	x														
Geospatial analysis									x	x														
Quality at entry and other analyses									x	x														
Six country case studies											x	x	x	x	x									
Triangulation brainstorming																X								
Gap filling																X	x							
Report writing																								
Draft report																	x	x	x					
Due diligence (gathering feedback and comments)																				x				
Final report																					x	x		
Presentation to Council in the SAER																							x	
Dissemination and outreach																							->	

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

49. The main findings, conclusions and recommendations will be included in the IEO Semi Annual Evaluation Report (SAER) that will be presented to Council at the fall meeting in December 2019. The full report will be uploaded as a Council information document. It will be distributed to the Council members, GEF Secretariat, STAP, GEF country focal points and GEF Agency staff. A graphically edited version will be published as open access on the Office's website. A detailed dissemination plan will be prepared and implemented, which will include distribution of the above-mentioned outputs in the main evaluation networks through existing IEO mailing lists as well as mailing lists of audience and stakeholders that will be developed during the conduct of the evaluation. The plan will also consider concrete opportunities to present the evaluation through webinars as well as at evaluation conferences.

10. Resources

50. The SCCE is being conducted by a team led by a Senior Evaluation Officer from the IEO with oversight from the Chief Evaluation Officer and the Director of the IEO. The team benefits from coordination and interaction with the IEO's staff managing the other two SCCEs, and will be supported by IEO evaluation analysts. Short-term consultants will be selected to help with desk reviews and portfolio analyses. National or regional consultants will be selected for field verifications to benefit from the extensive knowledge of context and issues at hand in the case study countries. The required skills mix includes practical, policy, and/or academic expertise in key GEF focal areas of the projects and programs under analysis, evaluation experience and knowledge of external information sources that are relevant to GEF activities in the case study countries.

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Annex 1: Evaluation Matrix

Key Questions	Indicators/basic data/what to look for	Sources of information	Methodology
KQ1) <i>What are the key factors influencing sustainability of outcomes in the two biomes?</i>	- Aggregate effectiveness and outcome ratings - Aggregate ratings of sustainability of project outcomes - Aggregate financial, socio-political, institutional, and environmental risks to sustainability ratings	- APR data, including any other available TEs/TERs of projects completed between 2007 and 2014 - APR 2017 Study on the sustainability of GEF project benefits	- Portfolio analysis - Desk review
	- Aggregate progress to impact (P2I) and broader adoption mechanisms (sustaining, replication, scaling-up, mainstreaming and market change) in place	- TEs/TERs of projects completed between 2007 and 2014 - IEO & GEF Agencies' evaluations	- Broader Adoption/P2I desk analysis - Document review protocol - Desk review
	- Evidence/examples of positive, negative and absent change based on the above mechanisms, and identification of main underlying factors in each example, including: (i) stakeholders involved at design; (ii) private sector involvement post-completion; (iii) existence of institutions functioning after completion; (iv) evidence of private sector cofinancing; (v) other.	- Central stakeholders - Country stakeholder - Available country data	- Interviews - Dyadic interviews (<i>with pairs of child and standalone project managers from similar countries in the biomes</i>) - Field observations in six case studies (<i>case studies will be conducted in synergy with the LDC and SIDS SCCEs</i>)
	- Aggregate geospatial data on: (i) forest area as a proportion of the total land area; (ii) NDVI; and (iii) socioeconomic indicators; among others. - Links between immediate outcomes and GEBs (expressed as geospatial data) - Hot spots of positive, negative and no change based on the above mechanisms, and identification of main underlying factors in each example	- GIS/Remote Sensing databases - TEs/TERs of projects completed between 2007 and 2014 that can be and/or have already been geocoded - Country stakeholders - Available country data	- Aggregated geospatial analysis aimed at identifying hot spots and no change - Field observations in six country case studies (<i>geocoding and analysis of environmental and socioeconomic parameters to be done in conjunction with SFM evaluation</i>)
	- Aggregate geospatial data on: (i) forest area as a proportion of the total land area; (ii) NDVI; and (iii) socioeconomic indicators; among others.	- GIS/Remote Sensing databases; completed projects between 2007 and 2014 that can be and/or have already been geocoded	- Aggregated geospatial analysis aimed at identifying hot spots and no change
	- Aggregate financial and environmental risks to sustainability ratings	- APR data, including any other available TEs/TERs of projects completed between 2007 and 2014	- Portfolio analysis
KQ2) <i>In what way, if any, does the environment and socioeconomic development/ livelihoods nexus (or lack thereof) help explain the observed sustainability in the two biomes?</i>	- Aggregate countries' differences in: (i) reliance on natural resources, (ii) susceptibility to natural	- TEs/TERs of projects completed between 2007 and 2014	- Document review protocol

Key Questions	Indicators/basic data/what to look for	Sources of information	Methodology
	disasters, (iii) poor's dependence on the environment, and (iv) governments' economic development & other priorities		
	- Existence of regulatory framework enabling private sector to address environmental issues - Evidence of access to private sector funding after project completion	- TEs/TERs of projects completed between 2007 and 2014 - IEO's country-level evaluations (Cameroon, Benin, Eritrea and Sierra Leone)	- Document review protocol - Desk review
		- Country stakeholders - Available country data	- Field observations in six country studies
	- Perceptions on the existence of a nexus or a trade-off between environment and socioeconomic development	- Country stakeholders - Available country data	- Field observations in six country studies
KQ3) <i>To what extent has GEF support been relevant to the main environmental challenges the countries face in the two biomes, and are there any gaps?</i>	- Existence of national operational strategies related to GEF focal areas	- Documentation from completed and ongoing enabling activities	- Document review protocol
	- Alignment of GEF support with national environmental priorities and budgets, and with other donors' support to the environmental sector in the countries	- Country stakeholders - Available country data (laws/policies, strategies and budgets; documentation from other donors)	- Interviews - Field observations in six country studies
	- Evolution of STAR and non-STAR focal areas allocations and utilization - Evolution of GEF support by modality	- Portfolio data from PMIS, Agency verified	- Portfolio analysis
	- Variety of the services available to countries from the 11 GEF Agencies working in the two biomes	- Portfolio data from PMIS, Agency verified - Project documentation	- Formative quality-at-entry analysis either by biomes or by groupings of countries according to common criteria/features (<i>building on the findings of the evaluation of the expansion of the GEF partnership</i>)
	- Actual and planned use of the services available to countries from the 11 GEF Agencies working in the two biomes	- Country stakeholders - Available country data	- Field observations in six country studies
	- Perceptions on incentives and disincentives to embark in GEF integrated programs and/or multifocal projects	- Country stakeholders - Available country data	- Interviews - Field observations in six country studies
	- Existence of gender analysis - Existence of sex disaggregated / gender sensitive	- Portfolio data from PMIS, Agency verified - Project documentation	- Portfolio analysis - Document review protocol

Key Questions	Indicators/basic data/what to look for	Sources of information	Methodology
KQ4) <i>To what extent have gender and resilience been taken into consideration in GEF programming in the two biomes?</i>	data (i.e. share of men & women involved in project design; share of men & women targeted as direct beneficiaries; share of men & women in lead project mgmt. roles)	- OPS5 and 6 data on gender (also covering APR data from TEs/TERs of projects completed since GEF-4 to GEF-6)	
	- Gender ratings	- GEFSEC Annual Monitoring Report data and corporate scorecard on gender	- Portfolio analysis
	- Evidence of women's inclusion and women's empowerment - Linkages between country gender plans, policies, strategies and project strategies and plans on gender	- Country stakeholders - Available country data	- Field observations in six country studies
	- Existence of resilience considerations	- Project documentation from PMIS, Agency verified	- Document review protocol
	- Resilience as 1) risk management, 2) as a co-benefit, or 3) as integrated into a multiple benefits framework	- APR data from TEs/TERs of projects completed since GEF-4 to GEF-6 - Portfolio data from PMIS, Agency verified	- STAP methodology
	- Resilience as 1) in a static system/engineering sense, 2) resilience as incremental change, or 3) resilience as transformational change	- APR data from TEs/TERs of projects completed since GEF-4 to GEF-6 - Portfolio data from PMIS, Agency verified	- Béné et al. methodology
KQ5) <i>To what extent has GEF support performed in the 13 fragile countries in the two biomes, and how have the results obtained from completed GEF projects and programs been affected in those situations that have become fragile?</i>	- Aggregate effectiveness, outcome and sustainability ratings, and their variation over time in the fragile countries - Fragility data and indicators of project countries	- World Bank list of fragile situations from FY06 to FY18 - TEs/TERs of projects completed between 2007 and 2014 in fragile countries	- Portfolio trend analysis - Comparative rating analysis between different cohorts of fragile situations (always fragile, become fragile, not fragile anymore, etc.)
	- Main features and dynamics on environmental change caused by fragility	- Relevant existing literature	- Literature review
	- Perceptions on the most important factors having influenced the variations in those fragile countries having shown the largest change in performance	- Central stakeholders - Country stakeholders - Available country data	- Interviews - Case studies selected on an opportunistic basis (if feasible)

TECHNICAL DOCUMENT 2 - SELECTION OF CASE STUDY COUNTRIES

December 2018

1. Introduction

1. Case studies are the main component of the Africa Biomes SCCE. They focus on the two overarching evaluation objectives: (i) To understand the determinants of sustainability; and (ii) To assess GEF's relevance to and performance in tackling the main environmental challenges in the two biomes. Selection of case study countries draws upon the Africa Biomes SCCE's sustainability cohort, composed of 68 national and regional projects completed between 2007 and 2014 having Annual Performance Review (APR) ratings. Projects in the sustainability cohort are classified as: (i) having both outcome and sustainability ratings in the positive range; (ii) having both outcomes and likely sustainability ratings in the negative range; (iii) having either positive outcome and negative likely sustainability ratings, or the inverse; and (iv) not having either outcome or sustainability ratings, or both (Table 1**Table**).

Table 1 Project ratings distribution

Project	Outcome and likely sustainability ratings				Total
	Both Positive	Both Negative	Neutral*	No Ratings**	
Country	10	16	16	4	46
Regional	7	4	4	7	22
Total	17	20	20	11	68

* positive outcome and negative sustainability, or negative outcomes and positive sustainability

** projects without either outcome rating, sustainability rating, or both.

2. In addition to the outcome and sustainability ratings, the selection of country case studies will be informed by trends over time of key environmental outcome indicators at geolocated project sites, with the aim of identifying cases of positive and absent or negative change. Country case study selection follows the steps described hereafter.

Step 1: Identification of the main environmental challenges

3. The selection process starts from an overview of the main environmental challenges faced by the countries in the two biomes. The overview Figure 1 below is derived from the overview of the main environmental challenges presented in Table 1 of the approach paper (also annexed to this document). The figure synthesizes the 10 most commonly shared environmental challenges faced by countries in the Sahel and Sudan-Guinea Savannah biomes.

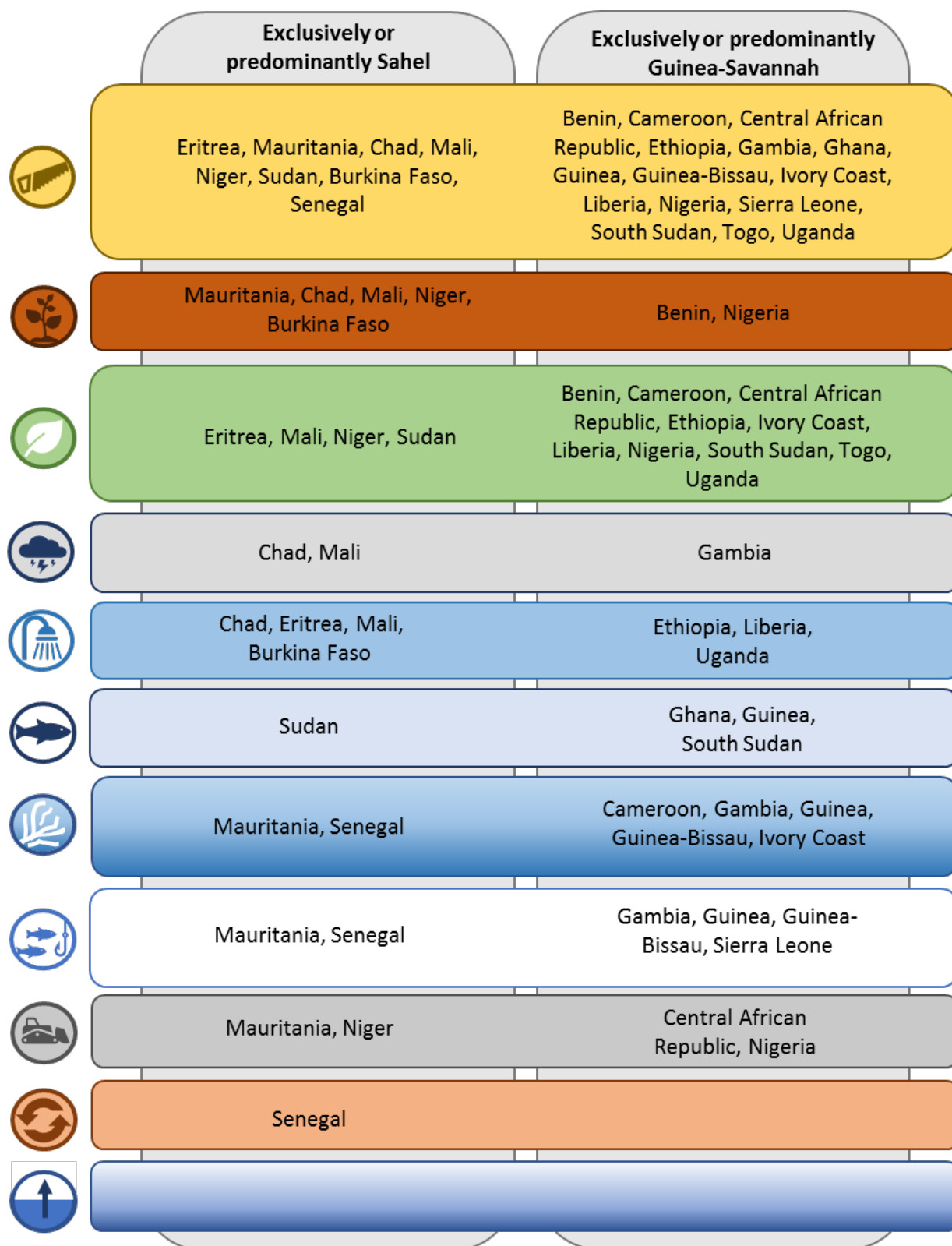
Figure 1: Main environmental challenges in the two biomes



Step 2: Classifying the main environmental challenges by biome

4. The selection process continues with linking the main environmental challenges to the two biomes. To do that, Figure 2 categorizes the 23 countries as being either exclusively or predominantly Sahelian (totaling 8 countries), and either exclusively or predominantly Guinean-Savannah (totaling 15 countries), based on the estimated percentage of national territory falling in each biome.
5. Although both Senegal and Burkina Faso have an estimated equal share of national territory in each biome, having as such the most common features of both biomes, in this selection procedure they are grouped with the Sahelian category for convenience purposes.

Figure 2: Linking main environmental challenges to countries



6. While deforestation and land degradation are the most common environmental challenges identified by both Sahelian and Guinean-Savannah countries alike, desertification is a main concern mainly in the Sahel. Threats to biodiversity is more a concern for Guinean-Savannah countries. Water quality and quantity comes next in terms of number of countries in both biomes, however no projects address this challenge in any of the countries (see Step 3 here below). Threats to in-land water resources has a good representation of both national and regional projects despite being mentioned as a main environmental challenge only by Sudan, South Sudan, Ghana and Guinea.

Step 3: Linking successful and unsuccessful projects to main environmental challenges in the two biomes

7. The third step consists in identifying, from the sustainability cohort, those projects that have tackled the 11 main environmental issues identified in Step 1 and that had positive or negative outcome and likely or unlikely sustainability ratings (Table 2).

8. It's assumed that those projects that have been rated in the 'positive' range both on outcome and likely sustainability have been successful in addressing the environmental issue they were designed to tackle. Similarly, project with 'negative' ratings both on outcomes and likely sustainability are assumed having been unsuccessful in doing that. A third category includes all the other projects, i.e. those with mixed positive and negative ratings for outcomes and sustainability, or the opposite. For these projects, classified as neutral, no assumption can be made at this stage on their success or failure in addressing the environmental challenge they were designed to tackle.

Table 2: Outcome and sustainability ratings

CHANGE		Outcome rating					
		Highly satisfactory	Satisfactory	Moderately satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
Sustainability rating	Likely	Positive			Neutral		
	Moderately Likely						
	Moderately Unlikely	Neutral			Negative		
	Unlikely						

9. Figure 3 maps projects with positive and negative outcome and sustainability ratings against the 11 environmental challenges in the two biomes. Projects are mapped based on the type of environmental challenges they address and the scope of intervention (country or regional). Regional projects often cover countries in both biomes, therefore they have not been mapped to a specific biome in the figure.

Figure 3: Linking project outcome and sustainability ratings to environmental challenges by biome

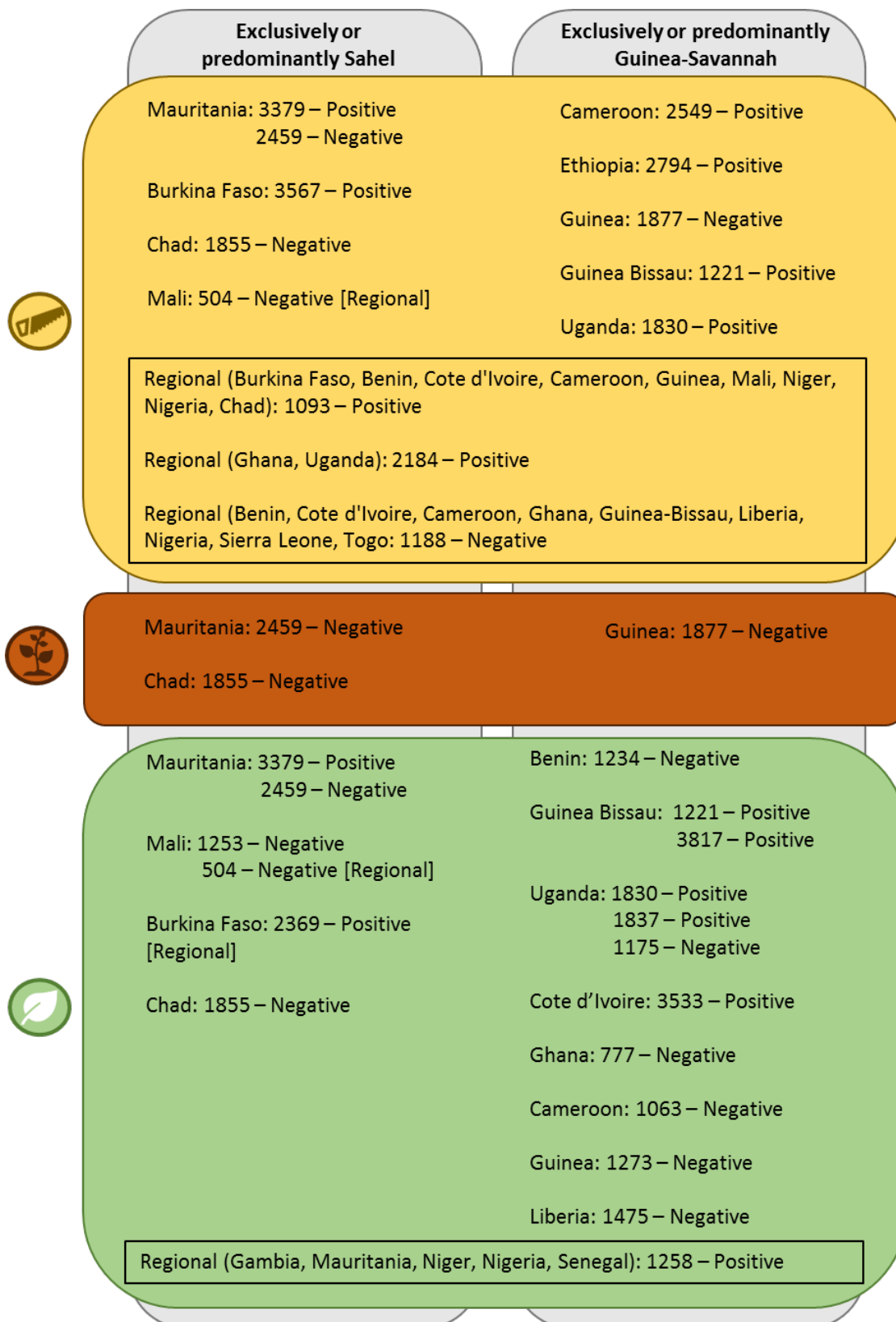
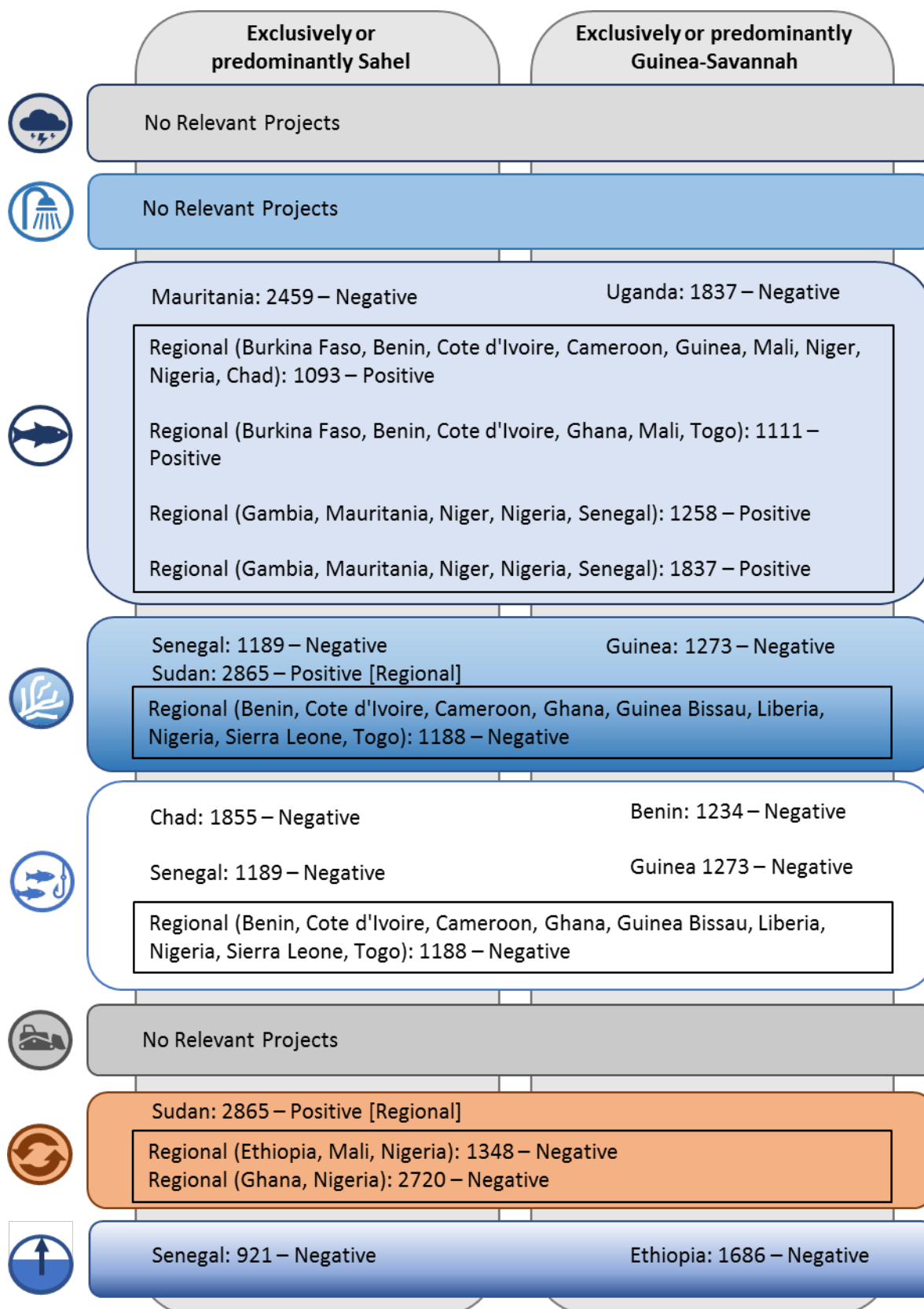
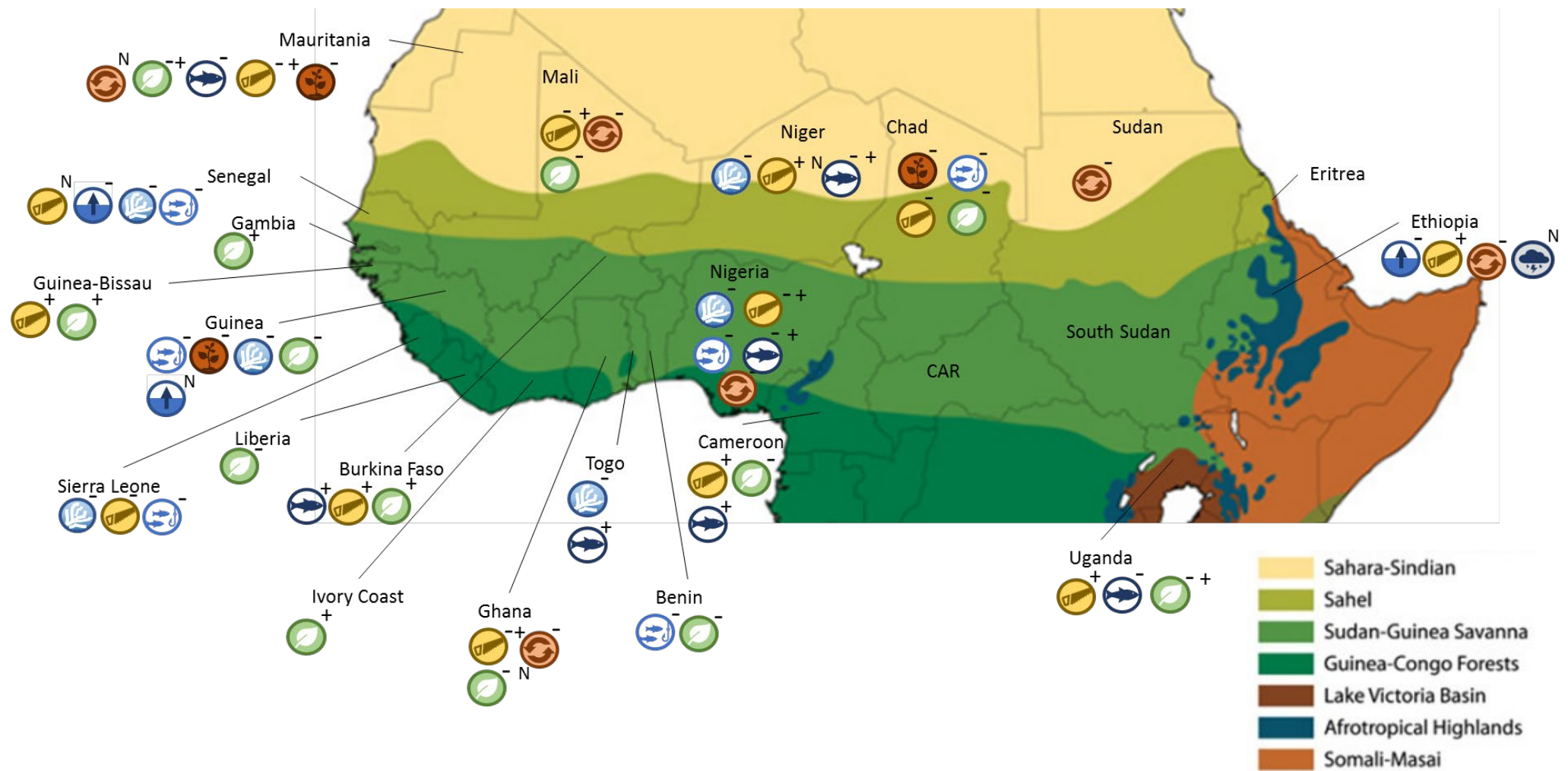


Figure 4: Linking projects to main environmental challenges (continued)



Overview of project change per environmental challenge in the biomes



Step 5: Country case study development

10. Guided by the mapping of countries and projects to environmental challenges (Figure 3), countries with the largest number of national and regional projects with positive and negative ratings are selected. The countries selected also include those in which projects addressed the most commonly shared environmental challenges, i.e. deforestation and land degradation, threats to biodiversity, and desertification. Despite marine waters related environmental challenges (especially coastal and coral reef degradation) are addressed by several projects, they are not part of the evaluation scope, which focuses on land-based environmental challenges (see the Africa Biomes SCCE's Approach Paper). Other environmental challenges will be covered as opportunities for data gathering in the countries selected arise.

11. Five countries result from the application of the above criteria: Mauritania, Nigeria, Uganda, Mali and Guinea. Table 3 lists positives and negatives in each country by environmental challenge.

Table 3: Case study countries, projects and main environmental challenge

Country	National Projects		Regional Projects	
Mauritania	2 projects	   (-)   (+)	1 project	  (+)*
Nigeria	2 projects	 (-) Capacity Building (-)	5 projects	 (-)  (-)   (+)*    (-)*   (+)*
Uganda	3 projects	 (-)   (+)   (+)	1 project	 (+)
Mali	2 projects	 (-)	4 projects	  (+)*

		 (N)		  (-)  (-)*  (+)
Guinea	2 projects	   (-)   (-)	3 projects	   (-)*   (+)* Capacity Building (+)

**Shared regional interventions between countries selected*

12. These five countries also provide an opportunity to assess projects with either positive outcomes and negative sustainability, or the inverse. These include two national projects in Nigeria, a national project in each of Mali and Guinea, 2 regional projects in which Uganda participates, and a regional project in which Mauritania, Mali, and Guinea participate (Table 4).

Table 4: Additional case study projects

Country	Country Projects		Regional Projects	
Mauritania	N/A		1 project	  (N)  (N)*
Nigeria	2 projects	 (N)   (N)	N/A	
Uganda	N/A		1 project	 (N)  (N)
Mali	1 project	 (N)	1 project	 (N)*
Guinea	1 project	 (N)	1 project	 (N)*

13. To note, two national and two regional projects involving Guinea Bissau will be covered by the case study component of the Small Islands Developing States SCCE.

Annex 1: Main environmental challenges in the 23 countries

(Africa Biomes SCCE Approach Paper, Table 1)

Benin	• Deforestation • Desertification • Threats to Biodiversity	Liberia	• Deforestation and Rubber Plantations • Threats to Biodiversity • Water Pollution
Burkina Faso	• Water Scarcity • Land Degradation and Desertification • Deforestation	Mali	• Desertification and Drought • Water Availability and Pollution • Threats to Biodiversity
Cameroon	• Land Degradation and Deforestation • Over-harvesting of Biological Resources • Degradation of Coastal & Marine Ecosystems	Mauritania	• Desertification and Deforestation • Iron Mining • Fisheries and Coastal Ecosystems
Central African Republic	• Subsistence and Commercial Poaching • Deforestation and Land Degradation • Diamond Mining and Pollution	Niger	• Desertification and Deforestation • Threats to Wildlife • Environmental Consequences of Mining
Chad	• Drought • Desertification and Land Degradation • Access to Water and Sanitation	Nigeria	• Desertification • Deforestation and Threats to Biodiversity • Oil Pollution
Eritrea	• Water Stress • Land Availability and Degradation • Deforestation and Threats to Biodiversity	Senegal	• Urban Pollution • Deforestation • Coastal Wetlands & Fisheries Over-exploitation
Ethiopia	• Water Availability & Access to a Safe Source • Livestock, Soil Erosion & Land Degradation • Threats to Biodiversity and Endemism	Sierra Leone	• Deforestation • Land Degradation • Overfishing

Gambia	• Drought and Agricultural Productivity • Threats to Forest and Wetland Ecosystems • Overfishing and Coastal Erosion	South Sudan	• Soil Erosion and Land Degradation • Poaching and the Ivory Trade • Forests and Fisheries
Ghana	• Deforestation • Land Degradation and Coastal Erosion • Overfishing & Reduced Water in Lake Volta	Sudan	• Soil Erosion and Land Degradation • Poaching and the Ivory Trade • Forests and Fisheries
Guinea	• Deforestation and Refugees • Overfishing & Destruction of Mangroves • Land Degradation	Togo	• Land Degradation and Deforestation • Threats to Aquatic Ecosystems • Threats to Biodiversity
Guinea-Bissau	• Deforestation • Cashew Farming and Soil Erosion • Threats to the Bijagos Biosphere Reserve	Uganda	• Land Degradation and Deforestation • Habitat Degradation & Threats to Biodiversity • Water Availability and Pollution
Ivory Coast	• Deforestation • Threats to Biodiversity • Threats to Coastal Ecosystems		

Source: [UNEP 2008](#)

Annex 2: List of projects with positive and negative ratings

GEF ID	Agency	Scope	Countries	Focal Area	Title	Phase	Type	GEF Grant (incl. PPG)	Co-Finance	Date of project		Rating		Challenge addressed
								\$US million		Start	Compl.	Outc.	Sust.	
504	UNEP/ UNDP	Regional	Botswana, Kenya, Mali	BD	Management of Indigenous Vegetation for the Rehabilitation of Degraded Rangelands in the Arid Zone of Africa	GEF2	FSP	9.05	3.55	6/8/01	9/30/07	-	-	 
1063	WB	Country	Cameroon	BD	Forest and Environment Development Policy Grant	GEF3	FSP	10.27	116.53	9/18/06	12/31/11	-	-	
1189	WB	Country	Senegal	BD	Integrated Marine and Coastal Resource Management	GEF3	FSP	5.34	11.49	4/15/05	12/1/11	-	-	 
1234	WB	Country	Benin	BD	Community-based Coastal and Marine Biodiversity Management Project	GEF3	FSP	4.65	7.30	10/14/08	5/15/14	-	-	 
1273	WB	Country	Guinea	BD	Coastal Marine and Biodiversity Management	GEF3	FSP	5.35	18.53	7/20/07	12/31/13	-	-	  
1686	WB	Country	Ethiopia	CC	Renewable Energy Project	GEF3	FSP	5.21	10.40	4/9/03	6/30/12	-	-	
2720	UNIDO	Regional	Ghana, Nigeria	Chem.	Develop Appropriate Strategies for Identifying Sites Contaminated by Chemicals listed in Annex A,	GEF3	FSP	2.65	2.10	10/30/08	12/31/12	-	-	

					B and/or C of the Stockholm Convention										
3384	WB	Country	Nigeria	LD	SIP: Scaling up SLM Practice, Knowledge, and Coordination in Key Nigerian States	GEF4	FSP	7.00	99.10	5/9/11	12/31/13	-	-	Capacity Building	
777	WB	Country	Ghana	BD	Northern Savanna Biodiversity Conservation (NSBC) Project	GEF2	FSP	7.93	20.20	9/23/02	2/28/09	-	-		
921	WB	Country	Senegal	CC	Electricity Services for Rural Areas Project	GEF2	FSP	5.00	66.70	6/30/05	12/31/12	-	-		
942	WB	Country	Nigeria	BD	Local Empowerment and Environmental Management Project - Micro Watershed and Environmental Management Project	GEF2	FSP	8.35	82.98	4/30/04	12/31/09	-	-		
1175	UNDP	Country	Uganda	BD	Conservation of Biodiversity in the Albertine Rift Forest Areas of Uganda	GEF3	FSP	3.75	7.95	5/8/07	12/31/13	-	-		
1188	UNDP / UNEP	Regional	Angola, Benin, Congo, Cote d'Ivoire, Cameroon, Gabon, Ghana, Equatorial Guinea, Guinea-Bissau, Liberia, Nigeria, Sierra Leone, Sao Tome and Principe, Togo, Congo DR	IW	Combating Living Resource Depletion and Coastal Area Degradation in the Guinea Current LME through Ecosystem-based Regional Actions	GEF3	FSP	21.45	43.97	10/26/04	12/31/12	-	-	  	

1253	WB	Country	Mali	BD	Gourma Biodiversity Conservation Project	GEF2	FSP	5.68	3.58	9/9/05	12/31/12	-	-	
1348	WB/FAO	Regional	Ethiopia, Morocco, Mali, Nigeria, Tunisia, Tanzania, South Africa	Chem.	Africa Stockpiles Program, P1	GEF3	FSP	25.70	35.00	10/3/05	5/31/13	-	-	
1475	WB	Country	Liberia	BD	Establishing the Basis for Biodiversity Conservation on Sapo National Park and in South-East Liberia	GEF3	MSP	1.00	1.44	9/23/05	7/31/11	-	-	
1855	WB	Country	Chad	MFA	Community-Based Ecosystem Management Project	GEF3	FSP	6.25	87.92	6/20/06	12/30/11	-	-	   
1877	WB	Country	Guinea	LD	Community-based Land Management	GEF3	FSP	7.35	34.40	7/20/07	12/31/14	-	-	 
2459	WB	Country	Mauritania	LD	Community-based Watershed Management Project	GEF3	FSP	6.35	58.80	1/26/07	3/31/13	-	-	   

3135	UNEP	Country	Gambia	MFA	Adoption of Ecosystem Approach for Integrated Implementation of MEAs at National and Divisional Level	GEF4	MSP	0.49	0.17	1/1/09	12/1/14	-	-	Capacity Building
1093	WB/UNDP	Regional	Burkina Faso, Benin, Cote d'Ivoire, Cameroon, Guinea, Mali, Niger, Nigeria, Chad	IW	Reversing Land and Water Degradation Trends in the Niger River Basin	GEF3	FSP	13.38	29.64	10/5/04	2/28/11	+	+	
1221	WB	Country	Guinea-Bissau	BD	Coastal and Biodiversity Management Project	GEF3	FSP	5.15	6.31	3/14/05	3/31/10	+	+	
1830	WB	Country	Uganda	BD	Protected Areas Management and Sustainable Use (PAMSU)	GEF1	FSP	8.00	30.00	12/4/02	6/30/10	+	+	
2794	WB	Country	Ethiopia	LD	SIP: Country Program for Sustainable Land Management	GEF4	FSP	9.35	28.80	10/10/08	9/30/13	+	+	
3379	IFAD	Country	Mauritania	LD	SIP: Participatory Environmental Protection and Poverty Reduction in the Oases of Mauritania	GEF4	FSP	4.35	15.57	4/7/11	4/5/14	+	+	
3817	WB	Country	Guinea-Bissau	BD	SPWA-BD: Guinea Bissau Biodiversity Conservation Trust Fund Project	GEF4	MSP	0.95	2.79	3/14/11	2/28/14	+	+	

1111	UNEP	Regional	Burkina Faso, Benin, Cote d'Ivoire, Ghana, Mali, Togo	IW	Addressing Transboundary Concerns in the Volta River Basin and its Downstream Coastal Area	GEF3	FSP	5.84	11.02	7/1/07	12/31/13	+	+	
1258	UNEP	Regional	Estonia, Gambia, Hungary, Lithuania, Mauritania, Niger, Nigeria, Senegal, Turkey, Tanzania, Yemen, South Africa	BD	Enhancing Conservation of the Critical Network of Sites of Wetlands Required by Migratory Waterbirds on the African/Eurasian Flyways.	GEF3	FSP	6.35	6.20	6/1/06	12/1/10	+	+	 
1837	UNDP	Country	Uganda	BD	Extending Wetland protected Areas through Community Based Conservation Initiatives	GEF4	MSP	0.83	3.03	6/3/08	6/30/14	+	+	 
2184	UNEP	Regional	Ghana, Morocco, Uganda, South Africa	LD	SIP: Stimulating Community Initiatives in Sustainable Land Management (SCI-SLM)	GEF4	MSP	0.94	0.95	9/1/09	12/31/14	+	+	
2396	UNEP	Regional	Burkina Faso, Kenya	BD	Dryland Livestock Wildlife Environment Interface Project	GEF3	MSP	1.00	2.36	8/29/05	1/31/09	+	+	
2549	WB	Country	Cameroon	LD	Sustainable Agro-Pastoral and Land Management Promotion under the National Community Development Program Support Program (PNDP)	GEF3	FSP	6.35	92.00	12/1/06	3/1/12	+	+	 

2865	UNIDO	Regional	Egypt, Jordan, Sudan, Yemen	Chem.	Promotion of Strategies to Reduce Unintentional Production of POPs in the PERSGA Coastal Zone	GEF4	MSP	1.00	2.03	12/23/08	10/31/11	+	+	
3533	WB	Country	Cote d'Ivoire	BD	Protected Area Project (Projet d'Appui a la Relance de la Conservation des Parcs et Reserves, PARC-CI)	GEF4	FSP	2.54	12.99	1/15/10	12/31/14	+	+	
3567	IFAD	Country	Burkina Faso	LD	CPP: Burkina Faso - Sub-programme of the Northern Region-under Partnership Programme for Sustainable Land Management	GEF3	FSP	2.02	27.82	10/8/09	1/31/14	+	+	
3960	WB	Regional	Central African Republic, Congo, Cameroon, Gabon, Equatorial Guinea, Congo DR	MFA	CBSP-Capacity Building for Regional Coordination of Sustainable Forest Management in the Congo Basin under the GEF Program for the Congo Basin	GEF4	MSP	0.87	3.03	8/2/11	12/31/14	+	+	Capacity Building
3961	WB	Country	Gambia	BD	SPWA-BD: The Gambia Biodiversity Management and Institutional Strengthening Project	GEF4	MSP	1.00	1.26	3/21/11	1/31/12	+	+	Capacity Building

Annex 3: List of projects with neutral ratings

GEF ID	Agency	Scope	Countries	Focal Area	Title	Phase	Type	GEF Grant (incl. PPG)	Co-Finance	Date of project		Rating		Challenge addressed
								\$US million		Start	Compl.	Outc.	Sust.	
3284	World Bank	Country	Liberia	BD	Consolidation of Liberia's Protected Area Network	GEF4	MSP	0.81	6.63	07/11/08	11/30/12	-	+	   
3346	UNEP	Regional	Kenya, Tanzania, Uganda	Chem.	DSSA Malaria Decision Analysis Support Tool (MDAST): Evaluating Health Social and Environmental Impacts and Policy Tradeoffs	GEF4	MSP	1.00	1.01	09/01/09	04/01/13	-	+	
136	World Bank	Country	Ghana	BD	Natural Resource Management	GEF1	FP	8.73	53.50	06/09/99	06/20/07	-	+	
1503	World Bank	Country	Nigeria	LD	National Fadama Development Program II (NFDPII): Critical Ecosystem Management	GEF3	FP	10.32	53.19	07/26/06	12/31/11	-	+	 

3154	UNDP	Country	Ethiopia	CCA	Coping with Drought and Climate Change	GEF3	MSP	1.00	1.87	03/27/09	11/19/13	+	-	 
3126	UNDP	Country	Ghana	MFA	Establishing an Effective and Sustainable Structure for Implementing Multilateral Environmental Agreements	GEF4	MSP	0.50	0.28	04/13/09	12/31/12	+	-	Capacity Building
3385	World Bank	Country	Senegal	LD	SIP: Sustainable Land Management in Senegal	GEF4	FP	4.80	46.40	03/05/10	12/31/12	+	-	
1178	World Bank	Country	Burkina Faso	MFA	Sahel Integrated Lowland Ecosystem Management (SILEM), Phase I	GEF3	FP	4.84	0.41	12/22/04	12/31/10	+	-	  Capacity Building
1067	World Bank	Country	Gambia	BD	Integrated Coastal and Marine Biodiversity Management	GEF2	MSP	0.99	0.79	09/01/02	03/31/08	+	-	 
2183	World Bank	Country	Ghana	MFA	Community-based Integrated	GEF3	MSP	0.85	6.65	02/19/04	02/19/08	+	-	

					Natural Resources Management Project in Okyeman									
8	World Bank	Country	Guinea	CC	Rural Energy	GEF2	FP	2.00	15.00	06/27/03	06/30/13	+	-	
1274	World Bank	Country	Mali	CC	Household Energy and Universal Rural Access Project	GEF3	FP	3.91	49.85	05/07/04	06/30/09	+	-	 Capacity Building
1275	World Bank	Country	Niger	MFA	Community-based Integrated Ecosystem Management Program under the Community Action Program	GEF2	FP	4.35	39.83	12/11/03	06/30/08	+	-	 
2380	UNDP	Country	Niger	LD	Sustainable Co-Management of the Natural Resources of the Air-Tenere Complex	GEF3	FP	4.23	5.37	08/22/06	12/31/12	+	-	
3382	World Bank	Country	Niger	LD	SIP: Community Driven SLM for Environmental and Food Security	GEF4	FP	4.67	40.30	12/24/08	04/30/13	+	-	

2828	World Bank	Country	Nigeria	CC	Rural Electrification and Renewable Energy Development	GEF3	MSP	1.00	9.00	09/16/05	06/30/12	+	-	
2614	UNDP	Regional	Cabo Verde, Gambia, Guinea-Bissau, Mauritania, Senegal	CC	Adaptation to Climate Change - Responding to Shoreline Change and its human dimensions in West Africa through integrated coastal area management.	GEF3	FP	4.00	9.73	05/23/08	12/31/11	+	-	 
2140	UNEP	Regional	Ethiopia, Ghana, Uganda, Zambia	BD	Removing Barriers to Invasive Plant Management in Africa	GEF3	FP	5.73	6.17	01/01/06	07/01/10	+	-	
876	World Bank	Country	Burkina Faso	BD	Partnership for Natural Ecosystem Management Program (PAGEN)	GEF2	FP	7.68	5.96	04/29/03	12/31/07	+	-	 Capacity Building
1420	UNEP	Regional	Benin, Guinea, Mali,	MFA	Reducing Dependence on POPs and other	GEF3	FP	4.48	4.46	04/23/09	12/31/14	+	-	

			Mauritania, Niger, Senegal		Agro-Chemicals in the Senegal and Niger River Basins through Integrated Production, Pest and Pollution Management										

Annex 4: Projects, Change and Regional Coverage by Main Environmental Challenge

Main Environmental Challenge	National projects		Regional projects
	Exclusively or predominantly Sahel	Exclusively or predominantly Guinea-Savannah	
	GEF ID 2459 (-) Mauritania GEF ID 3379 (+) Mauritania GEF ID 3567 (+) Burkina Faso GEF ID 1855 (-) Chad GEF ID 3385 (N) Senegal GEF ID 1178 (N) Burkina Faso GEF ID 1275 (N) Niger GEF ID 2380 (N) Niger GEF ID 3382 (N) Niger	GEF ID 2549 (+) Cameroon GEF ID 2794 (+) Ethiopia GEF ID 1877 (-) Guinea GEF ID 1221 (+) Guinea-Bissau GEF ID 1830 (+) Uganda GEF ID 1503 (N) Nigeria	GEF ID 504 (-) [S] Mali GEF ID 1093 (+) Guinea, Mali, Nigeria GEF ID 2184 (+) Uganda GEF ID 1188 (-) Nigeria, Guinea-Bissau
	GEF ID 2459 (-) Mauritania GEF ID 1855 (-) Chad	GEF ID 1877 (-) Guinea	N/A
	GEF ID 2459 (-) Mauritania GEF ID 3379 (+) Mauritania GEF ID 1253 (-) Mali GEF ID 1855 (-) Chad GEF ID 1178 (N) Burkina Faso GEF ID 876 (N) Burkina Faso GEF ID 1275 (N) Niger	GEF ID 1234 (-) Benin GEF ID 1221 (+) Guinea-Bissau GEF ID 3817 (+) Guinea-Bissau GEF ID 1175 (-) Uganda GEF ID 1830 (+) Uganda GEF ID 1837 (+) Uganda GEF ID 3533 (+) Cote d'Ivoire GEF ID 777 (-) Ghana	GEF ID 1258 (+) Mauritania, Nigeria GEF ID 504 (-)[S] Mali GEF ID 2396 (+) [S] GEF ID 2140 (N) Uganda

		GEF ID 1063 (-) Cameroon GEF ID 1273 (-) Guinea GEF ID 1475 (-) Liberia GEF ID 3284 (N) Liberia GEF ID 136 (N) Ghana GEF ID 1503 (N) Nigeria GEF ID 2183 (N) Ghana GEF ID 1067 (N) Gambia	
	N/A	GEF ID 3154 (N) Ethiopia	N/A
	N/A		
	GEF ID 2459 (-) Mauritania	GEF ID 1837 (-) Uganda GEF ID 3284 (N) Liberia GEF ID 924 (-) Nigeria GEF ID 2549 (+) Cameroon	GEF ID 1093 (+) Guinea, Mali, Nigeria GEF ID 1111 (+) Mali GEF ID 1258 (+) Mauritania, Nigeria
	GEF ID 1189 (-) Senegal	GEF ID 1273 (-) Guinea GEF ID 3284 (N) Liberia GEF ID 1067 (N) Gambia	GEF ID 1188 (-) Nigeria, Guinea-Bissau GEF ID 2614 (N) Mauritania, Guinea-Bissau
	GEF ID 1189 (-) Senegal GEF ID 1855 (-) Chad	GEF ID 1234 (-) Benin GEF ID 1273 (-) Guinea GEF ID 3284 (N) Liberia	GEF ID 1188 (-) Nigeria, Guinea-Bissau
	N/A		

	N/A	N/A	GEF ID 1348 (-) Mali, Nigeria GEF ID 2720 (-) Nigeria GEF ID 1420 (N) Guinea, Mali, Mauritania GEF ID 2865 (+) GEF ID 3346 (N) Uganda
	GEF ID 921 (-) Senegal GEF ID 1274 (N) Mali	GEF ID 1686 (-) Ethiopia GEF ID 8 (N) Guinea GEF ID 2828 (N) Nigeria GEF ID 3154 (N) Ethiopia	GEF ID 2614 (N) Mauritania, Guinea-Bissau
Capacity Building	GEF ID 1274 (N) Mali GEF ID 876 (N) Burkina Faso GEF ID 1178 (N) Burkina Faso	GEF ID 3126 (N) Ghana GEF ID 3384 (-) Nigeria GEF ID 3135 (-) Gambia GEF ID 3961 (-) Gambia	GEF ID 3960 (+) Guinea

*Projects highlighted in grey will be covered as part of the county case study field visits

TECHNICAL DOCUMENT 3 - GUIDANCE NOTE FOR COUNTRY CASE STUDIES

February 2019

1. Introduction and Purpose

1 Case studies are the main component of the Sub-Saharan Africa (SSA) Biomes SCCE. They focus on the two overarching evaluation objectives:

- (a) To understand the determinants of sustainability; and
- (b) To assess GEF's relevance to and performance in tackling the main environmental challenges in the two biomes.

2 In its latest Annual Performance Report (APR) the GEF Independent Evaluation Office (IEO) has conducted a desk review on sustainability ([GEF IEO 2018](#)). Based on 53 post completion verification reports, the review indicates that higher sustainability ratings at project completion are associated with higher levels of post project completion outcomes. For most projects, these outcomes are in turn correlated with satisfactory outcome ratings at completion. Importantly, at post completion more projects achieved environmental stress reduction and broader adoption of project outcomes than at completion. The following contributing factors were at play in those cases where past outcomes were not sustained:

- (a) lack of financial support for the maintenance of infrastructure or follow up
- (b) lack of sustained efforts from the executing agency
- (c) inadequate political support including limited progress on the adoption of legal and regulatory measures
- (d) low institutional capacities of key agencies
- (e) low levels of stakeholder buy-in, and
- (f) flaws in the theory of change of projects.

3 Building on the APR desk review findings, this evaluation aims at exploring in depth, through country case study analysis, the factors contributing and/or hindering the sustainability of project outcomes. The aim is to cross check the APR findings as well as identify any other nuances to the six factors above, or new factors that either hinder or contribute to the sustainability of project completion outcomes.

4 Selection of case study countries draws upon the SSA Biomes SCCE's sustainability cohort, composed of 68 national and regional projects completed between 2007 and 2014 having APR ratings for both outcomes and sustainability. Projects in the selected countries addressed the most common environmental challenges shared by the largest number of countries in the two biomes, i.e. deforestation and land degradation, threats to biodiversity, and desertification. Despite marine waters related environmental challenges (especially coastal and coral reef degradation) are addressed by several projects, they are not part of the evaluation scope, which focuses on land-based environmental challenges.

5 The purpose of this note is to detail the design of the country case study visits and provide guidance to the case study teams. The same data gathering approach should be used, so that observations and emerging findings are coherent and comparable across all countries and projects visited. In short, this note aims at maintaining as much as possible homogeneity among the five studies.

2. Key Evaluation Questions

6 The SSA Biomes SCCE focuses on five key questions. As indicated in the evaluation matrix annexed to the approach paper, case studies and related country visits/data gathering pertains to the following five questions (and related indicators):

KQ1): What are the key factors influencing sustainability of outcomes in the two biomes?

KQ2): In what way, if any, does the environment and socio-economic development/livelihoods nexus (or lack thereof) help explain the sustainability of outcomes in the two biomes?

KQ3): To what extent has GEF support been relevant to the main environmental challenges the countries face in the two biomes, and are there any gaps?

KQ4): To what extent have gender and resilience been taken into consideration in GEF programming in the two biomes?

KQ5): To what extent has GEF support performed in the 13 fragile countries in the two biomes, and how have the results obtained from completed GEF projects and programs been affected in those situations that have become fragile?

7 Key Questions 1), 2) and 3) will be the main focus of the case study data gathering effort. They will be answered building on desk review of project documents as well as on the results from portfolio and geospatial analysis prior to the missions. Once in the countries, these three questions will be answered through central level interviews and field verifications, as detailed in the following sections. Key Questions 4) and 5) will be answered through central level interviews with key stakeholders in the capital. Interview guidelines with indicators for each question are presented in Annex 1.

3. Case Study Planning, Approach and Methodologies

8 **Guinea, Mali, Mauritania, Nigeria and Uganda** emerged as the countries having the largest number of national and regional projects with positive and negative APR ratings both on outcomes and sustainability.⁶ Four of the five case studies (the ones in LDC countries) will also serve the Least Development Countries (LDCs) SCCE. An additional country, **Guinea Bissau**, will be covered by the Small Island Developing States (SIDS) SCCE following a similar approach and methodology. The aim is to coordinate and synergize the country level data gathering and

⁶ SCCE: Sahel and Sudan-Guinea Savannah Biomes: Selection of Case Study Countries (IEO internal document).

analysis effort in a way to serve the needs of the three SCCEs. Annex 2 details the projects belonging to the SSA Biomes SCCE sustainability cohort in the selected countries.

9 A minimum of two weeks is foreseen for each country mission, 30-40% spent conducting interviews and data gathering in the capital (including briefing and debriefing the GEF Operational Focal Point in the country) and the rest dedicated to field verification in project sites. Teams will also conduct dyadic interviews in the countries ([Morgan et al. 2016](#)) when applicable. Dyadic interviews will be conducted with pairs of child and standalone national project managers from similar countries in the two biomes to inquire about evidence or examples of positive, negative and absent long term environmental change and the related underlying factors in each example. The focus on comparing child projects (i.e. projects designed and implemented under a program) with similar standalone projects is to test the hypothesis that implementing a 'programmatic' project gives a higher likelihood of higher outcomes and sustainability, and the underlying factors pertaining to a program that make child projects more sustainable. A separate guidance note has been prepared for dyadic interviews and will be provided to the teams.

10 Country visits will benefit from analyses conducted in house by the GEF IEO prior to the missions. First, results will be extracted for each country from the ongoing project documentation review and will be provided to the teams. Secondly, project sites where spatial observations can be made are being geo-located based on the location information contained in project documents prior to the visit to the countries. A preliminary geospatial analysis will be conducted at the country and project site level, aiming at identifying change and trends over time in:

- (a) Land productivity, land cover and soil organic carbon
- (b) Forest loss/gain
- (c) Forest fragmentation

11 The results of this analysis will be field verified during country visits, with the aim of understanding the factors that contributed to the change observed through remote sensing.

12 Each country case study should target field verification in one site of at least three completed projects from the sustainability cohort (one with positive, one with negative, and one with neutral ratings both for outcomes and sustainability), aiming at covering the intervention typologies applied to the main environmental challenges in the two biomes. If possible, project site visits will also be identified by the case study team lead from completed projects that are not part of the sustainability cohort and projects under implementation (see Annex 3 and 4 for a full list of national projects in those two cohorts). The methods section of the case study report (a report outline is presented in Annex 5) will explain the rationale for the choice of the sites to be field verified.

13 The criteria for selection of projects to cover in addition to the sustainability cohort ones are:

- (a) priority to completed over under implementation projects,
- (b) priority to national over regional projects, and
- (c) projects belonging to dyads.

14 The SCCE Task Team Leader (TTL) Carlo Carugi will directly participate in the conduct of two case studies: (i) Guinea and (ii) Uganda, in both cases with assistance from a national consultant. The Mauritania case study will be conducted by Sara El Choufi, SCCE team member, supported by one national consultant, and the Nigeria and Mali case studies will be conducted by a senior evaluation consultant.

4. Indicative Steps

15 Based on the preliminary activities described above, especially on the selection of project sites for field verification, and following email introductions from the GEF IEO, the evaluators responsible for the respective case studies shall also make initial contact with the in-country project managers and other stakeholders.⁷ A mission agenda with a timetable and list of persons to be met, including the list of project sites will be drafted and agreed to with the GEF OFP based on the selection of project sites to visit and the stakeholders to interview. Ideally, the agenda should be prepared and shared with national partners one month before the mission.

16 Given resource constraints, it will not be possible to assess a statistically representative number of project sites in each country. The intention is to visit an illustrative sample of project sites. Logistics and costs will have to be taken into consideration. In any case, the sample will be selected from sites where activities began from the year 2007 onwards. In case sites of projects under implementation need to be visited, these will have had activities ongoing for at least two years. For completed projects to be retained, the key stakeholders should still be available for meetings/interviews. The sampling approach will be documented in the case study report.

17 Study teams will follow these steps: (i) background reading prior to the country visits; (ii) information/data collection and interviews at the central level in the capital; (iii) Project site visits; (iv) analysis; and (v) report writing. Background reading includes: (i) *SSA Biomes SCCE Approach Paper*; (ii) *GEF IEO Annual Performance Report 2017 (the sustainability analysis chapter)*; (iii) *SSA Biomes SCCE Selection of Case Study Countries* note; (iii) *Project Documentation* (both design and progress reports (PIRs and MTRs), and terminal evaluations); (vi) this *Guidance Note* – including the interview protocol (in Annex 1); (v) *Guidance Note for Dyadic Interviews*; and (vi) *Pre-mission geospatial analyses and portfolio reviews*.

⁷ A complete stakeholder list is being put together, with information gathered from the GEF Agencies.

A tentative scheduling of the country visits is presented here below:

#	Country	MONTHS	Mar-19				Apr-19				May-19				Jun-19				Who
		WEEKS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
1	Guinea				X	X													Carlo, national consultant
2	Mauritania								X	X									Sara, national consultant
3.i	Mali			X	X														Senior consultant
3.ii	Nigeria					X	X												
4	Uganda										X	X							Carlo, national consultant
5	Guinea Bissau										X	X							Senior consultant (SIDS SCCE)

LEGEND

	Public holidays respected in the countries (Ramadan, Easter)
	Planned Office travel, not related to the SCCE

Annex1: Interview Guidelines

This Annex guides the interviews to be conducted in the country visits under this evaluation. This applies mostly to interviews held with national level stakeholders - the Government (GEF Operational Focal Point, other staff involved with the project), GEF Agency/ies and executing agencies. It may also be used during project site visits with beneficiaries, depending on whether they are sufficiently familiar with the project in order to be able to reply to the questions in an informed manner.

The list below is not exhaustive and can be used as an initial reference, to be adjusted, modified and adapted to the program, topic and country covered in the case study. A separate list is provided for dyadic interviews to national project directors in the guidance document for dyadic interviews.

KQ1: What are the key factors influencing sustainability of outcomes in (project site/country)?

Look for evidence and examples of positive, negative and absent change in terms of longer term sustainability of outcomes and broader adoption⁸ in place. Identify the main underlying factors in each example. Provide detailed explanation for each factor/mechanism that either positively influenced/supported or hampered sustainability. Factors may include, but are not limited to:

- Financial support for the maintenance of infrastructure or follow up
- Sustained efforts from the national executing agency
- Existence of institutions and/or governance structures functioning after completion
- Political support, including legal and regulatory measures

⁸ **Broader adoption** is said to have taken place when governments and other stakeholders adopt, expand, and build on the initiatives that the GEF funds, during program/project implementation or afterwards, as a result of initial successes. Broader adoption occurs through five mechanisms: sustaining, mainstreaming, replication, scaling-up, and market change, defined as:
Sustaining: A GEF-supported intervention or outcome is continued to be implemented by the original beneficiaries without GEF support through clear budget allocations, implementing structures, and institutional frameworks so they can keep reaping the benefits and provide incentives for adoption by other stakeholders.

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

Replication: A GEF-Supported intervention is reproduced at a similar administrative, or ecological scale, often in other geographical areas/regions.

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

Market change: A GEF-supported intervention influences economic demand for and supply shifts to more environment-friendly products and services. Market change may encompass technological changes, policy and regulatory reforms, and financial instruments.

- Institutional capacities of key national agencies
- Stakeholders involved at design
- Other (specify)

Questioning may include the following:

- *When and why did broader adoption take place, during or after the project's implementation?*
- *What were the project-related contributing factors positively affecting the sustainability of outcomes? What were the project-related factors hindering the sustainability of outcomes? What were the underlying mechanisms at play?*
- *What were the context-related contributing factors positively affecting the sustainability of outcomes? What were the context-related factors hindering the sustainability of outcomes? What were the underlying mechanisms at play?*
- *Were there specific risks – climatic as well as non-climatic risks – that threatened or prevented project objectives from being achieved, and threatened longer term sustainability?*
- *In relation to longer term sustainability and broader adoption, which were the most critical contributing and hindering factors, and were these mostly project or context-related?*

KQ2: In what way, if any, does the environment and socio-economic development/livelihoods nexus (or lack thereof) help explain the sustainability of outcomes in (project site/country)?

Focus on the nexus or trade-off between environmental development and various aspects of socioeconomic development as a potential explaining factor that either positively influenced/supported or hampered longer term sustainability. Nexus and/or trade-offs may be explained by the following:

- Existence (or lack) of in country regulatory framework enabling private sector to address environmental issues, with examples of compliance and/or adoption by private entities
- Evidence of (or lack) access to private sector funding after project completion, and what that means with respect to the environment/development trade-offs
- Perceptions of the existence of a nexus or a trade-off between environment and socioeconomic development (food security, income generation, other), with concrete examples of both nexus and trade-offs

- Examples of specific mitigation actions to tackle trade-offs or take advantage of synergies
- Other (specify)

Questioning may include the following:

- *What positive or negative environmental changes or trends are visible after project completion, resulting from the project? What are the factors that contributed to or hindered such changes?*
- *What positive or negative socioeconomic changes or trends are visible after project completion, resulting from the project? What are the factors that contributed to or hindered such changes?*
- *What positive or negative changes or trends in individual and institutional capacity, and governance are visible after project completion, resulting from the project? What are the factors that contributed to or hindered such changes?*

KQ3: To what extent has GEF support been relevant to the main environmental challenges the countries face in (project site/country), and are there any gaps?

- Existence of national operational strategies related to GEF focal areas, and alignment of GEF support with national environmental priorities and budgets, and with other donors' support to the environmental sector in the countries
- Perceptions of projects' relevance towards the country's priorities and specific environmental challenges, with concrete examples of relevance or the lack thereof
- Perceptions of the most appropriate type of support the GEF could give to the country in support of tackling its main environmental challenges
- Perceptions of whether [the expansion of the GEF partnership](#) resulted in the country being able to collaborate with more Agencies
- Variety of the services available to countries from the xx GEF Agencies working in the country, and actual and planned use of the services available to countries from these Agencies
- Perceptions of incentives and disincentives to embark in GEF integrated programs and/or multifocal projects

Questioning may include the following:

- *Is the support offered by the GEF in line with the national environmental priorities?*
- *What is the most appropriate type of support the GEF could give to the country for tackling their main environmental challenges?*
- *Does the country prefer national projects or regional projects, medium-size or full-size projects, single focal area or multi-focal area projects? And why?*
- *Did the expansion of the GEF partnership result in the country being able to collaborate with more GEF Agencies?*
- *Are the accessible GEF Agencies qualified to support the country's main environmental challenges?*
- *Are there any plans to use GEF Agencies that have not been used in the past?*

KQ4: To what extent have gender and resilience been taken into consideration in GEF programming in?

KQ4.1: Gender

- Existence of country gender plans, policies, strategies, specific gender-focused ministries or departments, and linkages between these and the environmental focus of GEF projects. With concrete examples, if these exist
- Linkages between country gender plans, policies and strategies and those at project level
- Evidence of women's inclusion and women's empowerment at the project level
- Perceptions of the role of women in environmental stewardship in the country
- Evidence of women's inclusion and women's empowerment

KQ4.2: Resilience

- Existence of resilience-focused country plans, policies, strategies, and specific resilience-focused departments or task forces, and linkages between these and the environmental focus of GEF projects. With concrete examples if these exist
- Is there evidence of resilience thinking or resilience considerations in GEF projects? Do these considerations link towards country priorities on resilience? Give concrete examples

KQ5: To what extent has GEF support performed in the 13 fragile countries in the two biomes, and how have the results obtained from completed GEF projects and programs been affected in those situations that have become fragile?

This question applies only to Mali and Guinea Bissau.

- Main features and dynamics on environmental change caused by fragility
- Perceptions on the most important factors having influenced the variations in those fragile countries having shown the largest change in performance
- Other (specify)

Annex 2 – Case Study Countries and their Sustainability Cohort Projects (GEF 4 - GEF 6 Projects that have been completed between 2007 and 2014)

Country	Project scope (N: national; R: regional)	GEF ID	Environmental Challenge									APR ratings				Agency	Focal Area	Title	Phase	Type	GEF Grant	Co-finance	Implementation	
			Threat to biodiversity	Deforestation & land degradation	Threat to in-land water resources	Waste Management	Climate change	Coastal and coral reef degradation	Threat to marine resources	Desertification	Capacity building	Outcome +	Outcome -	Sustainability +	Sustainability -								Start	End
Guinea	N	8					1					+		-	WB	CC	Rural Energy	GEF2	FP	2	15	6/27/03	6/30/13	
	N	1273	1					1	1			-		-	WB	BD	Coastal Marine and Biodiversity Management	GEF3	FSP	5.35	18.53	7/20/07	12/31/13	
	N	1877		1						1		-		-	WB	LD	Community-based Land Management	GEF3	FSP	7.35	34.4	7/20/07	12/31/14	
	R	1093		1	1							+	+		WB/UNDP	IW	Reversing Land and Water Degradation Trends in the Niger River Basin	GEF3	FSP	13.4	29.64	10/5/04	2/28/11	
	R	1420				1						+		-	UNEP	MFA	Reducing Dependence on POPs and other Agro-Chemicals in the Senegal and Niger River Basins through Integrated Production, Pest and Pollution Management	GEF3	FSP	4.48	4.46	4/23/09	12/31/14	
	R	3960								1	+	+			WB	MFA	CBSP-Capacity Building for Regional Coordination of Sustainable Forest Management in the Congo Basin under the GEF Program for the Congo Basin	GEF4	MSP	0.87	3.03	8/2/11	12/31/14	
Mali	N	1253	1									-		-	WB	BD	Gourma Biodiversity Conservation Project	GEF2	FSP	5.68	3.58	9/9/05	12/31/12	
	N	1274					1				1	+		-	WB	CC	Household Energy and Universal Rural Access Project	GEF3	FSP	3.91	49.85	5/7/04	6/30/09	
	R	504	1	1								-		-	UNEP/UNDP	BD	Management of Indigenous Vegetation for the Rehabilitation of Degraded Rangelands in the Arid Zone of Africa	GEF2	FSP	9.05	3.55	6/8/01	9/30/07	
	R	1093		1	1							+	+		WB/UNDP	IW	Reversing Land and Water Degradation Trends in the Niger River Basin	GEF3	FSP	13.4	29.64	10/5/04	2/28/11	
	R	1111			1							+	+		UNEP	IW	Addressing Transboundary Concerns in the Volta River Basin and its Downstream Coastal Area	GEF3	FSP	5.84	11.02	7/1/07	12/31/13	
	R	1348				1						-		-	WB/FAO	Chem.	Africa Stockpiles Program, P1	GEF3	FSP	25.7	35	10/3/05	5/31/13	
Mauritania	R	1420				1						+		-	UNEP	MFA	Reducing Dependence on POPs and other Agro-Chemicals in the Senegal and Niger River Basins through Integrated Production, Pest and Pollution Management	GEF3	FSP	4.48	4.46	4/23/09	12/31/14	
	N	2459	1	1	1					1		-		-	WB	LD	Community-based Watershed Management Project	GEF3	FSP	6.35	58.8	1/26/07	3/31/13	
	N	3379	1	1								+	+		IFAD	LD	SIP: Participatory Environmental Protection and Poverty Reduction in the Oases of Mauritania	GEF4	FSP	4.35	15.57	4/7/11	4/5/14	
	R	1258	1		1							+	+		UNEP	BD	Enhancing Conservation of the Critical Network of Sites of Wetlands Required by Migratory Waterbirds on the African/Eurasian Flyways	GEF3	FSP	6.35	6.2	6/1/06	12/1/10	
	R	1420				1						+		-	UNEP	MFA	Reducing Dependence on POPs and other Agro-Chemicals in the Senegal and Niger River Basins through Integrated Production, Pest and Pollution Management	GEF3	FSP	4.48	4.46	4/23/09	12/31/14	
Nigeria	R	2614					1	1				+		-	UNDP	CC	Adaptation to Climate Change - Responding to Shoreline Change and its human dimensions in West Africa through integrated coastal area management	GEF3	FSP	4	9.73	5/23/08	12/31/11	
	N	942			1							-		-	WB	BD	Local Empowerment and Environmental Management Project - Micro Watershed and Environmental Management Project	GEF2	FSP	8.35	82.98	4/30/04	12/31/09	
	N	1503	1	1								-	+		WB	LD	National Fadama Development Program II (NFDP II): Critical Ecosystem Management	GEF3	FSP	10.3	53.19	7/26/06	12/31/11	
	N	2828					1					+		-	WB	CC	Rural Electrification and Renewable Energy Development	GEF3	MSP	1	9	9/16/05	6/30/12	
	N	3384								1		-		-	WB	LD	SIP: Scaling up SLM Practice, Knowledge, and Coordination in Key Nigerian States	GEF4	FSP	7	99.1	5/9/11	12/31/13	
	R	1093		1	1							+	+		WB/UNDP	IW	Reversing Land and Water Degradation Trends in the Niger River Basin	GEF3	FSP	13.4	29.64	10/5/04	2/28/11	
	R	1188		1				1	1			-		-	UNDP/UNEP	IW	Combating Living Resource Depletion and Coastal Area Degradation in the Guinea Current LME through Ecosystem-based Regional Actions	GEF3	FSP	21.5	43.97	10/26/04	12/31/12	
	R	1258	1		1							+	+		UNEP	BD	Enhancing Conservation of the Critical Network of Sites of Wetlands Required by Migratory Waterbirds on the African/Eurasian Flyways.	GEF3	FSP	6.35	6.2	6/1/06	12/1/10	
	R	1348				1						-		-	WB/FAO	Chem.	Africa Stockpiles Program, P1	GEF3	FSP	25.7	35	10/3/05	5/31/13	
R	2720				1						-		-	UNIDO	Chem.	Develop Appropriate Strategies for Identifying Sites Contaminated by Chemicals listed in Annex A, B and/or C of the Stockholm Convention	GEF3	FSP	2.65	2.1	10/30/08	12/31/12		
Uganda	N	1175	1									-		-	UNDP	BD	Conservation of Biodiversity in the Albertine Rift Forest Areas of Uganda	GEF3	FSP	3.75	7.95	5/8/07	12/31/13	
	N	1830	1	1								+	+		WB	BD	Protected Areas Management and Sustainable Use (PAMSU)	GEF1	FSP	8	30	12/4/02	6/30/10	
	N	1837	1		1							+	+		UNDP	BD	Extending Wetland protected Areas through Community Based Conservation Initiatives	GEF4	MSP	0.83	3.03	6/3/08	6/30/14	
	R	2140	1									+		-	UNEP	BD	Removing Barriers to Invasive Plant Management in Africa	GEF3	FP	5.73	6.17	1/1/06	7/1/10	
	R	2184		1								+	+		UNEP	LD	SIP: Stimulating Community Initiatives in Sustainable Land Management (SCI-SLM)	GEF4	MSP	0.94	0.95	9/1/09	12/31/14	
Guinea Bissau	R	3346				1						-	+		UNEP	Chem.	DSSA Malaria Decision Analysis Support Tool (MDAST): Evaluating Health Social and Environmental Impacts and Policy Tradeoffs	GEF4	MSP	1	1.01	9/1/09	4/1/13	
	R	1188		1				1	1			-		-	UNDP/UNEP	IW	Combating Living Resource Depletion and Coastal Area Degradation in the Guinea Current LME through Ecosystem-based Regional Actions	GEF3	FSP	21.5	43.97	10/26/04	12/31/12	
	N	1221	1	1								+	+		World Bank	BD	Coastal and Biodiversity Management Project	GEF3	FSP	5.15	6.31	3/14/05	3/31/10	
	R	2614					1	1				+		-	UNDP	CC	Adaptation to Climate Change - Responding to Shoreline Change and its human dimensions in West Africa through integrated coastal area management	GEF3	FP	4	9.73	5/23/08	12/31/11	
	N	3817	1									+	+		World Bank	BD	SPWA-BD: Guinea Bissau Biodiversity Conservation Trust Fund Project	GEF4	MSP	0.95	2.79	3/14/11	2/28/14	

Annex 3 – National completed projects included in the relevance cohort - (GEF 4 - GEF 6 Projects that have been completed after 2014)

GEF ID	Agency	Country	Focal Area	Title	GEF phase	Type	Trust Fund	GEF Grant (incl. PPG) (\$US million)	Co-Finance (\$US million)	Date of project start	Date of project completion
3703	UNDP	Guinea	CC	Increased Resilience and Adaptation to Adverse Impacts of Climate Change in Guinea's Vulnerable Coastal Zones	GEF - 4	FSP	LDCF	3.07	162.89	11/8/2010	
3776	UNDP	Mali	CC	Enhancing Adaptive Capacity and Resilience to Climate Change in the Agriculture Sector in Mali	GEF - 4	FSP	LDCF	2.44	8.48	6/9/2010	
3979	FAO	Mali	CC	Integrating Climate Resilience into Agricultural Production for Food Security in Rural Areas	GEF - 4	FSP	LDCF	2.18	4.50	5/31/2011	
3699	UNDP	Mali	CC	SPWA-CC: Promotion of the Use of Agrofuels from the Production and Use of Jatropha Oil in Mali	GEF - 4	MSP	GET	1.00	5.76	2/23/2012	10/30/2017
3576	UNDP	Mauritania	BD	Partnership to Mainstream Marine and Coastal Biodiversity into Oil and Gas Sector Development in Mauritania	GEF - 4	MSP	GET	1.00	4.51	12/16/2010	6/15/2016

GEF ID	Agency	Country	Focal Area	Title	GEF phase	Type	Trust Fund	GEF Grant (incl. PPG) (\$US million)	Co-Finance (\$US million)	Date of project start	Date of project completion
3794	UNDP	Nigeria	CC	SPWA-CC: Promoting Energy Efficiency in Residential and Public Sector in Nigeria	GEF - 4	FSP	GET	2.73	7.10	4/11/2011	
3804	UNDP	Nigeria	CW	Less Burnt for a Clean Earth: Minimization of Dioxin Emission from Open Burning Sources	GEF - 4	FSP	GET	4.28	19.68	7/30/2010	
3827	WB	Nigeria	CC	SPWA-CC: Nigeria Urban Transport	GEF - 4	FSP	GET	4.50	325.00	5/16/2011	5/31/2017
4100	WB	Nigeria	CW	PCB Management and Disposal Project	GEF - 4	FSP	GET	6.30	12.20	2/2/2012	6/15/2016
3393	UNDP	Uganda	LD	SIP: Enabling Environment for SLM to overcome land degradation in the cattle corridor of Uganda.	GEF - 4	FSP	GET	1.88	2.60	8/12/2010	12/31/2015

Annex 4 – National projects under implementation included in the relevance cohort – (GEF 4 - GEF 6 projects that have been under implementation for at least 2 years)

GEF ID	Agency	Country	Focal Area	Title	GEF phase	Type	Trust Fund	GEF Grant (incl. PPG) (\$US million)	Co-Finance (\$US million)	Date of project start
3958	UNIDO	Guinea	CC	SPWA-CC: Promoting Development of Multi-purpose Mini-hydro Power Systems	GEF - 4	MSP	GET	0.91	0.88	5/31/2012
4692	UNDP	Guinea	CC	Strengthening Resilience of Farming Communities' Livelihoods against Climate Changes in the Guinean Prefectures of Gaoual, Koundara and Mali	GEF - 5	FSP	LDCF	3.82	29.34	11/20/2013
5041	UNDP	Guinea	MFA	Strengthening Decentralized Management of the Environment to Meet Rio Convention Objectives	GEF - 5	MSP	GET	0.55	0.63	4/29/2015
5289	UNDP	Guinea	CC	Developing a Market for Biogas Resource Development and Utilization in Guinea	GEF - 5	FSP	GET	2.71	11.00	8/25/2015
3575	UNDP	Guinea-Bissau	BD	SPWA-BD: Support for the Consolidation of a Protected Area System in Guinea-Bissau's Forest Belt	GEF - 4	MSP	GET	1.00	3.92	7/8/2010
4019	UNDP	Guinea-Bissau	CC	Strengthening Resilience and Adaptive Capacity to Climate Change in Guinea-Bissau's Agrarian and Water Sectors	GEF - 4	FSP	LDCF	4.13	19.95	4/12/2011
5331	UNIDO	Guinea-Bissau	CC	Promoting Investments in Small to Medium Scale Renewable Energy Technologies in the Electricity Sector	GEF - 5	MSP	GET	1.83	10.26	10/23/2014
3377	WB/ UNDP	Mali	LD	SIP: Fostering Agricultural Productivity in Mali	GEF - 4	FSP	GET	8.55	145.20	12/17/2010
3763	UNDP	Mali	BD	SPWA-BD: Expansion and Strengthening of Mali's PA System	GEF - 4	FSP	GET	1.83	9.25	12/23/2010
4822	FAO	Mali	CC	Strengthening Resilience to Climate Change through Integrated Agricultural and Pastoral Management in the Sahelian zone in the Framework of the Sustainable Land Management Approach	GEF - 5	FSP	LDCF	2.27	14.25	1/2/2015
5192	UNDP	Mali	CC	Strengthening the Resilience of Women Producer Group's and Vulnerable Communities in Mali	GEF - 5	FSP	LDCF	5.56	16.50	5/12/2015
5270	WB	Mali	MFA	GGW Natural Resources Management in a Changing Climate in Mali	GEF - 5	FSP	MTF	8.43	13.00	12/6/2013
3893	IFAD	Mauritania	CC	Support to the Adaptation of Vulnerable Agricultural Production Systems	GEF - 4	FSP	LDCF	3.60	10.47	4/15/2013
5190	AfDB	Mauritania	CC	Improving Climate Resilience of Water Sector Investments with Appropriate Climate Adaptive Activities for Pastoral and Forestry Resources in Southern Mauritania	GEF - 5	FSP	LDCF	6.60	14.58	
5792	WB	Mauritania	MFA	PSG-Sustainable Landscape Management Project under SAWAP	GEF - 5	FSP	GET	4.81	19.20	12/17/2015

GEF ID	Agency	Country	Focal Area	Title	GEF phase	Type	Trust Fund	GEF Grant (incl. PPG) (\$US million)	Co-Finance (\$US million)	Date of project start
8029	WB	Mauritania	IW	West Africa Regional Fisheries Program SOP C1	GEF - 5	FSP	GET	7.00	23.05	6/24/2015
3943	UNIDO	Nigeria	CC	SPWA-CC: Mini-grids based on Renewable Energy (small-hydro and biomass) Sources to Augment Rural Electrification	GEF - 4	FSP	GET	2.68	11.94	8/7/2012
4090	UNDP	Nigeria	BD	SPWA-BD: Niger Delta Biodiversity Project	GEF - 4	FSP	GET	3.76	10.65	9/26/2012
4907	WB	Nigeria	MFA	GGW: Nigeria Erosion and Watershed Management Project (NEWMAP)	GEF - 5	FSP	MTF	8.59	500.00	9/16/2013
5375	UNIDO	Nigeria	CC	Scaling up Small Hydro Power (SHP) in Nigeria	GEF - 5	FSP	GET	2.74	17.20	3/24/2015
3392	WB	Uganda	LD	SIP: Sustainable Land Management Country Program	GEF - 4	FSP	GET	7.20	117.90	12/20/2011
4456	UNDP	Uganda	BD	Conservation and Sustainable Use of the Threatened Savanna Woodland in the Kidepo Critical Landscape in North Eastern Uganda	GEF - 5	FSP	GET	3.18	10.68	7/24/2013
4644	UNDP	Uganda	MFA	Addressing Barriers to the Adoption of Improved Charcoal Production Technologies and Sustainable Land Management Practices through an Integrated Approach	GEF - 5	FSP	GET	3.58	14.66	5/20/2014
4993	UNDP	Uganda	CC	Strengthening Climate Information and Early Warning Systems in Africa to Support Climate Resilient Development and Adaptation to Climate Change	GEF - 5	FSP	LDCF	4.10	26.27	1/23/2014
5204	AfDB	Uganda	CC	Building Resilience to Climate Change in the Water and Sanitation Sector	GEF - 5	FSP	LDCF	8.62	38.00	4/30/2015
5603	UNIDO	Uganda	CC	Reducing Vulnerability of Banana Producing Communities to Climate Change Through Banana Value Added Activities - Enhancing Food Security and Employment Generation	GEF - 5	FSP	LDCF	2.92	7.07	12/4/2015

Annex 5 – Case study reporting

The reporting should be done for each country separately and should not take more than 15 pages main report, and follow the indicative outline below:

Report Outline

1. Introduction, Context and Methodology (2 pages)
2. Findings (10 pages)
 - 2.1 KQ1: Key factors driving the observed sustainability of outcomes
 - 2.2 KQ2: Observed sustainability and the environmental / socio-economic nexus
 - 2.3 KQ3: Relevance of GEF support to the environmental challenges faced by the country
 - 2.4 KQ4.1: Gender
 - 2.5 KQ4.2: Resilience
 - 2.6 KQ5: Fragility (if applicable)
3. Summary of emerging findings and preliminary conclusions (3 pages)

The main report should be complemented by the following two annexes:

Annex 1: List of interviewees

Annex 2: List of sites visited (with maps if available)

Additional technical annexes for presenting the data collected and related analyses should be added as needed, in support to the main findings presented in the report.

TECHNICAL DOCUMENT 4 - GUINEA CASE STUDY REPORT

Abbreviations

ANAFIC	Agence Nationale de Financement des Collectivités
APR	Annual Performance Report
CLMP	Community-Based Land Management
CMBMP	Coastal Marine and Biodiversity Management
FNDL	Fonds National pour le Développement Local
GEF	Global Environment Facility
ICR	Implementation Completion Report
IEO	Independent Evaluation Office
LDP	local development plan
MPA	marine protected area
PACV	Programme d'Appui aux Communautés Villageoises
RAZC	Increased Resilience and Adaptation to Adverse Impacts of Climate Change in Guinea's Vulnerable Coastal Zones
SCCE	Strategic Country Cluster Evaluation
SLM	sustainable land management
UNDP	United Nations Development Programme

1. Introduction

1. This Guinea Case Study is part of the Sub-Saharan Africa Strategic Country Cluster Evaluation (SCCE): Sahel and Sudan-Guinea Savanna Biomes (in short, Africa Biomes SCCE). Sub-Saharan Africa (SSA) Strategic Country Cluster Evaluation (SCCE): Sahel and Sudan-Guinea Savanna Biomes Case studies are the main component of the SCCE. They focus on the two overarching evaluation objectives:

- (a) To understand the determinants of sustainability
- (b) To assess the Global Environment Facility's (GEF) relevance to and performance in tackling the main environmental challenges in the two biomes

2. In its latest annual performance report (APR) (GEF IEO 2018), the GEF Independent Evaluation Office (IEO) has conducted a desk review of postcompletion verification reports (n=53), finding that the following contributing factors were at play in those cases in which past outcomes were not sustained:

- (a) Lack of financial support for the maintenance of infrastructure or follow-up
- (b) Lack of sustained efforts from the executing agency
- (c) Inadequate political support, including limited progress on the adoption of legal and regulatory measures
- (d) Low institutional capacities of key agencies
- (e) Low levels of stakeholder buy-in
- (f) Flaws in the theory of change of projects

3. As explained in the approach paper of the Africa Biomes SCCE, this evaluation aims at exploring in depth, through country case study analysis and building on the APR desk review findings, the factors contributing to or hindering the sustainability of project outcomes.⁹ The aim is to cross-check the APR findings as well as to identify any other nuances to the six factors above, or new factors that either hinder or contribute to the sustainability of project outcomes. In addition, country studies also cover relevance issues such as GEF support modalities, expansion of GEF Agencies, and cross-cutting issues such as gender, resilience, and fragility.

Methodology

4. The Guinea Case Study is built on analyses conducted in-house by the GEF IEO before the mission in the country. The mission to Guinea took place March 16–28, 2019. Data from a desk-based portfolio review and geospatial analysis was verified during the mission, with the goal of

⁹ See the GEF IEO Approach Paper "Sub-Saharan Africa (SSA) Strategic Country Cluster Evaluation (SCCE): Sahel and Sudan-Guinea Savanna Biomes" in this volume.

assessing the factors that contributed to the observed changes. The data gathering concentrated on completed projects because they were the most relevant for sustainability issues. Information gathered through interviews with national stakeholders in Conakry and during the field verifications in selected project sites were triangulated with desk review and geospatial analysis and analyzed with input from field visits to feed into this report. Data collection and interviews took place at the central level in the capital Conakry and in the project areas through interviews with relevant stakeholders (annex A).

5. Individual interviews in Conakry were conducted with staffs from the Ministry of Environment Water and Forest (including the GEF Operational Focal Point and his team), the Direction Nationale de l'Hydraulique, the Agence Nationale de Financement des Collectivités (ANAFIC), the Ministère de l'Administration du Territoire et de la Decentralization, the Direction Nationale de la Météorologie, the United Nations Development Programme (UNDP), and the World Bank's country offices. Interviews focused on the following key evaluation questions:

- (a) What are the key factors influencing sustainability of outcomes in the two biomes?
- (b) In what way, if any, does the environment and socioeconomic development/livelihoods nexus (or lack thereof) help explain the sustainability of outcomes in the two biomes?
- (c) To what extent has GEF support been relevant to the main environmental challenges the countries face in the two biomes, and are there any gaps?
- (d) To what extent have gender and resilience been taken into consideration in GEF programming in the two biomes?

6. As recommended in the Africa Biomes SCCE Country Case Study Guidelines, key questions 1, 2, and 3 were the main focus of the case study data gathering effort. Key question 4 was addressed through central-level interviews with key stakeholders in the capital and through project document reviews. The same approach was also applied in the field, whereby representatives of respective administrations were consulted, before conducting field observation and verification in selected project sites. Field visits were conducted in five localities (annex B).

7. Although initially the issue of how GEF support is affected by fragile situations—key question 5 in the SCCE approach paper—was not to be covered in Guinea, it was brought to the attention of the mission that a GEF project was stopped for two years after the death of the former president, which led to political instability and social tensions. The case is discussed in a specific chapter of this report.

8. The main limitation encountered in the conduct of this study concerns the difficulty of locating all the actors who were directly involved in the projects under analysis, both in Conakry and in the sites visited, as these projects were completed several years ago. However, we could locate several of the key stakeholders involved and found that all the people whom we talked to,

even if not involved, were generally very much informed of the achievements of the projects under analysis and had useful contributions to offer.

Scope

9. Three projects were selected for the Guinea Case Study (GEF IDs 1093, 1273, and 1877). These projects belong to the Africa Biomes SCCE's Sustainability Cohort. Composed of national and regional interventions that have been completed between 2007 and 2014, this cohort provides enough time after completion, allowing to observe the sustainability of project outcomes in the long term.

10. Two more projects were selected from the Africa Biomes SCCE's Relevance Cohort (GEF IDs 3703 and 4692). Both projects have been completed after 2014 and focus on climate change adaptation. A concise description of the five selected projects follows below.

GEF ID 1093: Reversing Land and Water Degradation Trends in the Niger River Basin

11. This regional project aimed at supporting the nine participating riparian countries of the Niger River Basin in their efforts to work together to ensure the sustainable development and management of the basin's land and water resources, including protection of its unique dryland environment and associated biodiversity. The expected outcome was a strengthened local, regional, and national institutional capacity in all nine-basin countries that will support effective execution capacity for future investments in sustainable land and water resource management in the Niger River Basin.

12. The Guinea component of this regional GEF-3 project was jointly implemented by the World Bank and UNDP between October 2004 and January 2011. It belonged to the GEF international waters focal area. The environmental objectives were to reduce and prevent transboundary water-related environmental degradation, prevent land degradation, and to protect globally significant biodiversity, through sustainable and cooperative integrated management of the Niger River Basin, enhancing existing capacity, informing decision-making, and ensuring the public's greater involvement in the Basin's decision-making process. The developmental objective was to develop and implement sustainable measures for reversing trends in land and water degradation through collaborative decision making in the Niger River Basin.

GEF ID 1273: Coastal Marine and Biodiversity Management

13. This national GEF-3 project was implemented by the World Bank between July 2007 and December 2013. It belonged to the GEF biodiversity focal area. The developmental objective was to promote rational management of Guinea's coastal biodiversity for both conservation and sustainable development ends in selected priority areas, with an emphasis on assisting communities in and around these priority areas to plan, implement, and maintain environmentally sustainable and socially inclusive alternative livelihoods options. The environmental objective was to promote the conservation of globally and nationally significant habitats and species in Guinea's coastal zone in selected priority areas encompassing coastal Ramsar sites.

GEF ID 1877: Community-based Land Management

14. This national GEF-3 project was implemented by the World Bank between July 2007 and December 2014. It belonged to the GEF land degradation focal area. The developmental objective was to reduce land degradation through the integration of sustainable land management (SLM) practices into the development planning process of communities and local governments in selected pilot subwatersheds. The environmental objective was to pilot sustainable and replicable approaches to the prevention and mitigation of the causes and negative impacts of land degradation on the structure and functional integrity of ecosystems.

15. Community-Based Land Management (CLMP) was designed to broaden the scope of a larger World Bank intervention, the Programme d'Appui aux Communautés Villageoises (PACV) to new sites.¹⁰ By adopting an integrated cross-sectoral approach facilitated by linking up with the PACV, and by using subwatersheds as a planning basis, the project was expected to contribute to the protection of selected critical watersheds.

GEF ID 3703: Increased Resilience and Adaptation to Adverse Impacts of Climate Change in Guinea's Vulnerable Coastal Zones

16. This national project, funded by the GEF-administered Least Development Countries Fund, was implemented by UNDP between August 2010 and December 2016. It belonged to the climate change adaptation focal area. The project goal was to reduce the vulnerability of low-elevation coastal zones to sea-level rise by contributing to: (1) the integration of climate risk reduction into planning, policies, and programs in coastal areas at the national and subnational levels; and (2) capacity development of key stakeholders in socioeconomic groups, including loggers, fishmongers, fishermen, farmers, and local politicians in charge of implementing the regulatory texts on risk management related to the rising sea level. The project objective was to strengthen the protection of vulnerable Guinean coastal communities/areas against the negative effects of climate change.

GEF ID 4692: Strengthening Resilience of Farming Communities' Livelihoods against Climate Changes in the Prefectures of Gaoual, Koundara and Mali

17. This national project was also funded by the GEF-administered Least Development Countries Fund. It belonged to the GEF climate change adaptation focal area. Its implementation by UNDP took place from August 2014 to December 2018. The project goal was to build the adaptation capacity of vulnerable communities in the prefectures of Gaoual, Koundara, and Mali to additional risks caused by climate change, particularly drought increased intensity and occurrence.

¹⁰ CLMP covered 36 rural communes, on top of the 330 communes covered by PACV.

2. Achievements of GEF-3 Sustainability Cohort Projects

Reversing Land and Water Degradation Trends in the Niger River Basin (GEF ID 1093)

18. Interviews at the Direction Nationale de l'Hydraulique reported that a great share of the activities in the projects were carried out in the other countries participating in this regional project. Only a small component of the project was implemented in Guinea, supporting small-scale interventions and capacity-building activities. Specifically, the Guinea component was centered on knowledge sharing, collection of data, and implementation of nine microprojects.

19. Otherwise, the project drew on the work being done in the nine participating countries to inform a parallel GEF project operating on the Senegal Basin, which aimed to establish an information system for improved data collection, data exchange, and monitoring mechanisms. An online data catalogue with information on biophysical and socioeconomic indicators was completed in 2009 and was endorsed at the regional level. Access to this website is hampered by unreliable power connection and server maintenance problems. An Environmental Indicators System was also put in place to facilitate coordinated basin-wide decision making, which continues to be funded under a separate project financed by the Fonds Français pour l'Environnement. A manual on standardized and harmonized hydrological data procedures for all the participating countries was prepared and shared through eight national workshops.

20. The project regional forum component aimed at facilitating the exchange of lessons and best practices on river basin management approaches in regional projects in Sub-Saharan Africa, drawing from other GEF river and lake basin projects in Africa (e.g., Senegal River, Lake Chad, among others). National teams organized workshops to review and learn from the implementation of the project. These workshops were held in late 2010 and early 2011. It was reported to the mission that regional forums are on hold for lack of financial support. The last regional forum to develop links with other Pan-African networks dealing with integrated water management was held in Mali in June 2011.

21. The project transboundary diagnostic analysis and strategic action program components were designed to complement the broader GEF international waters efforts in the region, which included a basin-wide Sustainable Development Action Plan for the Niger Basin. Under this component, the project helped to strengthen the capacity of the recipient countries to promote and improve coordinated and sustainable land and water management in the basin. Main outputs included a national level framework for land and water data and a set of environmental and socioeconomic indicators at basin level, developed and completed in 2009 (initial target was 2006).

Coastal Marine Biodiversity Management (GEF ID 1273)

22. According to a review of the project Implementation Completion Report (ICR) by the World Bank Independent Evaluation Group, up to 17 priority areas of Guinea's rural communities were selected for participation in this project. The focus was on the communities living on sites

identified under the Ramsar List of Wetlands of International Importance and shared watersheds (notably, Alcatraz Island, Rio Pongo, and Tristao Islands). An emphasis was put on assisting communities in and around these priority areas to plan, implement, and maintain environmentally sustainable and socially inclusive alternative livelihood options.

23. Two marine protected areas (MPAs) were formally created, fully meeting the project target. These two MPAs were established in the islands of Tristao and Alcatraz with a presidential decree in 2013. Management plans for the two MPAs were prepared, clearly defining local responsibilities over terrestrial and marine ecosystems. Parallel to that, an ecosystem assessment and inventories of several flora and fauna were conducted in the two MPAs. The mission could not verify whether the information provided in those studies have been taken up in the decision-making process or have led to institutional change. It was reported to the mission that several tools were developed to aid in the management of the two MPAs. The extent to which these tools are being applied or the results of their application on marine and biodiversity resources is unclear.

24. The ICR review by the Independent Evaluation Group (World Bank 2013) reports that by the end of the implementation phase, the resident populations in 11 Communautés de Développement Rural were sensitized, organized, and trained in environmental matters in the two MPAs, where local stakeholder management committees were created. The project strengthened the capacity of the 11 Communautés de Développement Rural to implement 5-year local development plans and related annual investment plans, with support from local development agents recruited by the project. The project also financed the implementation of 94 microprojects (exceeding the target of 60). Of these, 59 percent were implemented by women (exceeding the target of 30 percent). Interviews in situ confirmed that the resident populations in the two MPAs have been trained in environmental matters. The ICR review also reports that 100 personnel from the Ministry of Environment attended training for MPA management (exceeding the target of 60).

25. On the negative side, the project did not meet its target to develop a detailed proposal for sustainable financing for MPAs by project closure. Interviews with ANAFIC indicate that a workshop was held and the government was working on establishing a conservation trust fund with a specific window for MPAs, but a detailed proposal of that trust fund was not produced as of project closure. Two coordination meetings were held while the project was being implemented to discuss the matter. There was no follow-up to these discussions since the project's closure because of lack of financing.

26. The project planned to set up local units and intercommunity committees for the comanagement of MPAs with local communities, to become operational in 2013. Evidence presented in the ICR review (World Bank 2013), verified through interviews in Conakry, indicates that interdistrict committees were formally established in all the seven Communautés de Développement Rural that constitute the MPAs of Tristao and Alcatraz for MPAs comanagement. According to one Communauté de Développement Rural committee member met by the mission in Koba (Boffa Préfecture):

- (a) The committees received initial training and were equipped with a motorcycle so they can be operational. However, given the short period

of time since their creation, the supervision committees are not very strong... without further funding it is unlikely they will remain functional after project closure.

27. In summary, the ICR review reports the following outcomes: (1) the MPAs have been gazetted and the available information is sufficient for planning purposes; (2) 75 percent of stakeholders are sensitized to the marine resources and their threats; (3) an approved management plan exists but is only partly applied because of financial constraints; (4) a research inventory addressing the needs of the MPAs exists and the available staff is sufficient to manage them; (5) an M&E system exists, although the results are not systematically used for management purposes; (6) management objectives are sufficiently clear; (7) threats to the MPAs have been somewhat reduced; (8) living conditions of the population have been somewhat improved; (9) environmental awareness has been improved; and (10) 50 percent to 75 percent of stakeholders are satisfied with the process of creating the MPAs.

28. These moderately positive results need to be read within the uncondusive national and regional context in which the project operated. Major threats come from the mining sector, charcoal, and agriculture, and from weak enforcement mechanisms. Interviews in Tounkily (Boffa Préfecture), one of the project sites visited by the mission, mentioned slash and burn agriculture, bauxite mining, and apiculture as main causes of degradation in the region. Particularly the mining sector is becoming a serious threat because of the increased issuances of exploitation permits to mining companies. The country has set several safeguards through the *Code Minier* (Republique de Guinée 2011c) and the *Code de la Protection et de la Mise en Valeur de l'Environnement* (Republique de Guinée 1987) to protect the environment and the social structure. Enforcement of these safeguards remains weak and new carriers have been exploited regardless of the negative impact on the environment. In addition, mining is attracting a growing population of immigrant laborers, adding pressure on natural resources with their demand for food and charcoal. The transhumance of livestock in the dry season from Fouta Djallon to the fertile land along the MPAs also adds pressure on the land.

29. Mining companies granted with exploitation permits must comply with the government's requirement to compensate the environmental degradation caused by mining through reforestation or investment in social and environmental infrastructure and services. However, the compensation measures offered by the companies do not match the extent of degradation.

30. The production of charcoal for cooking and the agriculture sectors constitutes a serious environmental threat in the project areas. In the last fifteen years, carbonization has become one of the main sources of income for the populations of the region, and particularly for young people lacking training and job opportunities. Increased demand from the growing labor force in the mining sector is greatly incentivizing charcoal production, which entails an increased pressure on already scarce forests and mangroves. According to experts, 80 percent of the local population uses wood and charcoal as their source of energy (Fondation Hirondelle 2017). Most of the coalmen explain their action by needs of survival.

Community-based Land Management (GEF ID 1877)

31. Interviews at the Ministry of Decentralization and Local Planning pointed at the inclusion of environmental considerations in local development planning as drivers of sustainability in countries like Guinea, where decentralization of government functions to locally elected leaders is pursued. Guinea's National Policy on Local Development requires each rural community to prepare its own local development plan (LDP), containing a priority list of infrastructures and services to be realized within a 5-year period. Each of these has a budget. It is the responsibility of the local administration to find the funding (either from the central government or from international donors or the private sector) for the infrastructures identified. Funding may come from local taxes or from external donors or the private sector entities. The central government supports local development planning by taxing all mining companies 15 percent of their revenues to fund local development plans.

32. Favored by this conducive national context, CLMP has positively contributed to the integration of SLM into LDPs and the intensification of SLM practices in targeted areas. The project raised awareness of environmental issues and bolstered local capacity to embark on SLM and related income-generating activities in 26 rural communes, twice the number planned at appraisal. As a result, 35 percent of the targeted municipalities identified and integrated SLM activities at the subwatershed level into their LDPs (World Bank 2013, 27). In addition, the project provided training on governance and monitoring of natural resources management and income-generating activities to 2062 people and to 89 local investment fund beneficiaries. Another 182 local actors/stakeholders received training on negotiation techniques focusing on the management of conflicts between farmers and livestock to prevent land degradation. Fifty-five beneficiaries were trained in participatory mapping and identification and validation of SLM. Five subwatershed management committees were formed, one more than originally planned, but these only became operational at the time the project was ending. An interesting activity introduced by CLMP to PACV was intercommunity SLM and watershed management. These are partnerships between neighbor communities that provide the opportunity to address environmental issues that are transboundary to the localities. Each participating commune earmarks a certain amount of their respective LDP budget to the intercommunity watershed management agreement.

33. The sustainability of CLMP outcomes is likely to be impacted by the major changes introduced by the government in terms of decentralized local planning, a process supported by PACV. Since CLMP was completed, PACV helped the government to introduce a major institutional reform that aims at establishing a mechanism to contribute to finance local development plans. A national fund for local development investments (Fonds National pour le Développement Local–FNDL) was established with the Law No. 2016/001/AN of January 16, 2016. All the funding for the development of local communities are now consolidated in the FNDL. The purpose of this fund is to facilitate the transfer of resources to local communities as well as to mobilize funds provided by development partners and to ensure a balanced allocation among the different local authorities across the country. A decree establishing a financial regime for the allocation and organization of these resources was also crafted, which established the ANAFIC as funding arm of local development in Guinea. ANAFIC now substitutes PACV and is mandated to become the main channel through which LDPs will be financed.

34. An interesting feature of this new institutional mechanism is that it makes resources collected from the mining sector through the FNDL available to local authorities and ensures the readability and traceability of all the resources put at the disposal of the local elected representatives. The resources to be channeled through ANAFIC will derive from mining revenues under the provisions of Article 165 of the Mining Code, in addition to those by the technical financial and development partners. The 15 percent of mining taxes discussed earlier will be channeled to ANAFIC through the FNDL.

35. As ANAFIC has replaced PACV as the operational arm of local development finance, financial sustainability has the potential to improve, subject to the willingness of local authorities to invest in and protect their natural resources. In addition, for CLMP and PACV interventions to be sustained, they must be properly designed and implemented.

36. Evidence from field visits indicates moderately positive results in this regard. CLMP applied a coherent ecosystem approach to the whole watershed in selected pilot sites, working with all the stakeholders involved. In Tolo (Mamou Préfecture), the evaluation team visited two sites on the source of the Bafing River. The first one was on a protection measure to rehabilitate the river banks at the source, the second was a community-based farm in an adjacent watershed. The Bafing River is a source from which 50 percent of the water going to the Senegal River originates. A community village lives around the river source. One of CLMP's objectives was to reduce deforestation around the river source that leads to erosion and water loss from the basin. Deforestation is caused by land clearing for slash and burn, itinerant agriculture. A forest cutting ban is enforced around the river and its source by the local forest department. CLMP delocalized the farmer community around the river source to a watershed at 2 kilometers from the village, where communities can practice horticulture. This delocalization measure was informed by a socioeconomic study followed by intense participatory activities and negotiations, which provided a management arrangement for the distribution of land in the watershed and included granting some compensation measures to the farmers.



Reforestation/banks stabilizing around the river source Entrance of the village next to the river source

37. Years after the delocalization of the activity from the river, the ecosystem of the river bank has been slowly rehabilitated through intense reforestation measures. The place has become green and there are no longer agricultural activities around the river source, favoring the settling

in of a small microclimate that benefits the whole ecosystem. It was reported that years ago one could cross the river by foot in April. The banks around the river source, once degraded from unsustainable agriculture activities, are now green. Visual examination of satellite images from during (circa 2012) and after (circa 2018) project implementation, conducted once back from the country study mission to Guinea, shows increased vegetation cover directly adjacent to the perimeter of the river source (see figure below, 2012 and 2018). Additionally, these images show decreased agricultural activity on the hillslopes both to the west and to the north of the basin. A more quantitative analysis of annual satellite imagery using the annual mean Normalized Difference Vegetation Index from 2000 to 2018 also demonstrates increasing levels of vegetation cover/productivity throughout the time period (see figure below, graph). This trend is juxtaposed against a slight decreasing trend in rainfall. These data provide evidence that the restoration efforts around the river source are having positive effects on the vegetation.

2012

2018



Satellite images of the Bafing River source (2012, 2018) showing increased vegetation cover and decreased agricultural activity around most of the perimeter of the basin.



Time series of vegetation productivity (Normalized Difference Vegetation Index) and rainfall in the project period – Bafing River source

38. This positive outcome is the result of both context- and project-related factors. First, this region has been designated as a protected area since the French colonial time. But over the years and because of population growth and economic diversification, the pressure on the forest and land has nevertheless increased. Subsequent governments in Guinea have recognized the importance of these areas for the country and for the region, and provided small investments aiming at protecting these areas. CLMP and PACV investments were larger and more inclusive, providing a longer-term solution in accompanying the government efforts in preserving the area. Government efforts include enforcement of the protected area status of the river basin, coupled by incentives such as support to the establishment of tree nurseries by selected community members.

39. To enhance SLM practices and protect the Bafing River source, the project encouraged farmers to move their farming activities from eroded hillsides (where rock bunds were established to stabilize the soil) to nearby more productive low lands where they could farm collectively. This approach not only helped improve farmers' incomes, but it also protected the watersheds along the river basins. However, as was the case in the Coastal Marine and Biodiversity Management (CMBMP) sites visited on the coastal area (Koba and Tognifily), access to water remains the key impediment for agriculture in the Mamou region. The 2-hectare watershed where the farmers have been delocalized has an irrigation system with canals that allows water to be spread on the field, as well as six groundwater wells, all resulting from CLMP investments. The mission found this area underused. Farmers reported that despite the investments made, they only have enough irrigation water for six months per year.

40. Elsewhere, CLMP outcomes have been less significant, despite the likely availability of funding from ANAFIC. The subwatershed management committee in Poredaka (Mamou Préfecture) was visited by the mission works on an ad hoc basis under a strong leadership by the committee chair. Without local government support, the committee is likely to disappear. This was confirmed by interviewees at ANAFIC.

41. Social factors influence sustainability too. The mission visited two community-led cooperatives of horticulture producers in Poredaka (Mamou Préfecture). Both groups have been working on 2 hectares of land, however, with different structures. The first group is a women-lead group, while the second has a balanced representation between men and women. A focus group meeting moderated by the mission revealed that the two groups have a different approach in terms of managing their respective community farm. The women's group is risk averse and continues to plant the same crops over the years. The mixed group tried to introduce new plants, by buying more productive seeds. While the women's group has been consistently saving revenue, the mixed group invested its savings to purchase seeds of a potato variety with high yield potential. Without information and technical support, the mixed group bought seeds that were infected, which led to a financial loss for the cooperative. To note, the women's group seems to be more cohesive and stable than the mixed group in terms of number of members, which has not increased over the years.

3. Sustainability Analysis

42. In terms of overall sustainability, because the three projects have promoted the integration of natural resources and the environment into local development plans, they have helped shift and advance an institutional framework for decentralization that considers the sustainable management of natural resources at the local level. In fact, the main outcome that can be attributed to the GEF is the integration of sustainable management of natural resources in local development planning, adopted by all communes in Guinea. According to the interviews at ANAFIC, these projects were catalytic to speeding up the review of the Guide for the Elaboration of a Local Development Plan. The updated guide makes it mandatory to consider the management of natural resources in local development plans of all communes in Guinea. Several communes or districts in Guinea are complying with this requirement.

Factors Influencing the Sustainability of Outcomes

43. Until now there was no financial support to sustain GEF project outcomes. This may change when the newly established ANAFIC starts financing the LDPs in the communes through their annual investment plans. At the time of this case study, no information was available on: (1) how much of the local budget ANAFIC will channel to each commune, and (2) how much of the communal budget will be allocated by the communities themselves to natural resources management and SLM, in presence of other much needed investments such as school, market, and hospital, among others. Nevertheless, it is reasonable to assume that the financial sustainability of the outcomes of the three GEF projects under review is likely to improve through the resources allocated by the government to finance LDPs through ANAFIC.

44. In terms of institutional sustainability, interviewees with stakeholders in ANAFIC, as well as with local stakeholders in Mamou, Boffa, and Forecariah préfectures, indicated that the agents that have served the PACV are now working for ANAFIC. These officers are familiar with the decentralized governance structure of the different targeted project areas. Equipped with new skills thanks to the GEF, they are now leading the local directorates of microprojects and assisting the different communes in developing their annual investment plan.

45. During the project and soon after completion several ad hoc committees were set up to oversee the annual investment plans. It is uncertain if these committees can still function. Funding opportunities from FNDL will likely revitalize those committees, which will enable a better monitoring of environmental and social safeguards of the new LDPs investments (GEF IEO 2016; World Bank 2013).

46. The Forest Code (*Code Forestier*, République de Guinée 1999) establishes the appointment of forest protection agents in each commune. CLMP contributed to these developments (Terminal Evaluation Review 1877). The main feature of this code is that the responsibility for the forest resources protection has been devolved to the commune. However, the government-appointed forest protection agents do not have any transport means to oversee the whole commune. It appears highly unlikely that the communes in the different areas targeted by the three projects will use their scarce resources to equip those agents. This does not mean that no enforcement at all is being carried out, however. In Boffa, the representative of the Ministry of Environment

indicated that his agents have a couple of times arrested some people that were found cutting wood in protected areas. These people have later been found guilty by the court.

Environment and Development Nexus

47. The interview in the Ministry of Environment in Conakry has confirmed the strong commitment by the government to reconcile and synergize development and environmental objectives when it comes to the national sustainable development policy. According to a highly ranked government official:

- (a) The ultimate objective of all government actions is socio-economic well-being for the Guinean population; sustainable development is a means to that end and a sound environment is the prerequisite of sustainable growth.

48. However, an assessment of the government spending in the national budget among the different ministries reveals that in 2018 the Ministry of Environment received only 1 percent of the total budget (*Projet de Loi de Finance 2018*, République de Guinée 2017).

49. As of now, it is also impossible to quantify how much the different communes will be allocating from their annual investment budgets to environmental management and conservation measures versus socioeconomic development investments. Interviews with the mayors of Koba and Poredaka, as well as the prefects of Forecariah, Boffa, and Mamou, provided indications that meeting basic development needs are overriding goals and more important than the environmental challenges in the short term. This was the outcome of their consultations with their respective communities. Both the government-appointed prefects and the locally elected mayors also indicated that all socioeconomic investments in their communities will seek to capitalize and address environmental issues as much as possible. A review of selected LDPs collected by the mission in Boffa and Poredaka has revealed an average allocation of 5 percent of the total budget for environmental purposes.

50. As far as the communities themselves are concerned, their short-term need to cope with poverty often clashes with longer term environmental management objectives. In the absence of alternative sources of energy such as gas or electricity, beneficiaries indicated to the mission that it is going to be difficult for them to prioritize the environment over socioeconomic development, despite all the awareness-raising efforts by both GEF projects and the government, and the enforcement of the Forest Code by forest agents.

4. Achievements of More Recent Adaptation Projects

51. Achievements of GEF support to climate change adaptation efforts in Guinea are driven by a strong alignment with national priorities. Both the Increased Resilience and Adaptation to Adverse Impacts of Climate Change in Guinea's Vulnerable Coastal Zones (RAZC; GEF ID 3703) project and the Strengthening Resilience of Farming Communities' Livelihoods against Climate Changes in the Prefectures of Gaoual, Koundara and Mali (GEF ID 4692) project emanated from the Guinea's National Adaptation Plan of Action (NAPA 2007). According to the project terminal

evaluation (UNDP 2016), the main achievement of RACZ was that it contributed to creating an enabling environment for adaptation to climate change in central administration as well as in the targeted coastal communities, especially by integrating specific climate change adaptation measures within their LDPs, similarly to CMBMP and CLMP. Demonstration of pilot adaptation measures to climate change were conducted in the four targeted sites. RAZC also strengthened the adaptation capacities of local populations through the protection of vulnerable rice fields. The project introduced several income-generation activities, including four oyster farms, 52 improved fish-smokehouses, support of 13 groups for solar salt production, and support of 12 women's groups for horticulture. RAZC also contributed to restoration of mangrove ecosystems through reforestation of 166 hectares, deferred grazing of 200 hectares, and introduced energy-efficient cook stoves to reduce fuelwood consumption.

52. An important contribution to information and communication on climate risks was made through the financial and technical support of RAZC to the national Directorate of Meteorology. The project rehabilitated two stations: one in Boke, built in 1930, and the other in Conakry, which is the main station of the country. Additional semiautomatic weather stations were built in Boffa, Forécaria (in Kabak), Conakry, Boké, and Dubréka. These stations were set to collect weather-related information on a daily basis, to be sent to the main station in Conakry and to populate a database used to inform both farmers and the government. Those data were also disseminated through a newsletter, to inform the relevant stakeholders on different weather-related trends. Altogether, up to 300 newsletters were published in local languages throughout the project implementation period and broadcasted on community radio stations.

53. Continuation of some of the above-mentioned achievements was already problematic at completion. The RAZC terminal evaluation notes that rice land protection infrastructures involved management costs that are in line with the standards applied in Guinea. However, these infrastructures suffer from several technical shortcomings attributable to poor feasibility studies as well as gross maintenance deficiencies. In addition, the local advisory committees and the management committees set up with support from the project have a weak capacity to ensure sustainability of the rice land protection and management infrastructure. Importantly, these committees have not been integrated into the traditional decision-making systems at the community level.

54. The maintenance of rice protection infrastructures requires a minimum of financial resources that were neither planned by the project nor mobilized by the government. Field observations by the mission in Kabach (Forecariah Préfecture) and testimony of interviewed beneficiaries have revealed that the anti-salt dykes built by the project were insufficient, both in terms of height and width, to withstand water intrusion. Attempts were made in Konimodouya and Katonko to change the approach by building a more robust dike, but these too could not withstand the rising sea-level pressure.



Canal in Kaback



Submerged rice plain

55. In another rice protection infrastructure in Koba (Boffa Préfecture), the mission could see that clogging of dykes has started to cede in some parts because of the sea-level rise. Here, unlike Kaback, communities have organized themselves to regularly strengthen the dyke before the start of each rain season. However, with the years and the growing water pressure, farmers have only been able to raise the dyke to the increasing sea level, which again is insufficient. A larger investment would be needed for appropriately protect their rice fields from rising sea levels.



Dyke in Koba



Dyke repair by local communities

56. The government's lack of financial and technical resources impacted the continued delivery of benefits from RAZC support to the national agrometeorological service. The Department of Meteorology was not in the position to continue the publication of the newsletter after project closure. Radio stations expect a minimum fee to broadcast meteorological information. The newsletter needs to be translated into the local language to be able to reach all the stakeholders. It was reported to the mission that the stations in Boke and Forecariah have been vandalized and a part of the installed agrometeorological equipment was stolen. The mission visited the station in

Kabak. The station is not well maintained, and fencing is too low and not strong enough. The building is degraded and does not seem to be used.



RAZC automated agrometeorological station in Kabak

57. Income-generating activities show a few shortcomings as well. The fish-smokehouse built in Kaback, although well maintained and kept active by the women even after project closure, was not designed to be adapted to the realities of the region. After each rain season, the fish-smoking ovens are destroyed by infiltrating rain water and the women's groups in Kaback and Koba must build the fish-smokehouse table again. While the warehouses to store agricultural products is still being in use and benefits the communities, the salt storage facility is no longer functional and could fall apart any time soon. The storage was built without considering the impact of the chemical composition of the salt on the cement and iron. Another example of poor project design is the cool house for conservation of fish built in Koba—the engine installed is too small to properly cool the ice chamber.

58. Poor project design is not the only cause for discontinuation of project outcomes. Contextual factors also came into play. It was reported to the mission that estate planning investors from Conakry reclaimed coastal land in Koba to build houses on the beach near the dyke without control from local authorities. Until local authorities will address this complex land tenure issue, any investment or repair on the dyke will be negatively affected.

59. Having just been completed, the GEF ID 4692 project has not yet undergone a terminal evaluation. Available progress implementation reports and interviews with UNDP indicate that REMECC, building on the experience and lessons from RAZC, was contributing to changes in life quality (skills, knowledge, practices, incomes, and equipment level) of the population, as well as to the beneficiary needs in climate change resilience. It was reported to the mission that the GEF ID 4692 project has reinforced the local authorities and decentralized institutions, helping them integrate climate change adaptation in the regional and local development plans. The project also produced and disseminated agrometeorological information toward the main actors of prefectures, to be used for a climate change resilient agroforestry.

Factors Influencing the Likely Sustainability of Adaptation Outcomes

60. Interviews with several national stakeholders confirmed that the two GEF adaptation projects are well aligned with the plans and strategies of Guinea. This strong alignment with

national environmental priorities bodes well with the likely continued generation and delivery of adaptation outcomes. Some interviewees noted that the scale of both RAZC and REDECC were too small to address the magnitude of environmental challenges, especially in the case of sea-level rise. However, thanks to both RAZC and REDECC the GEF has managed to raise the profile of climate change adaptation in the national environment agenda. This resulted in some recent positive developments. The government is working with UNDP on a proposal, “Enhancing Resilience of Guinea Coastal Rural Community to Coastal Erosion Due to Climate Change,” which will scale up and replicate most of the components of RAZC in Guinea. This concept note is now being developed and a funding proposal will be submitted to the Green Climate Fund by 2020.

61. The mission found mixed results in terms of the likely financial sustainability of the adaptation outcomes achieved by the two projects funded by the Least Development Countries Fund, despite their relatively recent completion date (December 2016 for RAZC and December 2018 for REDECC). Interviews with representatives of the Directorate of Meteorology, having benefited from the technical and financial support of RAZC, pointed at the lack of financial and technical resources by the government as one of the key obstacles to the continuation of delivery of the agrometeorological bulletins in French as well as in local languages, a service that was greatly appreciated by the farming community in the coastal areas.

62. As discussed in the chapter 3, several examples of poor project design impacted the likely sustainability of adaptation outcomes. An example of poor project design, similar to CLMP, include the watershed infrastructure investments fostering horticulture and gardening. These were not preceded by technical feasibility studies, especially for what concerns the availability of both surface and underground water for irrigation. The appropriateness of this adaptation measure was questioned by several beneficiaries interviewed by the mission, faced with water shortages for at least six months per year. In Tognifily, the mission was told that because of water scarcity, the women’s group has started a new gardening perimeter in adjacent lowlands where traditional wells have been dug.

63. Another example of shortcomings that was noticed include the construction of the storehouse for salt production, for which the selection of construction materials did not consider that salt-resistant material would be required. This helps to understand why the salt production activity was discontinued: the salt extracted in the marine water salt production units is not appropriate for local consumption. Because of its high concentration in iodine that salt is not known and appreciated by the beneficiaries. The mission observed that iodine salt production has been replaced with the salt produced following the traditional recipe.



Tougnifily : Eroded door of the storage for iodine salt New fish-smoking cookstove built by women

5. Relevance of GEF Support to Guinea's Main Environmental Challenges

64. There was a shared view by both government representatives and nongovernmental stakeholders interviewed in Conakry that GEF projects are usually in line with the national strategies and address priority needs. This is confirmed by the review of project documents as well as the field visits, all clearly indicating that the GEF support has been key to address, advance, and raise awareness of the main environmental issues in the country, including deforestation, land degradation, destruction of mangroves, and sea-level rise.

65. CLMP focused on land degradation, an issue that has been identified as a major national problem, exacerbated by weak institutional capacity as well as poor knowledge of sound environmental management practices at the national and local levels. The project has helped the relevant government agents to understand the different regulatory framework set in the country, particularly for local agriculture or environmental and natural resources management. For instance, the role of the forest agents have been introduced and valued in the Forest Code. This has enabled them to better understand the policies of exploitation of the forest estate at community-, district-, and village-levels. These forest agents are the guardians for environment protection at the local level. They have a mandate to bring people who cut trees without permit or for charcoal to the attention of the police and bring them to the court.

66. The Guinea component of the Niger River Basin regional project has enabled the introduction and operationalization of an Environmental and Social Management Framework for all pilot projects and microgrant activities. For the review of the microproject a Micro-grant Operational Manual has been developed with environmental section and screening criteria, notification and procedural rules for implementation, and institutional responsibilities of the parties involved. This manual will be a useful tool at commune level, when it comes to screening and implementation of investments to be funded through ANAFIC.

67. Like in the case of the Niger River Basin project, under the CMBMP an environmental assessment was carried out for all proposed microprojects. Screening forms were developed to exclude those that might have had a negative environmental impact. No microproject was funded unless it passed this test. Committees were set up to follow up on the environmental aspects of microprojects. Local staff of the various technical ministries, especially forest guards and agricultural extension agents, but also locally elected officials, were trained in environmental safeguard measures and in filling out the screening forms (World Bank 2014).

68. GEF support to climate change adaptation through GEF-administered funding of the Least Development Countries Fund is highly relevant to Guinea's environmental priorities. Climate change adaptation is very much in the national environment agenda as well as in the strategies of Guinea's bilateral partners. Since its completion, the RAZC project has received a lot of attention. The Dutch government has recently offered 30 million Euros for the development of the agricultural plains of Kaback Islands in Forécariah Prefecture.¹¹

69. The relevance of GEF support is also demonstrated by the alignment between the recommendation by the National Adaptation Plan of Action of adopting a collegial approach through interministerial collaboration as a strategy to address climate change adaptation and the way the RAZC project has been implemented. The project has fostered collaboration between different departments of the Ministry of Agriculture, Decentralization, Hydraulic, Forestry, Environment as well as with dedicated institutions such as the Institute for Agriculture Research of Guinea. The latter has overseen the capacity building for agriculture components and anti-salt dyke of the project.

70. The relevance of GEF support has also been strengthened by the recent expansion of the GEF Agencies, which has enabled Guinea to work with a wider range of partners based on their comparative and competitive advantage. Before the expansion, the country had no other choice than to work with the three original GEF Agencies, some of which—according to representatives of the Ministry of Environment—are not always in line with the government in terms of needs and priorities. As a result, after the expansion the country decided not to work with certain Agencies on specific projects.

71. Currently, Guinea selects its GEF Agency based on the competitive and comparative advantages offered by each Agency for each project proposal. For instance, it was reported to the mission that Guinea is currently working with the Food and Agriculture Organization of the United Nations on a project related to land management around forest areas, to reconcile livestock production, agricultural production, and integrated management of protected areas. Another example concerns the International Union for Conservation of Nature, one of the most recently accredited Agencies by the GEF. Based on its expertise on the subject, the International Union for Conservation of Nature was asked to accompany a group of four neighboring countries—Guinea, Sierra Leone, Liberia, and Ivory Coast—on a regional project to fight against wildlife crime. This proposal was initially sponsored by the African Development Bank. As soon as it got accredited by the GEF, the International Union for Conservation of Nature, in agreement with the African

¹¹ The World News, May 28, 2019. Available at: <https://theworldnews.net/gn-news/amenagement-des-plaines-de-kaback-la-hollande-offre-30-millions-d-euros-a-la-guinee>.

Development Bank, took the lead on the proposal based on a specific request from participating countries.

6. Gender

72. Guinea has adopted its policy on gender in 2011. The overall goal of that policy is to promote, by 2020, equality and equity between men and women through the significant and lasting reduction of all forms of gender disparities and discrimination.

73. Despite this favourable national policy context, neither the project documents nor the respective terminal evaluations of the Niger River Basin project, the CMBMP, or of CLMP specifically mention gender. The CMBMP's ICR review (World Bank 2014) refers to women's groups involved in all SLM practices through socially inclusive capacity-building activities that supported income generation. The CLMP's ICR review (World Bank 2016) reports that of 94 microprojects implemented (exceeding the target of 60), 59 percent were targeted to women (exceeding the target of 30 percent). The project helped women's groups to become better organized and to take an agribusiness approach to their gardening work.

74. During its field work the mission visited several women-led activities. In fact, most of the activities visited in the field visits are run by women's groups. These groups are continuing working on the gardening sites supported by the GEF. The involvement of women contributes to the sustainability of project outcomes, especially with environment-friendly income-generating activities. Continuation of these activities is partly supported by the government. The women's group in Tougny is a member of the government forum for gardening farmers and pays its annual membership fee. In return, they receive technical assistance on horticulture as well as farming tools.

75. Continuation of women-led gardening activities is also explained by the strong interest and commitment of the women's groups themselves. The market gardening group Mounafanyi, visited by the mission in Mamou, is a good example of a success story. Mounafanyi is a 20-women owned group who grows vegetables the whole year. Mounafanyi has more than \$1000 as savings in their bank account. The cooperative has bought a piece of land to build an elementary school for their children. These women have organized themselves through their cooperative to contribute to the overall development of their communities. Furthermore, Mounafanyi women are accompanied by a dedicated agriculture extensionist who resides in the village. This cooperative will most likely continue its work in the years to come.

76. Recent projects tend to pay greater attention to gender. The REDECC project has promoted a strong involvement of women in agricultural production through the adoption of agroforestry practices and promotion of horticulture, small ruminants, and poultry (laying hens, etc.).

7. Fragility

77. Currently, Guinea is not considered as a fragile country.¹² However, past sociopolitical instability and conflicts—both in the region and in the country itself—have affected its natural resources endowment. The Ministry of Environment representatives interviewed by the mission indicated that in the late 1990s Sierra Leone and Liberia experienced a civil war, which led to the migration of millions of people to Guinea. Most of the migrants settled in areas that are close to the border, which is in the forest region of the country. This war heavily affected the environment in those areas, where forest resources were threatened and destroyed. To address these challenges, a regional project (consisting of Liberia, Sierra Leone, and Guinea) was funded by the World Bank in 2005 to protect the biodiversity in the Nimba Mountains. In 2007, a study was conducted on natural resources depletion around refugee camps. Although not directly related to GEF support, this study provides context and helps to understand how fragility can negatively affect the environment ([Oucho 2007](#)).

78. Fragility in Guinea directly affected the timely delivery of GEF support. In the biennium 2008–10 there was an interruption of the PACV because of the civil unrest that followed the president's death, which forced the World Bank to suspend all its operations in the country. Both CMBMP and CLMP were stopped as well, as they were hosted and executed through the PACV. Interviews in ANAFIC indicated that this unforeseen interruption caused serious delays during implementation.

8. Conclusions

79. The APR ratings for the three projects completed between 2007 and 2014, selected for the Guinea Case Study, were:

- (a) Niger River Basin (GEF ID 1093)—outcome: positive, and sustainability: positive
- (b) CMBMP (GEF ID 1273)—outcome: negative, and sustainability: negative
- (c) CLMP (GEF ID 1877)—outcome: negative, and sustainability: negative

80. Based on the mission findings and postcompletion verifications conducted in this case study, the only change in the above ratings is for the CLMP, which becomes positive owing to the prospects for financial sustainability brought about by decentralization and a 15 percent mining tax channeled to local development plans through ANAFIC.

81. Overall, the Guinea Case Study findings confirm the APR findings for what concerns the factors contributing to or hindering the sustainability of project outcomes, or both. The following factors appear to have fostered the observed sustainability:

¹² World Bank: "Classification of Fragile and Conflict-Affected Situations." Available at: <http://pubdocs.worldbank.org/en/189701503418416651/FY18FCSLIST-Final-July-2017.pdf>.

Project related

- Working with the ongoing decentralization and local development planning process, in which GEF support has mainstreamed SLM and climate change adaptation measures. Mainstreaming has become mandatory for all communes in Guinea. ANAFIC funding is likely to improve financial sustainability, provided communes take advantage of this funding opportunity by including environmental investments in their 5-year LDPs and requesting the related investment funding in their annual investment plans.
- Hosting GEF projects in a national program that has strong track record as was the case with PACV, which staffs have been reassigned to the same areas where they worked, which ensures continuation and institutional sustainability.
- Providing opportunities for income generation from environmental conservation measures at the local level (i.e. at the environmental and developmental nexus). Even if local communities are aware of the need to preserve the environment, there is little chance that they will change their behavior if they do not have at their disposal a viable income-generating and economic alternative.
- Promoting women-led initiatives. Women-led alternative income-generating activities demonstrated better prospects for sustainability.

Context related

- Beneficiaries providing postproject funding, for example in the horticulture garden operations led by women.
- Local level technicians retained in local government offices. Staffs of the national program have been retained in the same areas by ANAFIC.

80. The following key factors appear to have hindered the observed sustainability:

Project related

- Poor project design, observed in several cases during field verifications, especially on the more recent climate change adaptation projects. This is a missed opportunity, considering the success GEF had in raising the profile of adaptation in the national environmental agenda and the various funding opportunities made available by international donors for adaptation.

Context related

- Uncertain political support, demonstrated by the government focus on mining as well as the low budget allocation to the environment both at the national level and in the communes' LPDs, and lack of funding for forest agents' enforcement tasks, among others.

- Weak enforcement of laws and policies, demonstrated by the lack of enforcement of the mining code and the almost totally uncontrolled deforestation for charcoal production and other slash and burn agriculture activities.
- Insecurity, which directly affected the timely delivery of GEF support with the interruption of PACV in the biennium 2008–10.
- Government uncontrolled private investments in coastal areas, observed in Koba, where estate planning investors from Conakry reclaimed coastal land to build houses on the beach near the dyke without control from local authorities.

82. Although, in general, GEF support has been relevant to Guinea's national environmental challenges, this does not necessarily translate into large-scale and long-term environmental change in the country. As is the case for other countries in the region, although donors push for environmental conservation, the government of Guinea pursues an approach of balanced conciliation between environmental and developmental objectives.

83. The relevance of GEF to Guinea's national priorities has also increased owing to the recent move toward an intersectoral approach to the environment. Although the country lacks coordination between the sectors on overall environmental issues when it comes to development planning, it presents the sustainable management of Guinea's natural capital as a cross-cutting issue in its developmental policies. In fact, the environment is the fourth pillar in terms of priorities of the National Program for Social and Economic Development. At the national level, GEF support to climate change adaptation projects introduced interministerial collaboration. At the local level, the intercommunity initiatives in SLM and subwatershed management introduced by both CMBMP and CLMP have been an effective tool for environmental management.

84. The extension of the partners has increased the relevance of GEF support to Guinea's national environmental priorities. It has enabled Guinea to work with a range of partners based on their comparative and competitive advantage.

85. Although the desk review did not find specific reference to gender, women have gotten special attention and treatment in GEF projects. A great share of the activities visited by the mission are successfully run by women's groups.

86. The GEF is neither mandated nor equipped to address fragility situations emerging during GEF project implementation. However, GEF funding could be used, as was the case with the World Bank regional project that followed the conflict in Sierra Leone and Liberia, to restore the environmental degradation caused by such situations.

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Annex A: List of Interviewees

Name	Role/Institution
Oyé Guilagoui	Minister of State Ministry of Environment, Water and Forest
Amadou Sébory Touré	GEF Operational Focal Point Ministry of Environment, Water and Forest
Rachidi B. Radj	Country Director World Bank
Windpouire Josephine Lydie Sankara	Operations Officer World Bank
Racki Dia Camara	Program Assistant World Bank
Lionel Laurens	Country Director United Nations Development Programme
Mamadou Ciré Camara	Program Officer Environment and Sustainable Development United Nations Development Programme
Mamadou Kalidou Diallo	Monitoring, Evaluation and Environment Statistics Officer United Nations Development Programme
Mamadou Lamarana Diallo	Project Coordinator RAZC/United Nations Development Programme
Balde Younoussa	Consultant United Nations Development Programme
Mandiou Conde	National Director

	National Directorate of Hydraulics
Yogbo Doré	Deputy National Director National Directorate of Hydraulics
Camara Ibrahima Sory	Coordinator/National Focal Point Ministry of Energy and Hydraulics/Niger River Basin Authority
Mamadou Aliou Barry	Technician National Directorate of Hydraulics
Jean Pierre Loua	Technician National Directorate of Hydraulics
Henri Niankoye Loua	Technician National Directorate of Hydraulics
Soumah Mohamed Sankoun	Technician National Directorate of Hydraulics
Sekouba Sacko	Technical Coordinator Niger River Basin Project
Mohamed Lamine Bah	National Director National Directorate of Meteorology
Alpha Yaya Diallo	Deputy National Director National Directorate of Meteorology
Ismael Camara	National Director National Directorate of Local Development
Aboubacar Sidiki Sylla	Chief of Section National Directorate of Local Development
Mamadou Bella Balde	Secretary General for Decentralization – Mamou region

Alhassane Camara	Préfet, Forecariah region Ministry for Territory Administration and Decentralization
Camara Samba Aissata	Deputy Sous-Préfet, Forecariah region Ministry for Territory Administration and Decentralization
Camara Mountaga	Sous-Préfet, Kaback province in Forecariah region Ministry for Territory Administration and Decentralization
Ahmed Tidiane Somah	Préfet, Boffa region Ministry for Territory Administration and Decentralization
Mory Diallo	Préfet, Mamou region Ministry for Territory Administration and Decentralization
Boubacar Barry	Director Directorate of Territory Administration and Decentralization
Namory Keita	Director Directorate General of Nature Conservation
Mamdy Sayba Keita	Director General Guinean Office of Parks and Reserves
Watta Camara	Director General Forest Center of N'Zerekore
Saidou Doumbouya	Administrative Director Center for Monitoring and Environmental Information
Bangaly Dioumessy	National Director of Livestock National Directorate of Agriculture and Livestock
Bakary Magassouba	National Focal Point, Agreement on the Conservation of African-Eurasian Migratory Waterbirds/Guinean Office of Parks and Reserves/Ministry of Environment, Water and Forests

Joseph Sylla	National Focal Point United Framework Convention on Climate Change
Alkaly Bangoura	Senior Officer Secretariat Ministry of Environment, Water and Forest
Seydou Bari Sidibé	Senior Officer Secretariat Ministry of Environment, Water and Forest
Camara Laye	Officer responsible for PACV, Coastal Marine and Biodiversity Management (CMBMP), and Community-Based Land Management (CLMP) National Agency for Financing Communities (Agence Nationale de Financement des Collectivités—ANAFIC)
Sylla Kamba	Environmental & Social Safeguards Policy Monitoring Expert ANAFIC
Ibrahima Sory Camara	Coordinator Digital Financial Services

Annex B: List of Sites Visited

Préfecture	Project Sites
Forekariah	Kabach (GEF ID 3703)
Boffa	Koba, (GEF IDs 3073, 1273)
	Tougnifily (GEF IDs 1273, 1877)
Mamou	Tolo (GEF ID 1877)
	Poredaka (GEF ID 1877)

TECHNICAL DOCUMENT 5 - UGANDA CASE STUDY REPORT

April 2020

List of Acronyms

GEF	Global Environment Facility
IEO	Independent Evaluation Office
MWE	Ministry of Water and Environment
PA	protected area
PAMSU	Protected Areas Management and Sustainable Use
SCCE	Strategic Country Cluster Evaluation
SSA	Sub-Saharan Africa
UNDP	United Nations Development Program
UWA	Uganda Wildlife Authority

1. Introduction

Background and Context

1. This report presents findings from the Uganda Case Study. Case studies are the main components of the Sub-Saharan Africa (SSA) Strategic Country Cluster Evaluation (SCCE): Sahel and Sudan-Guinea Savanna Biomes. The Uganda Case Study is one of five case studies conducted as the main component of the SSA SCCE: Sahel and Sudan-Guinea Savanna Biomes. The studies focus on the two overarching evaluation objectives: (1) to understand the determinants of sustainability; and (2) to assess the Global Environment Facility's (GEF) relevance to and performance in tackling the main environmental challenges in the two biomes.
2. Land degradation in Uganda is widespread, varying in intensity and pattern from one part of the country to another, depending on farming practices, population pressure, vulnerability of the soil to denudation, and local relief. It is most pronounced in the drylands, which stretch along a southwest–northeast diagonal across the country popularly known as the “cattle corridor.” The drylands covering approximately 84,000 square kilometers account for some 90 percent of the national cattle herd. Despite the large numbers of cattle, poverty indicators show that the drylands constitute a severe poverty hotspot (see UNDP's Human Development Report 2005; UNDP 2005).
3. Uganda boasts two National World Heritage sites (criteria iii and iv), the Rwenzori Mountains National Park and the Bwindi Impenetrable Forest National Park. The Rwenzori have a high level of endemism particularly in the afro-alpine zone, and several trees are found only there or in the other forests of southwestern Uganda. Bwindi is unusual in that it is one of the few remaining areas in East Africa where lowland and montane forests meet, and as a probable refuge in the Pleistocene has exceptionally high biodiversity. Although it is the most diverse forest in East Africa for several plant groups, the species lists are no doubt far from complete. Half of the country's 400 known tree species are in Bwindi, including the globally threatened *Lovoa swynnertonii*. Bwindi also has an exceptionally diverse fauna, including approximately 35 percent of the world population of mountain gorillas. Uganda has one Ramsar site, Lake George, which is also a UNESCO Biosphere Reserve. The site has a rich flora, while over 50 fish species have been recorded from the lake, and it is an important overwintering site for many species of palearctic water birds.
4. The Kibale Conservation Area is located in the Albertine region and consists of the Kibale National Park, the Toro Semliki Wild Reserve, the Semliki Wild Reserve, and the Katonga Wild Life Reserve. The Kibale Conservation Area is spread across the three districts of Kyenjojo, Kamwenge, and Kabalore. Much of the support provided to Ugandan forests in the Albertine Rift focuses on the forest national parks on the southwestern corner of Uganda. Local communities around the forests have a high dependence on the forest resources because of poverty and lack of alternative sources of livelihoods.
5. According to the *2017 Statistical Abstract* by Uganda Bureau of Statistics (UBOS 2017), the Lake Mburo National Park is on one of the three most commonly visited game parks in Uganda; Queen Elizabeth National Park (35 percent of visits), Murchison Falls National Park (31 percent of visits), and Lake Mburo National Park (11 percent of visits).

Lake Mburo is located in the Kiruhura District in the Western Region of Uganda. The park has a variety of animals such as zebra, hippopotamus, impala, warthog, common eland, African buffalo, jackal, African leopard, and over three hundred (300) bird species. At 260 square kilometres (100 square miles), the park is the smallest of Uganda's savanna national parks.

6. For its size, Uganda is home to a high number of species. Nearly 19,000 have been recorded, almost half of them insects, 7000 plants, and approximately 2000 vertebrates. Such diversity is due in part to the wide range of elevations and habitats, although Uganda has experienced severe deforestation, cover falling from approximately 45 percent in 1900 to less than 8 percent today. Wetlands are of major significance in Uganda, covering approximately 13 percent of the territory. The driest regions are steppes and thickets in the northeast, while Mount Elgon in the east and the Rwenzoris in the west have high elevation forests, bamboo and tree heath, and high moorlands. Both of these mountains are ecological islands in the surrounding savannas. Uganda has six of the 12 major centers of plant endemism in Africa (White 1983).

7. Over twenty species of plants are known to be invasive in Uganda, including the widespread water weeds, *Eichhornia crassipes*, *Pistia stratiotes*, *Salvinia molesta*, and *Azolla filiculoides*. Uganda has developed capacity in biological control, and this has been put to good effect against the water hyacinth. As part of the GEF Lake Victoria Environmental Management Project, there has been good interinstitutional collaboration, including working toward a strategy and action plan developed by a national technical committee and involving the Presidential Economic Council. However, *E. crassipes* is still seen as a threat in Lake Albert, along with *Vossia cuspidata*. *Lantana camara*, a widespread weed in Africa, is a threat to the Budongo forest, Iganga/Pallisa, and the Mount Elgon National Park, whereas *Boswellia papyrifera* is also a threat in Budongo. The introduced *Acacia spp.* and *Mimosa pigra* are also invasive in a number of areas in Uganda.

8. The Uganda National Biodiversity Strategy and Action Plan identifies invasive species as a threat to biodiversity and proposes strategies for addressing the threat in the aquatic resource and forestry sectors, which cover the key sites of globally important biodiversity described here. However, despite the experience with water hyacinth, invasive species issues are not dealt with in a coordinated way, there being a wide range of legislation and institutions relating to the problem.

9. The cattle corridor in Uganda covers an estimated area of 84,000 square kilometers (i.e., 43 percent of the country's total land area) and is home to over 6.6 million people. The corridor is a semiarid transition zone across the center of the country, between the wet forest/grassland mosaics to the south around Lake Victoria, and the arid grasslands on the Sudanese boarder in the north (Karamoja). Most of the cattle corridor was traditionally inhabited by pastoralists who communally grazed their herds on the range, mixed with limited rain-fed agriculture. The corridor is host to a mixed production system comprising nomadic pastoralists, agro-pastoralists, and subsistence farmers; all subsisting in the drylands with a production system characterized by five critical facts: unclear, insecure land and resource tenure; increasing demand for biomass energy; low levels of economic growth; high and growing population; and uncertain climatic conditions. The corridor exhibits serious land and resource degradation driven by overgrazing, inappropriate agriculture

practices, and charcoal production leading to deforestation. The overall impact of degradation has been the disruption of ecosystem services, particularly provisioning services, caused by habitat fragmentation that reduces complexity and diversity, soil erosion with consequent declining soil fertility and declining productivity, invasion by termites, and nutrient loading of water bodies.

10. Biomass is the most widely used source of energy in Uganda. The majority of rural populations (93 percent) rely on biomass for cooking, with wood supplying over 75 percent of the total energy consumption. Charcoal is preferred to firewood because of its higher energy density than in wood. Because of this high-energy content per unit of weight, it is easier to transport than wood and is transported to markets far away from forests. When used for cooking, it is substantially more efficient than wood and burns with little smoke. The midterm review report for GEF ID 4644 (Addressing Barriers to the Adoption of Improved Charcoal Production Technologies and Sustainable Land Management Practices through an Integrated Approach) pointed out the inefficient charcoal production practices and an unsustainable wood biomass supply, as well as inadequate, often conflicting, policies as key challenges. The institutional and policy framework for charcoal, entailing tree planting, research, extension, production, marketing, as well as utilization, is weak.

11. A large portion of the Mount Elgon landscape (approximately 60 percent) is now deforested. The local population depends heavily on a variety of ecosystems in the region. River catchments are used by local communities for their socioeconomic activities, including agriculture, small-scale industries, tourism, and wildlife conservation. The wetlands are used as sources of freshwater for livestock, herbal medicine, food, and domestic use, and for fiber and firewood. Insecure land tenure is a major driver of land degradation by creating uncertainty regarding the possibility of reaping the long-term benefits of investing in sustainable land management practices and structures, particularly terracing on the slopes and tree planting. Those who do own land have very small land patches for subsistence, fuel wood, grazing, etc. There is increasing pressure on the land to accommodate a population that is still rising at the rate of 3.4 percent per year.

12. The region is faced with landslides and soil erosion; 84 percent reported recent drops in crop quality and yield attributable to soil erosion. There are no district and local land use plans that makes it difficult for the districts and lower authorities to coordinate land management approaches and to provide coherent support and advice to communities. Even though some local environmental ordinances and bylaws have clauses relating to the use of land on steep slopes, they are not properly enforced.

Objectives and Scope

13. In its latest annual performance report (APR) (GEF IEO 2018), the GEF Independent Evaluation Office (IEO) has conducted a desk review of postcompletion verification reports (n=53), finding that the following contributing factors were at play in those cases in which past outcomes were not sustained:

- (a) Lack of financial support for the maintenance of infrastructure or follow-up
- (b) Lack of sustained efforts from the executing agency

- (c) Inadequate political support, including limited progress on the adoption of legal and regulatory measures
- (d) Low institutional capacities of key agencies
- (e) Low levels of stakeholder buy-in
- (f) Flaws in the theory of change of projects

14. Building on the APR desk review findings, this evaluation aims at exploring in depth, through country case study analysis, the factors contributing or hindering the sustainability of project outcomes. The aim is to cross-check the APR findings as well as to identify any other nuances to the six factors above, or new factors that either hinder or contribute to the sustainability of project completion outcomes. In addition, country studies also cover relevance issues such as GEF support modalities, expansion of GEF Agencies, and cross-cutting issues such as gender, resilience, and fragility.

15. The Uganda Case Study covered six projects, selected according the SSA Biomes SCCE Country Studies Guidance Note.¹³

Table 1. Projects covered in the Uganda Case Study

GEF ID	Agency	Focal Area	Status	GEF Phase	Type	Project Title
1175	UNDP	Biodiversity	Completed	GEF-3	Full-size	Conservation of Biodiversity in the Albertine Rift Forest Areas of Uganda
1830	World Bank	Biodiversity	Completed	GEF-1	Full-size	Protected Areas Management and Sustainable Use (PAMSU)
2140	UNEP	Biodiversity	Completed	GEF-3	Regional	Removing Barriers to Invasive Plant Management in Africa
3393	UNDP	Land degradation	Completed	GEF-4	Full-size	SIP: Enabling Environment for SLM to Overcome Land Degradation in the Cattle Corridor of Uganda.
4644	UNDP	Multifocal	Ongoing	GEF-5	Full-size	Addressing Barriers to the Adoption of Improved Charcoal Production

¹³ See “Strategic Country Cluster Evaluation (SCCE): Sahel and Sudan-Guinea Savanna Biomes Guidance Note for Country Case Studies” in this volume. <https://www.gefio.org/documents/scce-african-biomes-guidance-note-country-case-studies>.

						Technologies and Sustainable Land Management Practices through an Integrated Approach	
5718	UNDP	Multifocal	Ongoing	GEF-5	Full-size	Integrated Management	Landscape
						for Improved Livelihoods and Ecosystem Resilience in Mount Elgon	

Note: UNDP= United Nations Development Programme. UNEP=United Nations Environment Programme

Source: Project Management Information System

Methodology

16. The main study methods employed were desk reviews, key informant interviews, dyadic interviews, and project site visits, as explained here below.

Desk Review

17. Desk review of the following documents was conducted to provide a background for the projects and an understanding of the approach and methodology: (1) SSA Biomes SCCE Approach Paper¹⁴; (2) GEF IEO *Annual Performance Report 2017* (the sustainability analysis chapter); (3) SSA Biomes SCCE Selection of Case Study Countries note¹⁵; (4) project documentation (both design and progress reports [project implementation and midterm], and terminal evaluations); (5) SCCE: Sahel and Sudan-Guinea Savanna Biomes Guidance Note for Country Case Studies, including the interview protocol; (6) guidance note for dyadic interviews; and (6) geospatial analyses and portfolio reviews.

Key Informant Interviews

18. Key informant interviews were conducted at the national and district level among key personnel that either managed or supervised the projects, which entailed the Ministry of Finance, Planning and Economic Development; United Nations Development Programme (UNDP); the World Wildlife Fund; the Uganda Wildlife Authority (UWA); the National Environment Management Authority; the Ministry of Agriculture, Animal Industry and Fisheries; the Ministry of Water and Environment (MWE; United Nations Environment Programme; and the National Agriculture and Research Organisation. The detailed list of people interviewed is attached as annex A.

¹⁴ See "Strategic Country Cluster Evaluation (SCCE): Sahel and Sudan-Guinea Savanna Biomes – Approach Paper" in this volume. <https://www.gefio.org/documents/scce-african-biomes-approach-paper>.

¹⁵ See "Strategic Country Cluster Evaluation (SCCE): Sahel and Sudan-Guinea Savanna Biomes: Selection of Case Study Countries" in this volume. <https://www.gefio.org/documents/scce-african-biomes-selection-case-study-countries>.

Dyadic Interviews

19. Dyadic interviews involved two project managers, one knowledgeable of a programmatic project (a child project belonging to SIP: Enabling Environment for SLM to Overcome Land Degradation in the Cattle Corridor of Uganda, GEF ID 3393) and the other of a comparable standalone project (Integrated Landscape Management for Improved Livelihoods and Ecosystem Resilience in Mount Elgon, GEF ID 5718), to discuss relevance and sustainability of different kinds of modalities.

Project Site Visits

20. Project sites visits included interviews with the technical officers in the districts who were in charge of supervising the projects, as follows:

- (a) Kyenjojo District Headquarters
- (b) Bugaki Subcounty Tree Lot, Kyenjojo District
- (c) Kibale National Park, along Kamwenge Road, Kabalore District
- (d) Toro Semliki Wild Reserve, along Karugutu-Ntoroko Road, Kabalore District
- (e) Sebitori Bee Keeping Project, Kibale National Park, Kabalore District
- (f) Mbarara District Headquarters—former district in charge of Lake Mburo National Park, at the time of implementation
- (g) Lake Mburo National Park; Kiruhura District

Key Study Questions

21. The key study questions were:

- (a) What are the key factors influencing sustainability of outcomes in in Uganda?
- (b) In what way, if any, does the environment and socioeconomic development/livelihoods nexus (or lack thereof) help explain the sustainability of outcomes in in Uganda?
- (c) To what extent has GEF support been relevant to the main environmental challenges in Uganda, and are there any gaps?
- (d) To what extent have gender and resilience been taken into consideration in GEF programming in in Uganda?

Study Limitations

22. The limitations encountered included the difficulty of finding people who worked on the project in the same institutions. Most people had moved on and it was difficult to trace them. Even at the district level, the technical staff have mostly changed so we had to follow

them wherever they were located. For some we had to conduct Skype and phone interviews when they were not physically available.

23. Regarding the dyadic interviews, the challenge was bringing the two managers together in one room at the same time. They were working in different parts of the country and very busy, and on the day of the agreed interview, one got an abrupt travel engagement that was taking him away for a long time. We had to do a telecom meeting to address this limitation.

24. Limited recall was another limitation, because most people had forgotten about the project and could not recall much. Extra probing and reminders from project documents helped to improve the recall.

2. Findings

26. The findings are presented according to key questions as follows: factors contributing to the observed sustainability of outcomes, observed sustainability and the environment/socioeconomic nexus, relevance of GEF support to the environmental challenges faced by the country, and gender and resilience.

Factors Contributing to the Observed Sustainability of Outcomes

Project Related

27. **Aligning GEF projects to sector priorities.** Projects were designed by sectors informed by national and sector plans. The sectors took up a number of those interventions after project closure. This was true for all projects. One part of it is ensuring relevance of the projects to weather changes, which increased acceptability and adoption at a community level. In Eastern Uganda, people asked, “why are stones growing,” after seeing bare rocks being more and more exposed. When organic matter was accumulated in one place and grass started to grow, this was very much appreciated and was hence duplicated by communities in other regions.

28. **Good project design.** This is the case especially for the support to infrastructure, office equipment, and motor vehicles (Protected Areas Management and Sustainable Use [PAMSU]; GEF ID 1830). These inputs lasted for a long time and are still largely functional. Good project design included providing relevant normative support. Data and information generated from several studies that were conducted resulted in information products, as in the Reducing Emissions from Deforestation and Forest Degradation study under the Conservation of Biodiversity in the Albertine Rift Forest Areas of Uganda (GEF ID 1175) project, which resulted in the readiness plan, forest investment plan, and the strategic plan for the Northern Albertine rift that is being taken up in the regions. Other examples include the National Invasive Species Strategy Action Plan and the Policy Guidelines inclusion of invasive species in the curriculum of agriculture colleges in Uganda through the National Council for Higher Education, as well as the inclusion in environmental laws (Removing Barriers to Invasive Plant Management in Africa; GEF ID 2140). This enabled line ministries, departments, and agencies to carry on the implementation of these activities. Skills generated through trainings under GEF ID 1830, 1175, and 3393 have been sustained and replicated in the follow-on projects and in other non-GEF projects in Uganda. The Albertine

Rift Conservation Group was formed as a result. Support to districts, for instance, in Masindi and Hoima (GEF ID 1175), to enact conservation bylaws and ordinances favoring tree planting, fostered biodiversity conservation. Capacity building included working with schools for environmental education. GEF ID 1175 promoted the establishment of woodlots and environmental conservation signage/talking compounds in schools. Students became change agents in their communities.

29. **Involving stakeholders at design and implementation.** All GEF projects consulted stakeholders and sought community engagement in implementation and monitoring interventions at the community and district level. Some projects like GEF ID 2140 used community-based trainers who remained in the communities after project closure. These were nominated by communities and were not facilitated right from the beginning for sustainability concerns. The communities got some grants, so they were part of the beneficiaries (GEF ID 3393 and 5718). Introducing a multisectoral approach was a good way to involve central level stakeholders. For example, an interministerial committee on sustainable land use management strengthened service delivery and continuity. This committee comprised the Ministry of Agriculture, Animal Industry and Fisheries; the Ministry of Minerals and Development; the Ministry of Lands; Ministry of Tourism, Wildlife and Antiquities; the Ministry of Trade and Industry; and MWE. For PAMSU (GEF ID 1830), GEF Agencies partnered with line ministries, departments, and agencies of the local governments. Civil society organizations brought onboard a comparative advantage and ability to build capacity to the community during and after the project. The districts continued to support tree planting, while some civil society organizations like the World Wildlife Fund, the Ngamba Island Chimpanzee Sanctuary, and the Jane Goodall Institute continued using biodiversity practices introduced by the Albertine project, such as biodiversity monitors. The Kidepo project adopted the same model and calls them community wildlife scouts.

30. **Promoting self-financing aspects for parks internal revenue generation.** Increased revenue from gate collections, donations, boat rides, game drives, and the like is used to run park activities and maintain vehicles. This was supported by GEF ID 1830.

Context Related

31. **Postproject follow-up of selected technologies and practices.** The National Forestry Authority and DWD continued providing tree seedlings (GEF ID 1175). Other follow-on GEF and non-GEF supported projects scaled up some of the previously promoted technologies and practices.

Factors Hindering the Sustainability of Outcomes

Project Related

32. **The projects not being institutionalized into line ministries.** In the project appraisals, the sectors reported inadequate involvement by the ministries, particularly with regard to UNDP projects. This meant limited ownership by the government as per the quote below by one national level respondent: "It was their project, it was called UNDP Project. It was taken as a UNDP activity since they were the ones getting funds and they ended up

micro-managing it. It only appeared as a government project when there was a steering committee, that's when the government was in charge."

33. Project rather than ministry staff. Recruiting project staff, instead of assigning roles to the ministry staff, was seen to work against the continuity of projects after project closure, for instance under GEF ID 1175. However, the ministry staff assigned to a project could not get any additional pay, which demoralized the government staff, so projects ended up hiring their own staff. "The projects come with their staff and they (staff) all disappear at the end of the project, nothing is left behind. They handed over 'old' materials to partners and go away; there is no project memory," remarked one respondent. "There was no control or reporting line between project and ministry staff. In order to ensure sustainability, the project should be housed in MWE and the head of department becomes the project coordinator, this will ensure continuity. Job descriptions would then be adjusted to include the SOW. The staff would be directly supervised by the ministry and report to the ministry," remarked another national level respondent.

34. Insufficient and/or badly designed alternative income-generating activities. To meet their needs, community members were forced to cut down trees early and sell them as poles or for charcoal burning. This was cited by both dyadic and field interviews which agrees with the terminal evaluation findings for GEF ID 3393.

35. Lengthy periods for designing GEF projects. GEF requires matching funds, but it was very difficult to secure them from GoU and other running projects; it was hard to convince them to contribute. The project design took 10 years and those who had committed to contribute had closed by the time it started. The lengthy design means that factors such as district boundaries and environmental issues change, and other partner projects close. This leads to the projects achieving less than they ought to have achieved, negatively affecting coverage and scale, and hence limiting sustainability. The project had depended a lot on funding from the International Fund for Agricultural Development, yet they were winding up as the project was starting. This affected all projects, particularly GEF ID 1175.

Context Related

36. National priorities not prioritizing conservation efforts. The Uganda Case Study, Protected Area (PA) Evaluation (GEF IEO 2014) cautioned that the national government's push toward mining and oil exploration in protected areas risks undermining long-term conservation efforts. This was re-echoed during interviews at the national and district levels, according to which oil exploration and related infrastructure, such as buildings, roads, and airports meant clearing of stretches of conservation areas. The Natural Resources Department has no field extension staff at subcounties to monitor and support communities (GEF ID 1175). The community development officers help a bit but are not qualified and do not take it as priority. The community development officers also ask for funding to go to communities that is unavailable.

37. Political interference and weak enforcement of laws and policies. People who have been told to move out of conservation areas move back close to elections with politicians protecting them. Some conservation areas were degazetted to settle people, for instance around the Lake Mburo National Park (GEF ID 1830). Tree cutting has continued, and people

reportedly take logs of trees from the districts to Kampala and turn them into timber there (GEF ID 1175). The weak enforcement of policies was also cited in the terminal evaluation for GEF ID 3393, one of three key barriers that hinder adoption of sustainable land management systems in the cattle corridor. The Uganda Case Study, PA Evaluation (GEF IEO 2014) alluded to a negative will on the side of enforcement officers, noting that some management staff of protected areas did not seem to have the urgency to stop illegal activities, instead condoning it.

38. **Limited funding.** At the international level, it was reported that funding for environmental issues was dwindling. The ministries, departments, and agencies and local governments had very limited allocation of funds to the environment sector. There were limited funds for regular monitoring of deforestation in subcounties (GEF ID 1175), technical support to farmers (GEF IDs 3392, 4644, 1175), and for addressing invasive weeds such as the salvinia weed on Lake Kyoga, the water hyacinth that is continuing to expand on Lake Victoria, the acacia hocali in Lake Mburo, and the congress weed in Queen Elizabeth National Park (GEF ID 2140, 1830). “When projects close, districts can’t take them up because they are supposed to use local funds that have been dwindling. Local funding is from timber, though the district only has reduced to 7 timber licenses and earns less than 10/= million per year; of which 65% remains at subcounty and the district gets 35%. From land, we get about 4/= million in a year. From game parks, all districts neighbouring Kibale Conservation Area (Kyenjojo, Kamwenge and Kabaloro) share 20%, which is little and is used to maintain access roads and buy goats and beehives for communities for income generation,” reported one respondent, Kyenjojo District.

39. **Institutional changes.** GEF support to UWA by GEF ID 1830 resulted in strategic plans and financial management systems that were used several years later. PAMSU further supported the establishment of the Wildlife Education Centre which is still in operation today. However, continuation of these benefits was later undermined by the transition of UWA from the government to an agency. This meant different work ethics and energies from pure government staff, which took some time to adjust. UWA strategic planning was weak at that time. The Tourism Sector was still a new ministry with limited funding, and the weak systems were not yet strong enough to support continuity.

40. **Unfavorable land tenure systems.** Land tenure systems where people were renting land posed sustainability issues, because landowners wanted to get their land back after seeing good profits from it. Insecure land tenure hindered planting trees, as cited in the midterm review report for GEF ID 4644 (GEF IDs 1175, 3393, 4644). The land tenure system also has a gender perspective, with most land in Uganda owned by men, particularly in rural areas. In some areas, especially in the Mount Elgon region, men who owned the land would allow women to plant and nurture trees on it, but only until the trees were at the same height as the women. After that, the trees belonged to the man who owned the land. This discouraged women from investing in trees, yet they are the ones mainly involved in cultivation of land.

41. **Increased population growth.** Increased population has led to land fragmentation when people own smaller shares of land, leading to encroaching on protected areas for settlement, cultivation, and grazing (GEF IDs 1830, 1175). The attempt by GEF ID 1175 to create a wildlife corridor for animals to move from the Queen Elizabeth National Park to the

Murchison Falls National Park did not work because people had settled in-between and forests had been cleared.

42. **Prolonged dry weather.** The Lake Mburo National Park lost almost 90 percent of its planted trees because of the persistent drought experienced in recent years.

Observed Sustainability and the Environmental/Socioeconomic Nexus

Observed Environmental Sustainability

Protected Areas Management and Sustainable Use (PAMSU) (GEF ID 1830)

43. **Surveying and demarcation of protected area boundaries.** Boundaries of protected areas were surveyed and demarcated with stone marks. Boundaries demarcated stood at 90 percent by 2009 and still stand. UWA later increased it by using its resources to plant trees along the boundaries. The Uganda Case Study, PA Evaluation (GEF IEO 2014) report pointed out that strong enforcement coupled with boundary demarcation have reduced encroachment on protected areas. Figure 1 shows Boundary marking at Toro Semuliki National Park.

Figure 1: Boundary marking at Toro Semuliki National Park



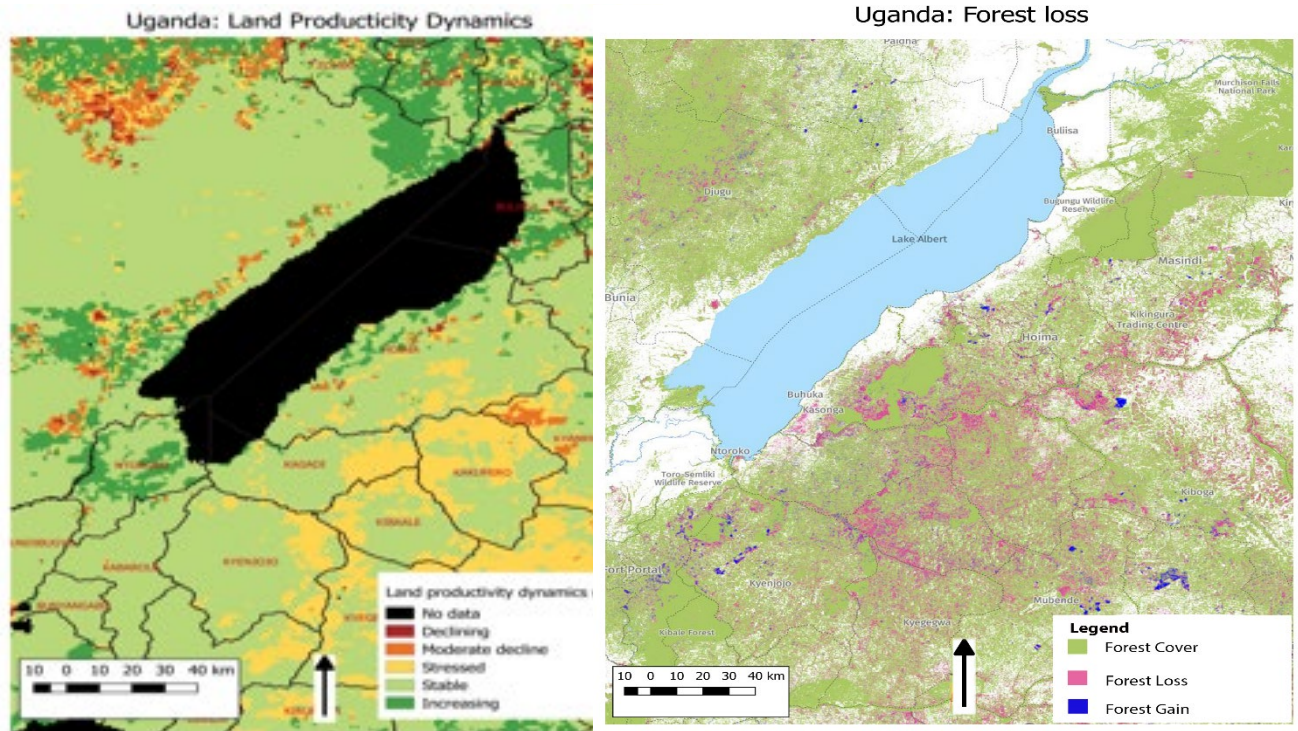
Source: Photo taken by the consultant during field visits

44. **Trenches around the protected areas.** PAMSU supported digging up of trenches to prevent animals from crossing. They are still largely functional, although some are being filled with silt. UWA was opening up some of the clogged trenches.

Conservation of Biodiversity in the Albertine Rift Forest Areas of Uganda (GEF ID 1175) and SIP: Enabling Environment for SLM to Overcome Land Degradation in the Cattle Corridor of Uganda (GEF ID 3393)

45. **Increased planting.** Tree planting continued, particularly in the Albertine region, where more private forests were established. Some free seedlings were later supplied by the National Forestry Authority, Carwell Ltd, and MWE. The Uganda Local Government Authority requires subcounties to plant trees on their land. Pockets of increased tree lots

⌘ *Figure 2: Forest cover loss/gain and land productivity dynamics in the Albertine region*



Source: Produced by the GEF IEO

46. The Uganda Case Study, PA Evaluation (GEF IEO 2014) report also pointed out that the majority of the wildlife and forests in Uganda are outside of the PA system, and activities in these forests are largely under the control of private forest owners who practice short-term afforestation for future harvesting. When private forest owners need of cash, they often cut down and sell off trees. The report further points out that tree-planting has also been promoted by donors, nongovernmental organizations, the National Forestry Authority, and the local government as part of conservation activities around protected areas.

47. **Conservation and forest management plans.** The Albertine Region Strategic Plan was carried forward by MWE who implemented some of the planned activities in the northern Albertine region. The plan still had one more year to go by the time of fieldwork. Districts also incorporated activities into the district development plans. Some civil society organizations, such as the World Wildlife Fund and CARE Uganda, continued to implement those activities. Management plans developed for central forest reserves and land use plans were still being used. Private forest owners were supported to developed forest management plans.

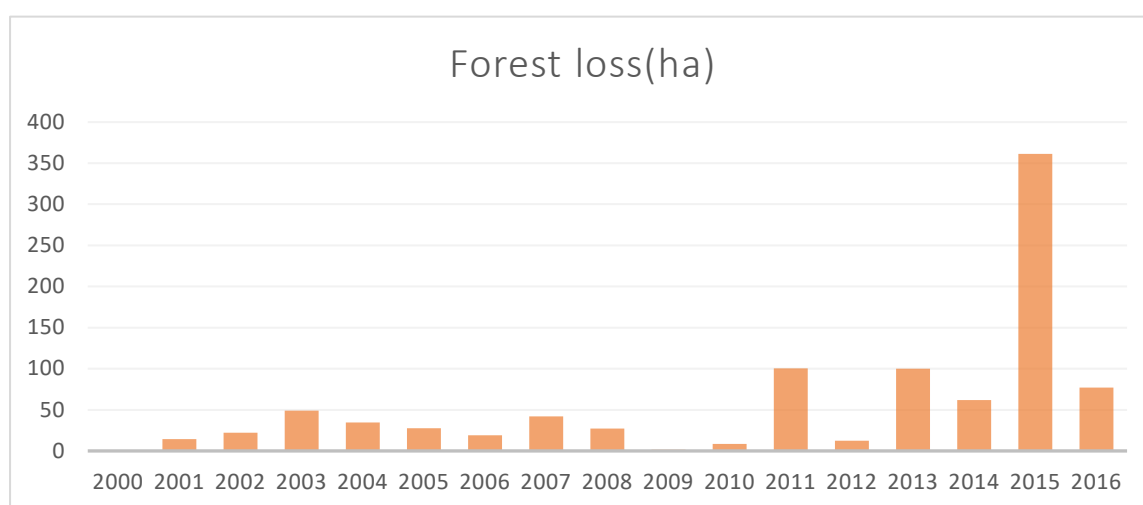
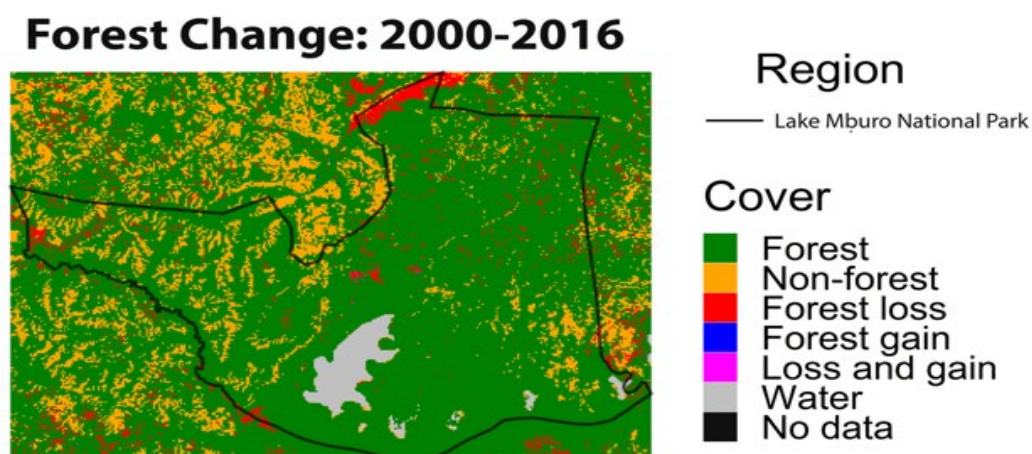
48. **Scaling up of technologies.** Technologies used in the enabling environment for SLM to overcome land degradation were similar to those scaled up in other projects, such as the charcoal project that improved charcoal kilns (GEF ID 4644). Conservation agriculture under GEF ID 3393 was also sustained and scaled up in other projects. Beneficiaries continued to implement those activities using the same technologies.

49. **SLM task forces were established.** District SLM task forces consisting of district natural resource and production committees were established. The members helped mainstream SLM interventions into follow-on activities.

Removing Barriers to Invasive Plant Management in Africa (GEF ID 2140)

23. The impact of this project was not well known or visible or in the districts, particularly in the Lake Mburo National Park, one of the parks where the project was implemented. There was heavy loss of forest cover in the whole park, particularly in the northern boundary where in addition to uprooting of trees, some areas of the park were used to resettle some war veterans, as shown in the map in figure 3. Between 2001 and 2016, the area experienced the loss of approximately 959 hectares or approximately 12 percent of its forest. This was primarily attributed to massive uprooting of Obugando (acacia hokai), which resulted in heavy forest cover loss, particularly acute in recent years (see forest loss chart in figure 3). There was massive opening up of areas to reduce the canopy increase and biomass for herbivores, turning the park from savanna woodland to a forested area. The suppressed dormant seeds of other biodiversity plants would get exposed to more sunshine and rainfall, which increased grassland for herbivores.

Figure 3: Forest change in the Lake Mburo National Park



Source: Produced by the GEF IEO

51. However, some products were mainstreamed at the national level and have continued to be used, as follows:

52. **Inclusion of invasive species in the curriculums of agriculture colleges.** The project influenced the National Council for Higher Education to include invasive species in curriculums of agriculture colleges in Uganda.

53. **Inclusion of invasive species into environmental laws.** Environmental laws were revised to include invasive species, which were initially left out.

54. **Development of the National Invasive Species Strategy Action Plan and Policy Guidelines.** The National Invasive Species Strategy Action Plan and Policy Guidelines were developed, and is being implemented by MWE; the Ministry of Agriculture, Animal Industry and Fisheries; the National Environment Management Authority; and the National Agriculture and Research Organisation.

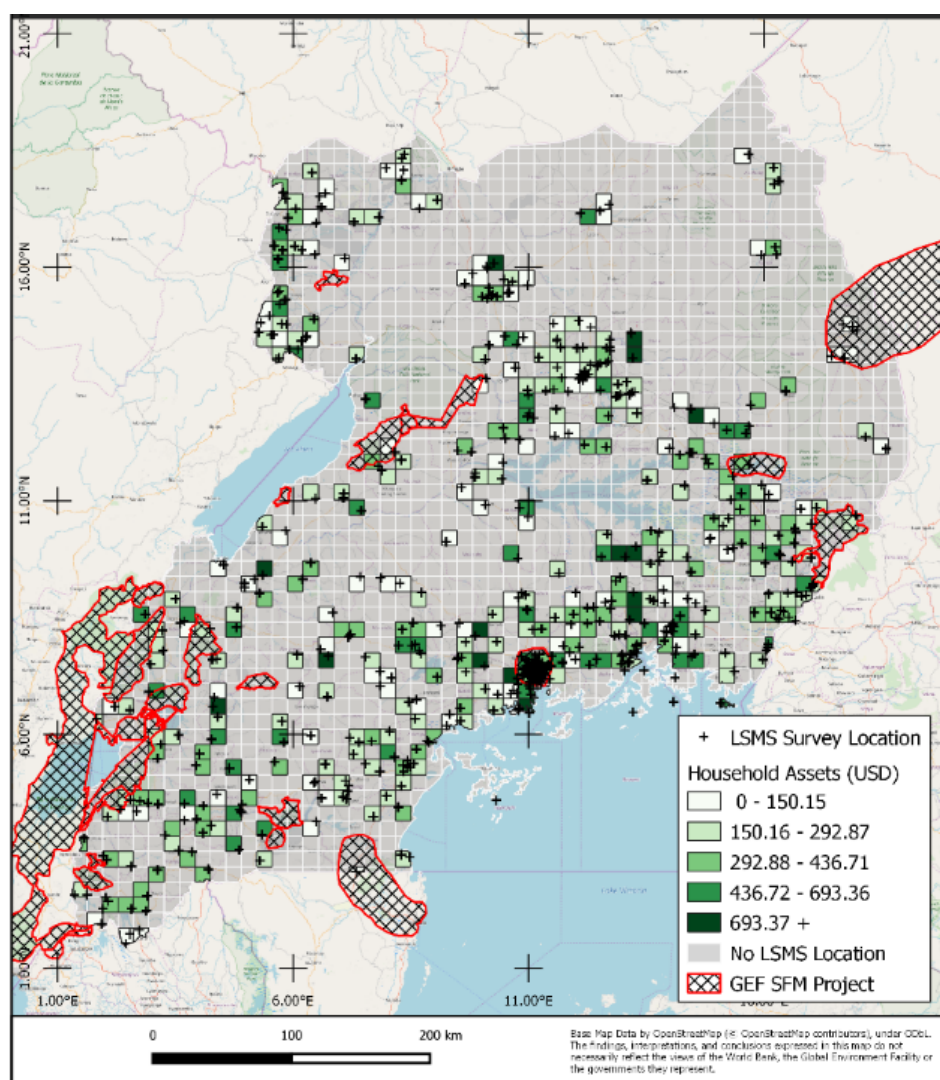
Socioeconomic Nexus

55. **Insufficient, short-term economic incentives for communities.** Overall, although improved conservation lead to increased income for the country and districts, the communities had to forego immediate sources of income from growing crops in protected areas, tree selling, and charcoal burning. Although some efforts were made to help communities start alternative income-generating activities, this was on a very small scale, and not all people around the parks received this support. The need for immediate income was also a common cause of encroachment on the environment in both dyadic and site-level interviews. “As you promote planting of trees, the social economic is communities don’t have ready income and wasn’t to cut trees and sell charcoal for quick income. I implemented my project in the cattle corridor and that was a common issue,” reported one participant in the dyadic interview. “Promoting good land management practices may require ploughing land across the slope rather than up and down yet this contradicts their tradition, of ploughing up and down. The communities needed to trade of tradition and adopt the new promoted practices,” said one participant in the dyadic interview. “Under sustainable land management such as mulching required more labour and more money, the very poor would not afford that, they would even not afford improved seeds or use of fertilisers. To address this, multipliable technologies were used e.g. crops were produced and given to others. The project made sure they promoted cost effective technologies using local materials like energy saving stoves,” remarked one participant in the dyadic interview.

56. A case study in Uganda was carried out as a part of the GEF IEO value for money analysis of the sustainable forest management projects (GEF 2019). The value for money Uganda Case Study leveraged the World Bank Living Standards Measurement Survey to detect the impact of GEF projects on proximate (within 50 kilometers) households to provide a more direct estimate of economic impacts. By comparing Living Standards Measurement Survey locations proximate to GEF interventions with those far away from GEF interventions, the local analysis indicated that GEF sustainable forest management projects are associated with an increase in household assets between \$163 and \$353 (within 40 to 60 kilometers, respectively) (figure 4). The value for money Uganda Case Study shows that households proximate to a GEF implementation site tended to experience

improvements in assets approximately \$310 (within 50 kilometers) higher than those not proximate to a GEF implementation site. The value for money Uganda Case Study corroborates the findings from the field visits conducted in the Albertine rift for this case study.

Figure 4: Data used in the Uganda Case Study of the GEF IEO value for money analysis



Source: Produced by the GEF IEO

57. **Increased revenues from parks.** UWA's own revenues as a proportion of recurrent costs rose from 49 percent in 2002 to 77 percent in 2009; the revenues continued to rise thereafter. The number of visitors to the protected areas rose from 66,542 visitors in 2002 to 142,884 in 2009, and numbers continued to rise thereafter. The number of protected areas with significant conflicts relating to community use or access reduced from 19 in 2002 to only 2 in 2009. All protected areas showed evidence of increased population of key mammal species. Internally generated revenues by UWA rose from 4.7 billion in 2002 to 15.7 billion Uganda Shillings in 2009. The revenues continued to rise from collections from gate entry fees, game rides, and other investments in the parks. Revenue sharing from park gate entry fees, whereby 20 percent is given to communities neighbouring parks, was used

to purchase goats in communities for income generation around the Kibale Conservation Area. Valley dams, classroom, and health center blocks were constructed around Lake Mburo and some in the Albertine region. Some feeder roads were maintained.

58. The Uganda Case Study, PA Evaluation (GEF IEO 2014) also pointed out that the inclusion of communities in benefit-sharing created ownership among communities, resulting from the feeling that their problems (especially concerning wildlife) are being heard and responded to by UWA management staff. This has reduced negative perceptions of PAs, and in some areas has developed a positive perception of them. The improved attitude was reported in visited areas of the Albertine region and Lake Mburo.

59. **Improved Infrastructure.** PAMSU funds were used for UWA office buildings for the head office, UWA offices in national parks, as well as housing units for UWA staff within parks. The proportion of UWA field staff housed adequately on-site increased from 10 percent in 2002 to 40 percent at the time of the field visit by the consultant. These structures are still serving their purposes and are in good condition as shown in figure 5. The trade off in housing construction is having to clear land to construct buildings, hence tempering with the environment.

Figure 5: UWA head office, field offices, and lodging units in Toro Semuliki Game Reserve



Source: Photo taken by the consultant during field visits

60. **Formation of cooperatives.** There was growth from community groups formed under the project to cooperatives, which are more viable economic organizations to manage their activities in business form and to collectively market their produce.

61. **Starting up of income-generation activities.** Although on a small scale, some income-generation activities were started as a result of the project to provide alternative

sources of income to community members. These included bee hives that were established at some edges of the conservation areas to control problem animals such as elephants from crossing over to nearby communities through stings and bee noise. These bee hives are being used to generate honey on a very small scale. The UWA bought tree seedlings from communities to plant and enclose the park around the Kibale Conservation Area, from which they gained some income. The trees were planted in four lines, two for UWA, two for communities. During construction of UWA office and staff quarters, communities earned money by selling food stuffs to construction staff and by renting out their houses to construction staff. One of the beehive projects visited is presented in figure 6.

Figure 6: Beekeeping projects in Kibale National Park



Source: Photo taken by the consultant during field visits

62. Similarly, the Uganda Case Study, PA Evaluation (GEF IEO 2014) noted that community groups that were adjacent to the parks were earning revenue from conducting their own ecotours, helping to establish school infrastructure and income-generating projects to community members.

63. **Increased private sector investments in park facilities.** The private sector was attracted to develop infrastructure in the parks, such as hotels and camps in the reserve areas, hence generating income and employing a number of locals. This enhanced the nexus between environmental conservation and increased income for the private sector within districts that charge hotels taxes.

64. **Strengthened technical and institutional capacity.** District and project staff were trained in different technical areas, including game park management, collaborative financial management and procurement, and basic ranger skills. The obtained skills continued to be used in the districts and parks. PAMSU supported development of manuals that established UWA management systems and are still in use.

65. **Infrastructure and equipment support to PAs.** PAMSU provided vehicles to different conservation areas and some of these were still in use to deploy rangers. The Lake Mburo National Park received three vehicles; a tractor that was still working in community conservation and supplying water to outposts and communities; and two pickup trucks, one

of which broke down (figure 7) but the other was still operational and used for deployment of rangers. The project also supplied computers, furniture, motorcycles, generators, and scanners which were still being used for UWA work.

Figure 7: One of the vehicles bought by PAMSU to the Kibale National Park



Source: Photo taken by the consultant during field visits

Relevance of GEF Support to the Environmental Challenges Faced by the Country

66. All key stakeholders interviewed at the national and site levels reported that GEF support was very relevant for addressing environmental challenges in Uganda. The GEF supported interventions on biodiversity, land degradation, climate change, persistent organic pollutants, international waters, management of invasive weeds, and chemical support. GEF support is aligned to Uganda's Vision 2040 and national plans that call for conservation of natural resources and protection of environment.

67. However, it was noted with concern that there is usually a late start for GEF projects because funds are allocated before projects are formulated: "It can take up to 9 years to formulate a GEF project," reported one national level respondent.

68. Supporting upholding the integrity of protected areas through demarcated boundaries is the main goal of UWA and was very relevant. The project boosted income from tourism. The vehicles provided were very strong and useful in patrolling the parks. The same model of vehicles (Toyota Land Cruiser pickups) were purchased after project closure.

69. Based on findings from dyadic interviews conducted among project managers, one knowledgeable of a programmatic project (a child project belonging to GEF ID 3393) and the other of a comparable standalone project (GEF ID 5718), to discuss relevance and sustainability of different kinds of modalities, it is evident that a programmatic approach is more relevant and hence preferred to a standalone project. The program approach was deemed more sustainable because of interlinkages between the projects, a better-informed design, and a high likelihood for successor projects building on the existing one. "A program is more efficient; one person can manage 3 projects with almost same salary as the standalone projects. A number of resources can be shared such as human resources, materials, vehicles and internet. It is also more effective since they can achieve more than standalone projects," remarked one former manager of child projects.

70. The scope of coverage for a program is broader and is therefore able to achieve more. In addition, program child projects are able to build on earlier investments with more longer-term results, whereas standalone projects are focused on achieving outputs/deliverables (medium term) because of their shorted periods of time. “Programs are more strategic and involve influencing policy changes, advocacy for the benefit of the people that the programs target, whereas standalone projects are more technical and is about delivering outputs stated in the project document within the specified time,” reported one former manager of a standalone project.

Preferred GEF Support Modality

71. Key stakeholders were asked about the preferred typology of support from the GEF with respect to national projects or regional projects, medium-size or full-size projects, and single focal area or multifocal area projects. Almost all respondents mentioned the following preferences:

- (a) **National projects.** Most of the respondents preferred national projects because they are tailored to national needs and are managed in the country. However, a few respondents said that with Uganda being part of the Nile Basin, some transboundary projects are needed where resources are shared. However, they pointed out weaknesses in previous regional projects where they say funds got stuck in other countries.
- (b) **Full-size projects.** Because environmental issues take long to change, they require heavy and long-term investments.
- (c) **Multifocal area projects.** A multisectoral approach is essential because environmental issues arise from several multifaced challenges.

72. Key stakeholders were also asked what they deemed the appropriate type of support from GEF for tackling their main environmental challenges, and they mentioned the following:

- Tackle some issues from a higher/global level to address issues such as oil and gas relating to huge multilateral companies.
- Continued capacity strengthening for ministries, departments, and agencies in upcoming technologies, energy conservation technologies, and climate smart agriculture.
- Invest in an integrated control of invasive weeds, which may include bio control, excavators to uproot some weeds, and tighten border controls. Lake Mburo, a water resource for animals, is dying out because of the invasive water hyacinth. This is a recent development.
- Boost an active habitat management, for instance, by reducing shrubs and planting more trees. This will provide a suitable habitat for animals.

- Support automation of management systems that better manage UWA staff across the country. There is a need to add more modules to the e-system.
- Support tree nursery establishments for all lower local governments for easier community access to seedlings.
- Fund more research, for instance in the Lake Mburo National Park. There is very scant research on the park; for instance, there is need for more research on invasive species.
- Facilitate the environmental extension services, supervision, and monitoring functions to enable regular inspections.
- Adopt a landscape approach as opposed to an ecosystem approach because all ecosystems within the landscapes will be targeted.
- Invest in human/wildlife conflict management because such conflicts are increasing with the increasing population.
- Support construction of water dams. During the dry season, many wildlife die because of a water shortage.
- Support maintenance of access roads to make park roads usable in both rainy and dry seasons.
- With an increasing population comes climatic challenges there is a need to empower citizens to take responsibility and take care of nature and to hold the government accountable. This calls for working closely with civil society.
- Look at environmental conservation from a business perspective. Challenge companies that use large volumes of water such as Coca-Cola and Nile Breweries to contribute to water conservation by investing in the environment.
- Support more long-lasting thatching for staff accommodation and construction of UWA staff housing units. The majority of current UWA housing for game staff has temporary thatching of grass that requires replacement annually, making it very expensive.
- Support pasture improvement outside the park to minimize domestic animals going to the park competing for water and trampling on grass.

Gender

73. Gender has been mainstreamed into sector plans and budgets, which cannot be passed without gender mainstreaming. Gender has also been mainstreamed into the district development plans, although usually there is no matching budget to implement gender activities.

74. Although there were some gender considerations in GEF projects, they were not very elaborate and strong, with the exception of projects funded through the UNDP. The UNDP requires all projects to have a gender expert at the implementation level so that they are formulated and implemented with a gender lens. The UNDP has a gender marker, and each project has gender mainstreaming.

75. The UNDP requires the inclusion of at least 50 percent of women in all activities because they are the ones that continually use the land. Women are encouraged to optimally utilize their access rights to land. A gender balance is emphasized by the UNDP in project staff recruitment, activity participation, as well as in the project board composition. Women were involved in leadership, skills building, and access to technologies. Attendance lists capture gender disaggregated data.

76. The MWE has a gender strategy, and the Environment and Natural Resources subsector has a gender strategy. In the strategy and projects, disaggregated data is used for decision making to cater for gender issues. The Ministry of Agriculture, Animal Industry and Fisheries has gender mainstreaming guidelines and gender guidelines for land degradation and climate change as gender guidelines. All ministries have a gender focal point person. The ministries were reported to have generalized gender strategies, whereas projects have more specific ones.

77. Under the Mount Elgon Integrated Landscape (GEF ID 5718), a number of community-based organizations were formed to access small grants, which are mostly led by women.

78. Women interact a lot with the environment and are recognized as its main influencers. They interact with water and land, and are seed and medicine collectors. The country is increasingly realizing that women are prime in protecting the environment.

79. Some of the gender issues noted include women in areas such as the Mount Elgon region (GEF ID 5718), where women are only allowed to own trees that are up to their height, after that, the tree belongs to the landowner, who are men. This discourages heavy investment by women in tree planting.

80. Initially, gender was not well mainstreamed, particularly in the PAMSU project. The projects were not very gender sensitive, for instance when the UWA staff housing units were constructed, where there was no gender consideration in terms of separate units for men and women. However, this was corrected in later designs. Out of nine UWA board members, only one was a woman, which later improved to two women. UWA had uniforms for staff but this did not include uniforms for pregnant women, and no nursing rooms for breastfeeding mothers.

81. UNDP-funded projects were also looking for ways of making technology more gender friendly. For instance, under conservation agriculture, the technology of permanent planting basins is being promoted, where a hand hoe is used to make small holes, approximately 7600 basins in an acre. Women are the main users of hand hoes, so oxen were introduced to help women. Using oxen also gets men more involved.

Resilience

82. Uganda has a Climate Change Department under MWE that prepares communities to be climate change resilient and has nationally determined contributions and pronouncements to the international arena, to contribute toward reduction of carbon emissions. The MWE has an Environment and Social Safeguard Framework for all projects.
83. Uganda has a National Climate Change Policy and its implementation plan; a climate change bill that is being discussed in the parliament. Uganda developed multisectoral national climate change indicators in 2018 that are being tracked by different sectors and were incorporated into the Programme Based Budgeting and Local Government Assessment tool to strengthen climate change implementation.
84. Uganda has developed resilience projects such as the Support Program for Climate Resilience project that is being implemented. Uganda has conducted assessments on the national adaptation plan of action and interventions. Other resilience interventions being implemented include: irrigation schemes, powering water sources with solar panels to ensure fulltime availability of water, digging up water storage systems for productions such as dams and valley tanks, and water transfers on gravity flow schemes.
85. Resilience was more outstanding under project projects GEF ID 5718 and 3393, where in order to reinforce resilience of landscape, planting of trees was integrated into the landscape to reduce wind speed and for increased water retention. The promoted technologies further help to keep more water and nutrients in the soil. Conservation agriculture increases maximum use of resources and productivity. The project further enhanced resilience of communities through a creation of systems of resilience where communities were organized to undertake joint landscape management activities. The savings groups also helped in reducing land mortgaging for small loans, which led to more social resilience. In addition, better prices for crops were obtained after cooperatives.
86. The Uganda Case Study, PA Evaluation (GEF IEO 2014) report pointed out the ability to be resilient against catastrophes and shocks, such as market forces and climate change, as one of the key components of a functional PA management system. However, it was pointed out that climate change is a relatively new concept in Uganda, and during the GEF design phase for earlier projects, particularly for GEF ID 1830 and 2140, climate change was not well accounted for. This was strengthened in latter projects (GEF IDs 5718, 3393, and 4644).

3. Summary of Emerging Findings and Conclusions

87. The APR ratings for the three biodiversity projects completed between 2007 and 2014, selected for the Uganda Case Study, were:
- (a) Albertine Rift (GEF ID 1175)—outcome: negative, and sustainability: negative
 - (b) PAMSU (GEF ID 1830)—outcome: positive, and sustainability: positive
 - (c) Invasive Plant Management (GEF ID 2140) —outcome: positive, and sustainability: negative

88. Based on the mission findings and postcompletion verifications conducted in this case study, the only change in the above sustainability ratings concerns PAMSU, which became negative postcompletion from context-related factors, as explained further below. In summary, GEF-supported infrastructure and equipment was found to be still functional and providing transport services and housing to protected areas staff after the project ended. The same applies to some other forms of soft support, such as PA management plans, guidelines, data, and information. On the other hand, support provided for alternative income-generating activities to compensate for short-term losses by communities engaged in conservation tended not to be sustained.

89. Most of the factors contributing to sustainability were project related. They stemmed from alignment of GEF projects to sector priorities and national plans, implementing through mandated government agencies, relevance of the projects to current weather changes, and capacity strengthening of communities and implementing partners. Sustainability was more evident where long-lasting infrastructure was built, and durable equipment was provided. Other factors included institutional strengthening, development of plans and guidelines on and inclusion of invasive species in environmental laws as well as in the curricula of agriculture colleges, and wide consultation with stakeholders and community engagement in implementation and monitoring interventions.

90. Most factors hindering sustainability were external and context related. Project-related hindering factors included GEF Agencies working more with national agencies than with line ministries (beyond pulling them together in a multiminsty workgroup), which was viewed as a threat to sustainability. GEF projects were perceived as not being institutionalized into line ministries. Context-related hindering factors included government priorities on infrastructure and economic development over conservation, political interference, and the limited allocation of funds to the environment sector at both national and district levels. Institutional changes, such as the management transition at UWA and the Tourism Sector, also affected sustainability.

91. Overall, although improved conservation lead to increased income for the country and districts, the communities had to forego immediate sources of income such as income from growing crops in protected areas and income from tree selling and charcoal burning. Some efforts were made to help communities start alternative income-generating activities, but this was on a very small scale, and not all people around the parks received support. The need for immediate income was also cited as a common cause of encroachment on the environment.

92. All key stakeholders interviewed at the national and site level reported that GEF support was very relevant for addressing environmental challenges in Uganda. The GEF supported programs on biodiversity, land degradation, climate change, persistent organic pollutants, international waters, management of invasive weeds, and chemical support.

93. The preferred kind of GEF support was national, full-size projects, and multifocal area projects. This is because national projects are tailored to national needs and are managed in country; full-size projects have long-term impact, while multifocal area projects address multifaced challenges through a multisectoral approach. Programmatic approaches

were also preferred rather than standalone projects because of their complementarity nature, wider scope, and higher likelihood for sustainability.

94. With the exception of projects funded through the UNDP, there were limited deliberate efforts to ensure gender inclusiveness and mainstreaming in the projects. Gender mainstreaming and resilience were the weakest links, particularly in earlier projects (GEF IDs 1830 and 2140). Women are, however, increasingly recognized as the main influencers of environment. They interact a lot with the environment during cultivation, and collection of water, seed, and medicine. It was pointed out that climate change is a relatively new concept in Uganda, so during the design phase of GEF projects, climate change was not well accounted for in earlier projects, but this was strengthened in latter project designs.

95. Regarding the required appropriate type of support to tackle the main environmental challenges, there is need for large-scale support for environmental conservation and strategic interventions to address emerging issues threatening the environment, such as oil and gas relating to huge multilateral companies. Long-lasting infrastructure investments requiring limited associated operating costs tend to be more sustainable than investments in capacity-building activities where the trainees cannot apply what they have learned because of lack of funds postcompletion.

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Annex A: List of Interviewees

Project	Institution	Name of Interviewees	Designation
National Level Interviews			
All	Ministry of Finance, Planning and Economic Development	1. Ms. Maris Wanyera	Ag. Director, Data and Cash Policy
		2. Mr Denis Mugagga	Economist
		3. Mr Isaac Katabalwa	Economist
GEF ID 1175; GEF ID 3393; GEF ID 5718	UNDP	4. Mr Onesimus Muhwezi	Team Leader, Environment
		5. Mr Daniel Omodo	Supervisor Albertine project
		6. Ms Sarah Mujabi	Supervisor SLM Mount Elgon project
		7. Mr Nicholas Burunde	Supervisor Charcoal project
	World Wildlife Fund	8. Mr David Duli	Country Director
		9. Mr George Kaija	Project Officer
GEF ID 1830	Uganda Wildlife Authority	10. Mr Samuel Besigye for Mr Sam Mwandha	Partnerships Manager
GEF ID 1830; GEF ID 2140	National Environment Management Authority	11. Mr Francis Ogwal	National Convention on Biological Diversity (CBD) Focal Person/ Natura Resources Manager
GEF ID 3393; GEF ID 5718	Ministry of Agriculture, Animal Industry and Fisheries (MAAIF)	12. Mr Stephen Muwaya	Commissioner Crops
GEF ID 1175		13. Mr Paul Mafabi	Commissioner Environment

Project	Institution	Name of Interviewees	Designation
National Level Interviews			
	Ministry of Water and Environment	14. Mr Stephen Mugabi	Former Commissioner Environment
GEF ID 2140	United Nations Environment Programme	15. Ms Jane Gubare Nimpamya	Global Environment Facility (GEF) Task Manager/Programme Management Officer
	National Agriculture and Research Organisation (NARO)	16. Dr. Peter Beine	Former NARO Project Manager
GEF ID 3393	MAAIF	17. Mr Paul Mwambu	Former Project Manager (GEF ID 3393)/Commissioner Crop Inspection and Certification MAAIF
GEF ID 5718	UNDP	18. Ms Barbara Namugambe	Former Project Manager (GEF ID 5718)
Site Level Interviews			
GEF ID 1175; GEF ID 1830	Kyenjojo District Local Government	19. Mr Julius Bigabwa	Senior Environment Officer
		20. Mr Charles Mugisha	Senior District Natural Resources Officer
GEF ID 1830	Kibale National Park	21. Mr Nelson Guma	Area Manager
	Toro Semiliki Wild Reserve	22. Mr Benson Mugyerwa	Warden In-charge

Project	Institution	Name of Interviewees	Designation
National Level Interviews			
GEF ID 2140; GEF ID 1830	Mbarara	23. Mr Jeconius Musinguzi	Former Senior District Environment Officer
GEF ID 1830	Lake Mburo National Park	24. Mr Asa Kule Musinguzi,	Conservation Area Manager
		25. Mr Noel Abaho	Assistant Warden, Community conservation,
		26. Ms Doris Kurumira	Ass. Warden, Ecological Monitoring and Research

Annex B: List of Sites Visited

1. Kyenjojo District Headquarters
2. Bugaki Subcounty Tree Lot, Kyenjojo District
3. Kibale National Park, along Kamwenge Road, Kabalore District
4. Toro Semliki Wild Reserve, along Karugutu-Ntoroko Road, Kabalore District
5. Sebitori Bee Keeping Project, Kibale National Park, Kabalore District
6. Mbarara District Headquarters—former district in charge of Lake Mburo National Park, at the time of implementation
7. Lake Mburo National Park; Kiruhura District

TECHNICAL DOCUMENT 6 - NIGERIA CASE STUDY REPORT

April 2020

Abbreviations

CEMP	Critical Ecosystem Management Project
FUG	Fadama Users Group
GEF	Global Environment Facility
IEO	Independent Evaluation Office
LEEMP	Local Empowerment and Environmental Management Project
NEWMAP	Nigeria Erosion and Watershed Management Project
NFDP	National Fadama Development Program II
NPS	National Park Service
SLBCOF	Sustainable Livelihood, Biodiversity Conservation and Outreach Fund
SLM	sustainable land management

1. Introduction, Context, and Methodology

Background

1. Case studies are the main component of the Sub-Saharan Africa Strategic Country Cluster Evaluation: Sahel and Sudan-Guinea Savanna Biomes. They focus on the two overarching evaluation objectives:

- To understand the determinants of sustainability
- To assess the Global Environment Facility's (GEF) relevance to and performance in tackling the main environmental challenges in the two biomes

2. In its latest annual performance report (GEF IEO 2018), the GEF Independent Evaluation Office (IEO) has conducted a desk review of postcompletion verification reports (n=53), finding that the following contributing factors were at play in those cases in which past outcomes were not sustained:

- Lack of financial support for the maintenance of infrastructure or follow up
- Lack of sustained efforts from the executing agency
- Inadequate political support, including limited progress on the adoption of legal and regulatory measures
- Low institutional capacities of key agencies
- Low levels of stakeholder buy-in
- Flaws in the theory of change of projects

3. Building on the annual performance report desk review findings, this evaluation aims at exploring in depth, through country case study analysis, the factors contributing to or hindering the sustainability of project outcomes. The aim is to cross check the annual performance report findings as well as to identify any other nuances to the six factors above, or new factors that either hinder or contribute to the sustainability of project completion outcomes. In addition, country studies also cover relevance issues such as GEF support modalities, expansion of GEF Agencies, and cross cutting issues such as gender, resilience, and fragility.

Coverage

4. Projects selected for the Nigeria case study include:

- (a) **GEF ID 942** (national). Title: Local Empowerment and Environmental Management Project (LEEMP)–Micro Watershed and Environmental Management Project. GEF Agency: World Bank; GEF focal area: biodiversity; GEF phase: GEF-3; GEF modality: full-size project; status: completed/closed (implementation: April 30, 2004 to December 31, 2009).

- (b) **GEF ID 1503** (national). Title: National Fadama Development Program II (NFDP II): Critical Ecosystem Management Project (CEMP). GEF Agency: World Bank; GEF focal area: land degradation; GEF phase: GEF-3; GEF modality: full-size project; status: completed/closed (implementation: July 26, 2006 to December 31, 2011).
- (c) **GEF ID 1093** (regional). Title: Reversing Land and Water Degradation Trends in the Niger River Basin. GEF Agency: World Bank/UNDP; GEF focal area: international waters; GEF phase: GEF-3; GEF modality: full-size project; project status: completed/closed (implementation: May 10, 2004 to February 2, 2011).
- (d) **GEF ID 1258** (regional). Title: Enhancing Conservation of the Critical Network of Sites of Wetlands Required by Migratory Waterbirds on the African/Eurasian Flyways. GEF Agency: UNEP; GEF focal area: biodiversity; GEF phase: GEF-3; GEF modality: full-size project; project status: completed/closed (implementation: June 1, 2006 to December 1, 2010).
- (e) **GEF ID 4090** (national). Title: SPWA-BD: Niger Delta Biodiversity Project. GEF Agency: UNDP. GEF focal area biodiversity. GEF phase: GEF-4; GEF modality: full-size project; project status: under implementation (start date: September 26, 2012).
- (f) **GEF ID 4907** (national). Title: GGW: Nigeria Erosion and Watershed Management Project (NEWMAP). GEF Agency: World Bank; GEF focal area: land degradation; GEF phase: GEF-5; GEF modality: full-size project; project status: under implementation (start date: September 16, 2013).

Methodology

5. Individual interviews were conducted with project staff at Abuja (federal headquarters), Kainji (Kwara State), Ilorin (Kwara State), and Abeokuta (Ogun State). Interviews were held with stakeholders (listed in annex A) on the key evaluation questions relevant for Nigeria:

- (a) What are the key factors influencing sustainability of outcomes?
- (b) In what way, if any, does the environment and socioeconomic development/livelihoods nexus (or lack thereof) help explain the sustainability of outcomes?
- (c) To what extent has GEF support been relevant to the main environmental challenges in Nigeria, and are there any gaps?
- (d) To what extent have gender and resilience been taken into consideration in GEF programming?

6. As recommended in the case study guidelines, key questions 1, 2, and 3 were the main focus of the case study data-gathering effort.¹⁶ Key questions 4 and 5 were also

¹⁶ See the section, “Strategic Country Cluster Evaluation (SCCE): Sahel and Sudan-Guinea Savanna Biomes Guidance Note for Country Case Studies.”

addressed through central level interviews with key stakeholders in the capital and through project document reviews, in the “SCCE: Project Review Protocols on Relevance and Sustainability” in particular.

7. The data gathering concentrated on completed projects because they were the most relevant for sustainability issues. World Bank security guidelines for Nigeria allowed site visits only to Kwara and Ogun States. It was therefore not possible to visit sites of the completed regional project GEF ID 1258, whereas there was no information available on the Nigeria component of the regional project GEF ID 1093.

2. Factors Driving the Observed Sustainability of Outcomes

LEEMP Project (GEF ID 942)

8. The LEEMP project was managed by the National Park Service (NPS), a federal agency under the Federal Ministry of Environment responsible for management of the national parks and protected areas, under the federal government of Nigeria.

9. The Global Environment Objective (from the project appraisal document) of the GEF project was that beneficiaries within the support zones around targeted protected areas in two of the participating states will have planned, cofinanced, and implemented, and are continuing to operate and maintain, environmentally sustainable and socially inclusive alternative livelihood microprojects. The GEO indicator was that by year 5, a 5 percent increase in population in species identified as being threatened would be observed.

10. According to a report prepared for the GEF IEO Evaluation Mission by NPS (Babiem 2019), which is confirmed by the objectives statement contained in the original project appraisal document, the specific goals of the GEF-financed component of LEEMP were:

- Improve protected area infrastructures and facilities
- Promote sound partnerships for effective protected area management
- Identify and promote incentives for wildlife and biodiversity conservation in the protected areas and in the support zones, by creating alternative means of income-generating activities to reduce pressure on the selected protected areas
- Provide technical assistance and capacity building for biodiversity and protected area management in key public agencies and in nongovernmental organizations
- Promote awareness of the benefits of conserving biodiversity and habitats

11. The project was implemented in four protected areas in Bauchi State (Yankari Game Reserve, Lame Burra Game Reserve, and the Malla-Dumba Lake and Forest Reserve) and Niger/Kwara States (Kainji Lake National Park). As stated earlier, because of security considerations only the Kainji Lake National Park area was available for a site visit.

Self-Reported Project Achievements

12. By project completion the following had been achieved (Babiem 2019):

- **Participatory management plans** for the four protected areas (2010–14) were produced and were in use.
- **Comprehensive ecological surveys** of the four protected areas and their support zones were completed. These documents were used to establish the baseline information before the start of the Project.
- **Baseline studies** of 50 GEF-supported communities were also produced. The document is to provide bases to compare the of GEF activities at the end of the project.
- **Institutional strengthening.** This subcomponent was to provide technical assistance, training, and study tours to protected area management, and to identify options for a strategic maintenance of improvements, particularly focusing on collaboration with the private sector and local communities living in adjacent support zones. Equipment and vehicles were provided to strengthen monitoring and tracking of species, their movement, and the health as well as viability of ecosystems; protected area infrastructure (roads, culverts, bridges, and watering points for wildlife, etc.) within the selected protected areas were also put in place.
- **Improving the livelihoods of communities within relevant support zones.** The major thrust of the incremental activities was to address a number of targeted initiatives to improve the decentralized management of the protected areas and contribute to support zone activities to further reduce negative impacts on the biodiversity hotspots in protected areas. Sustainable livelihood plans were formulated for each GEF community in the respective protected areas. Livelihood activities included planting of economic trees, livestock fattening activities, and apiaries, among others.
- **Waste to wealth training.** A consultancy on “Turning Waste to Wealth” was awarded, and 80 participants from the four protected areas were trained on the art of converting maize husk to craft materials like handbags, bead necklaces, shopping baskets, etc. The trainees registered themselves into five different cooperative associations through which materials/ equipment and cash were given for start-up.
- **Socioeconomic infrastructure.** The International Development Association–financed LEEMP component included microprojects such as schools, maternities, and health centers, complementing the already existing GEF microprojects. These infrastructure investments made considerable impacts on communities. Infrastructure investments were a priority in the community development plans, which were replaced by the GEF-supported sustainable livelihood plans. The International Development Association–supported microprojects were more conspicuous than the GEF-funded ones; which was of direct bearing on the livelihood of the individuals in the communities.

- **Conservation outreach centers.** Five outreach or ecocenters (Wawa in Niger State, Ibbi in Niger State, Yuga in Bauchi State, Sholom in Bauchi State, and Maina-Maji in Bauchi State), were constructed and equipped with facilities for training, recreation, information dissemination, and a market outlet for arts/crafts, etc.
- Special protected area microprojects executed in the Kainji Lake National Park:
 - Construction of the Nanu River bridge. The bridge is now providing improved access to markets for communities displaced by the establishment of the park.
 - Installation of high frequency communication equipment. This has improved communication capacity for rangers within the 2 sectors (Zugurma and Borgu) of the park.
 - Rehabilitation of 640 kilometers of 4-wheel driving tracks
 - Opening and clearing of 100 kilometers of 4-wheel driving tracks
 - Repairs of road grader for 4-wheel track rehabilitation
 - Supply/installation of meteorological equipment
 - Rehabilitation of the GEF focal office, Kainji Lake National Park Headquarters, located near the Kainji Dam

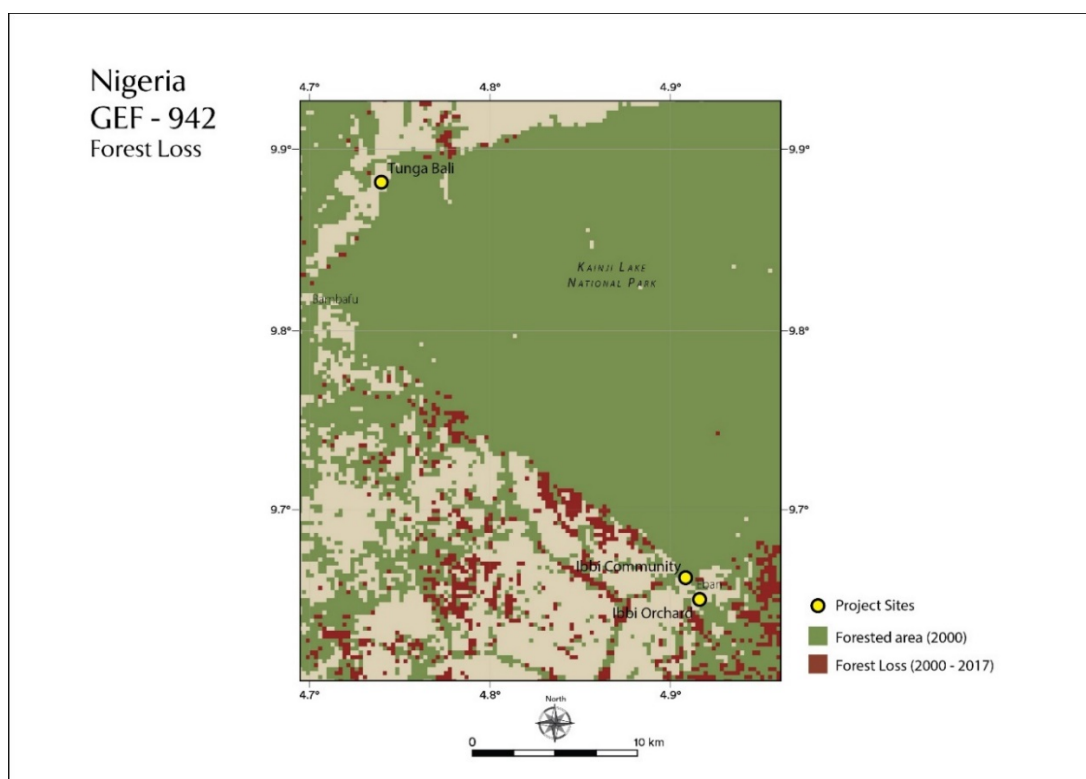
Site Visit Observations on the Sustainability of Main Interventions

13. Participatory management plans for the four protected areas were produced between 2010 and 2014 and are still in use. However, they are obsolete now and need to be reviewed in line with current international standards.

14. **Effect on deforestation.** Remote sensing maps of the project sites visited (figure 1) show that forest loss has been reduced or prevented around project sites in the surrounding communities of the Kainji Nature Reserve (Tunga Bali and Ibbi). This observation was confirmed during site visits.

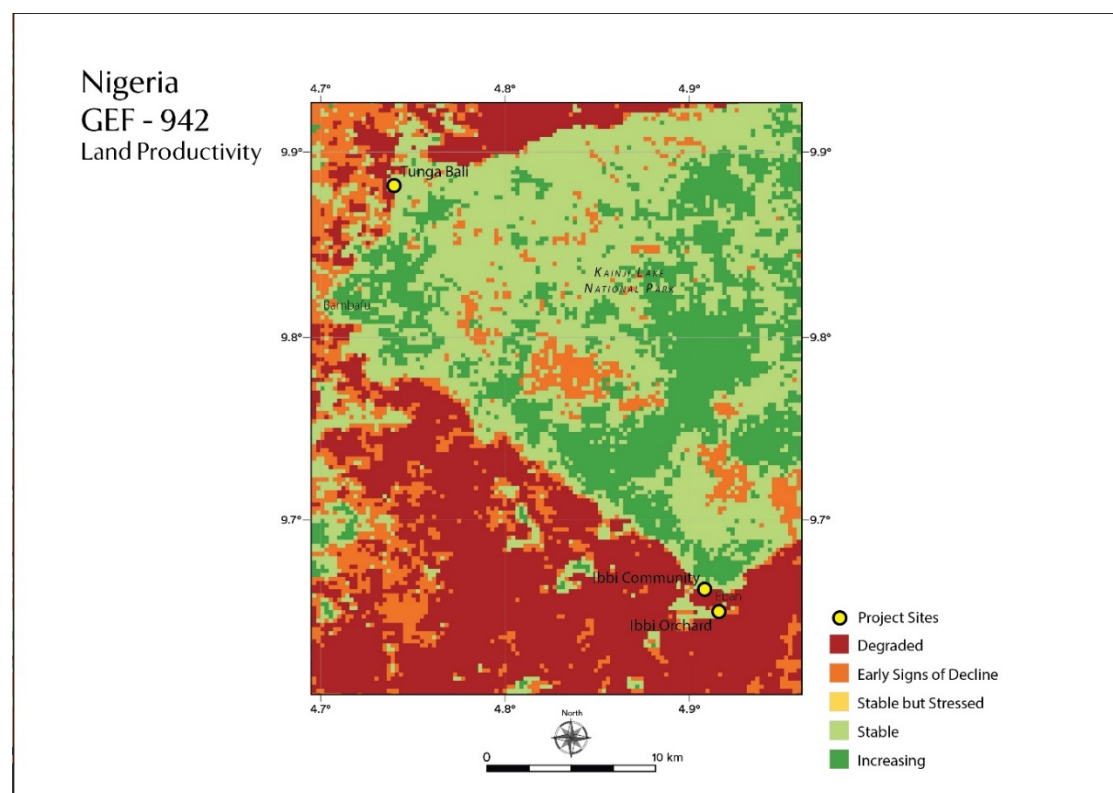
15. **Effects on land productivity.** Remote sensing data (figure 2), also show that land productivity has been stabilized around project sites in surround communities. This was also confirmed during site visits.

Figure 1: Forest loss around project sites in the surrounding communities of the Kainji Nature Reserve (Tunga Bali and Ibbi), March 2019



Source: Produced by GEF IEO

Figure 2: Land productivity around project sites in the surrounding communities of the Kainji Lake Nature Reserve (Tunga Bali and Ibbi), March 2019



Source: Produced by GEF IEO

16. The ecocenters continue to be maintained and to serve their intended purpose 10 years after project completion. The Ibbi Ecocenter located at the boundary of the park (figure 3) is still functioning and in good state of repairs. The center is receiving continued financing and maintenance support by the NPS, which uses it as office and as training center and community center by the surrounding community activities as designed.

Figure 3: IBBI GEF-Ecocenter, March 2019



Source: Photo taken by the consultant during field visits

17. Communities surrounding Tunga Bali. Alternative livelihood activities that were introduced to improve community livelihoods and discourage them from unsustainable exploitation of the protected areas were observed 10 years after project closure, as follows:

- The fruit orchard (mango, citrus, cashew) planted by the project is still being maintained and is now bearing fruit (figure 4).
- Fruits are harvested regularly by the community, some are shared for home consumption, with most sold.
- Proceeds of sales are used to maintain the orchard (purchase of fertilizers and chemicals, labor for under-brushings, etc.) and for community group activities.
- The animal-fattening group has also prospered and expanded; it started with six cattle, now it has at least 26.
- The community was not trained in nursery operation so it could not produce its own seedlings.

These positive results from the alternative livelihoods activities introduced by the project contribute to explain the geospatially observed reduction in forest loss.

Figure 4: Tunga Bali community orchard, March 2019



Source: Photo taken by the consultant during field visits

18. **Outreach Ibbi community orchard.** Five hectares plantation (mango, cashew, shea trees) was funded and planted by NPS in 2018–19.

19. This is an upscaling activity by NPS using the GEF project model, 10 years after project end, which demonstrates a broader adoption (replication) of the system of investment in economic trees—an example of positive change in terms of longer-term sustainability of outcomes and broader adoption in place.

20. **Community microprojects.** The desk officer in the Kainji Lake NPS Center reported that:

- The project successfully increased the awareness of the community surrounding the protected area not to enter and exploit its natural resources.
- A challenge has now emerged with migrants from Nigeria’s conflict-affected states who have no local base and who enter the reserve to poach and exploit resources.
- All livestock fattening microprojects have survived and expanded.
- All orchards have survived and some have also expanded autonomously.
- Business centers were not successful; they are too complex and could not be properly managed by the communities

- Motorcycle youth loan groups have survived and some have expanded, with three to five cycles of rotations.
- Beekeeping has failed; communities are afraid of bees and have not maintained them.
- Three crop-processing centers did not survive; community management did not work and trained operators left and could not be replaced.

Key Factors Driving Sustainability of Outcomes

- (a) Individual/household/family control of intervention activities and benefits versus community control/benefits. Examples include:
 - The successful cattle-fattening activity in Tunga Bali where the stock, although owned by the community, is managed by a Fulani herdsman, who shares proceeds with the community. The herd has grown from two to over 20 cattle.
 - Motorbike loans have been successful; loans have been repaid and new loans given to other borrowers. The scheme is in its fifth cycle in some communities.
 - Community-managed processing centers have all failed as communities could not manage the businesses to repair the machines or retain the operators.
- (b) Microproject activities that are familiar to the communities and within their technical capacity to manage are more likely to succeed. Examples include:
 - All grasscutter rearing, although individually owned and managed, have failed. Housing and management systems were new to technicians and the community and were not successfully mastered during the project.
 - Apiaries also failed, as community members are afraid of bees.
- (c) Postproject financing availability demonstrated by:
 - The NPS has continued funding for community ecocenter operations, including repairs to the buildings.
 - The NPS has provided financing for upscaling activities, for instance, the establishment of new orchards using the model adopted by the project.

Evidence of Broader Adoption (Sustaining)

21. The establishment of the Sustainable Livelihood, Biodiversity Conservation and Outreach Fund (SLBCOF) for the four protected areas was continued after project end. The SLBCOF was proposed in the project appraisal document to be established as a means of

exploring financing opportunities to support sustainable livelihood activities beyond the life span of the GEF project. To this end, the sum of \$550,000 was earmarked as takeoff grant or seed grant for the fund during the project period. However, the NPS was unable to access the takeoff grant as at project end in June 2010, because the three beneficiary states did not allocate the counterpart funds that they were expected to provide on time.

22. In 2012, the NPS as the lead implementing agency was able to secure a counterpart fund of NGN 210.0 M from the Federal Government as takeoff grant for the SLBCOF (to replace the takeoff grant that was not accessed during the project), as well as counterpart contribution of NGN 20.0 M from each of the three participating states. The registration of the SLBCOF entity as a nongovernmental organization was completed with the Corporate Affairs Commission, and the administrative structure of the fund was put in place. An account was opened with the First Bank PLC, for its operations. The SLBCOF was commissioned in the first quarter of 2013 and was made operational until December 2016. From January 2017 to date, activities have slowed down because of nonpayment of further counterpart contributions from the three participating states. The NPS was able to establish and furnish a SLBCOF Fund Management Office at the NPS headquarters in Abuja.

NFPD II/CEMP Project (GEF ID 1503)

23. The NFPD II/Critical Ecosystem Management Project (CEMP) (e.g., FADAMA II project) was managed by the Federal Government National Fadama Development Office in the Ministry of Environment. The project development objective was to enhance the sustained productivity of the Fadama areas and the livelihoods they support through a sustainable land use and water management concept (figure 5).

Figure 5: Fadama Ecosystem Development Concept, Critical Ecosystem Management Project



Source: Kwara State Fadama Coordination Office, 2019

24. The FADAMA II project had four components, namely:

- (a) **Capacity building.** Aimed at building sustainable land management (SLM) capacity of all stakeholders
- (b) **Integrated ecosystem management at watershed level.** Addressed technical, social, and location-specific activities to improve management of critical ecosystems.
- (c) **Community sustainable land management.** Supported SLM-related activities to address land degradation
- (d) **Project management and monitoring and evaluation**

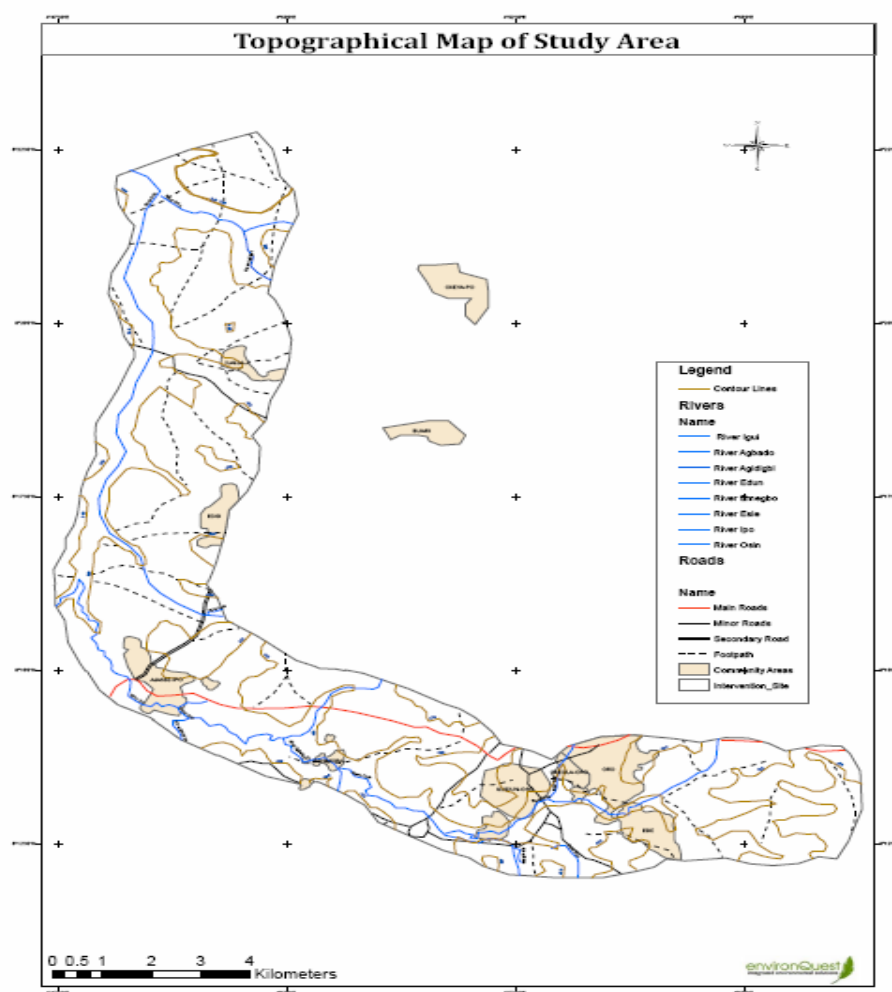
25. The project covered one intervention site in each of the six implementing states of Bauchi (Andiwa Lake Watershed), Imo (Oguta Lake Watershed), Kebbi (Jega-Dumbegu Watershed), Kogi (Koton Karfe Watershed), Kwara (Ajase Ipo Watershed), and Ogun (Eriti Watershed). Site visits were made to Ajase Ipo (figure 6) and Eriti (figure 9).

Self-Reported Project Achievements (Kwara State)

26. According to a report provided to the GEF Evaluation Mission by the Kwara State Fadama Coordination Office in April 2019, by project completion the following had been achieved in Kwara State (KSFCO 2019):

- The establishment of 151.4 hectares of trees in the form of orchards, woodlots, river bank tree plantings, scattered trees, and borderline tree planting
- A central Fadama Community Association nursery established with a 3000-seedling capacity
- Grasscutter rearing, snail production, beekeeping, and rabbit-rearing activities established
- Ten secondary schools and 16 primary schools were engaged in tree-planting activities, while six additional secondary schools established 3 hectares of orchards (0.5 hectares each).

Figure 6 : Kwara State–Ajasse Ipo Fadama intervention site (93 square kilometers)



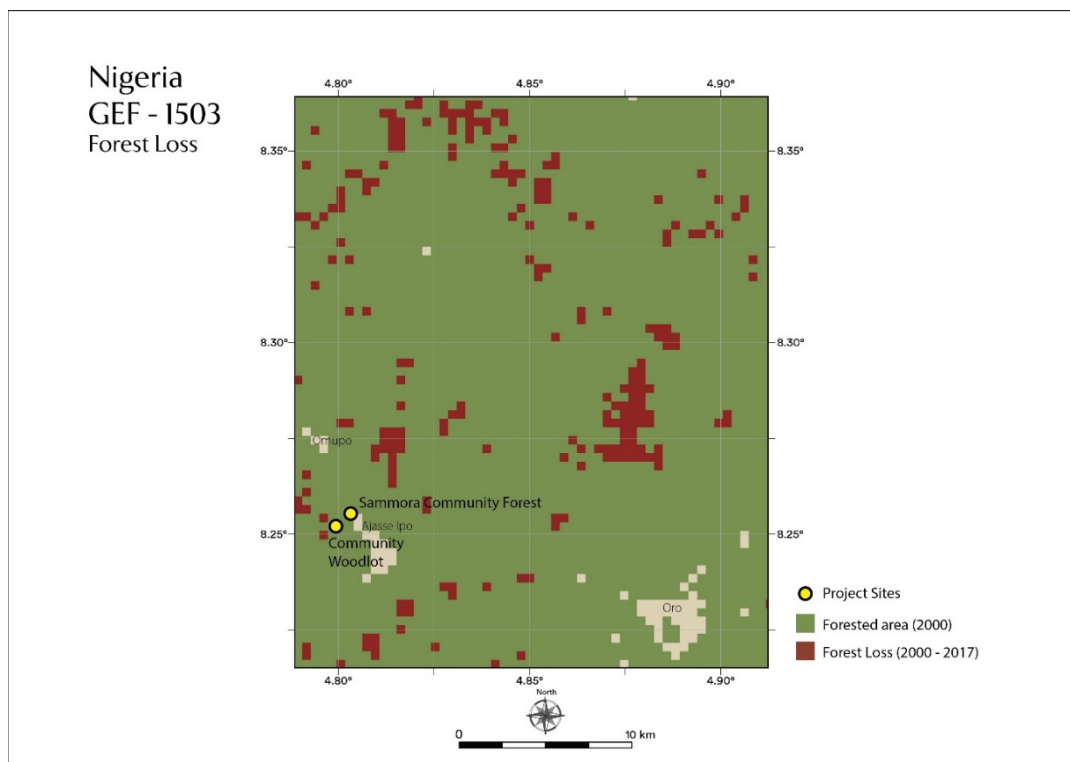
Source: Kwara State Fadama Coordination Office (KSFCO 2019)

Site Visit Observations on the Sustainability of Main Interventions (Kwara State)

27. **Effect on deforestation.** Remote sensing maps of the area around project sites visited (Figure 7) show that forest loss has been reduced or prevented around project sites in the Ajasse Ipo communities.

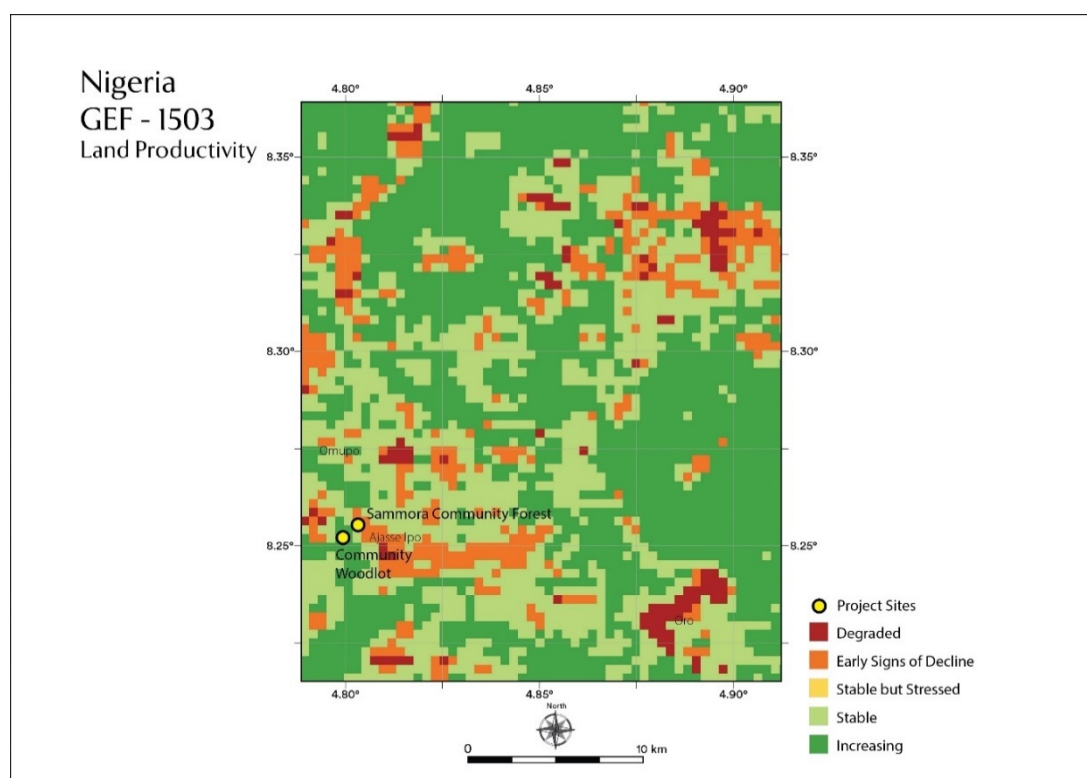
28. **Effects on land productivity.** Remote sensing data (figure 8) also show that land productivity is stable or is increasing around project sites in surround communities.

Figure: 7: Ajasse Ipo Fadama intervention site—forest loss, March 2019



Source: Produced by the GEF IEO

Figure 8: Ajasse Ipo—land productivity around project intervention sites, March 2019



Source: Produced by the GEF IEO

29. The Agbelore Fadama Users Group (FUG) was set up during project implementation and is still active eight years after project completion:

- The group originally consisted of 19 male and seven female members. It now has three male and seven female members. Dropouts were the result of death of members and some lack of interest.
- The project planted a 1-hectare gmelina woodlot for the group. This is not yet ready for harvest, but Fulani herdsman encroach and have harvested in fringes for housing timber and firewood.
- The group has autoexpanded by planting an additional 0.5 hectare on purchased land.
- All livestock microprojects except beekeeping by the chairwoman have failed.

30. The Agbelogba FUG, also set up during the project, is still active as well:

- This FUG initially had 14 male and six female members. Current composition is six male and six female members.
- Project planted a 1-hectare orchard (cashew), currently being harvested and the product sold.

- Group has autoexpanded by planting an additional 1 hectare in 2015 on purchased land.
- There has been further replication because of perceived success: two neighboring local government areas joined the project (Irepodun FUG) and established cashew orchards currently in existence.
- All livestock projects have failed (grasscutter, snails, rabbitry).

31. The Sanmora Community Forest was upgraded by the project, and is still in existence:

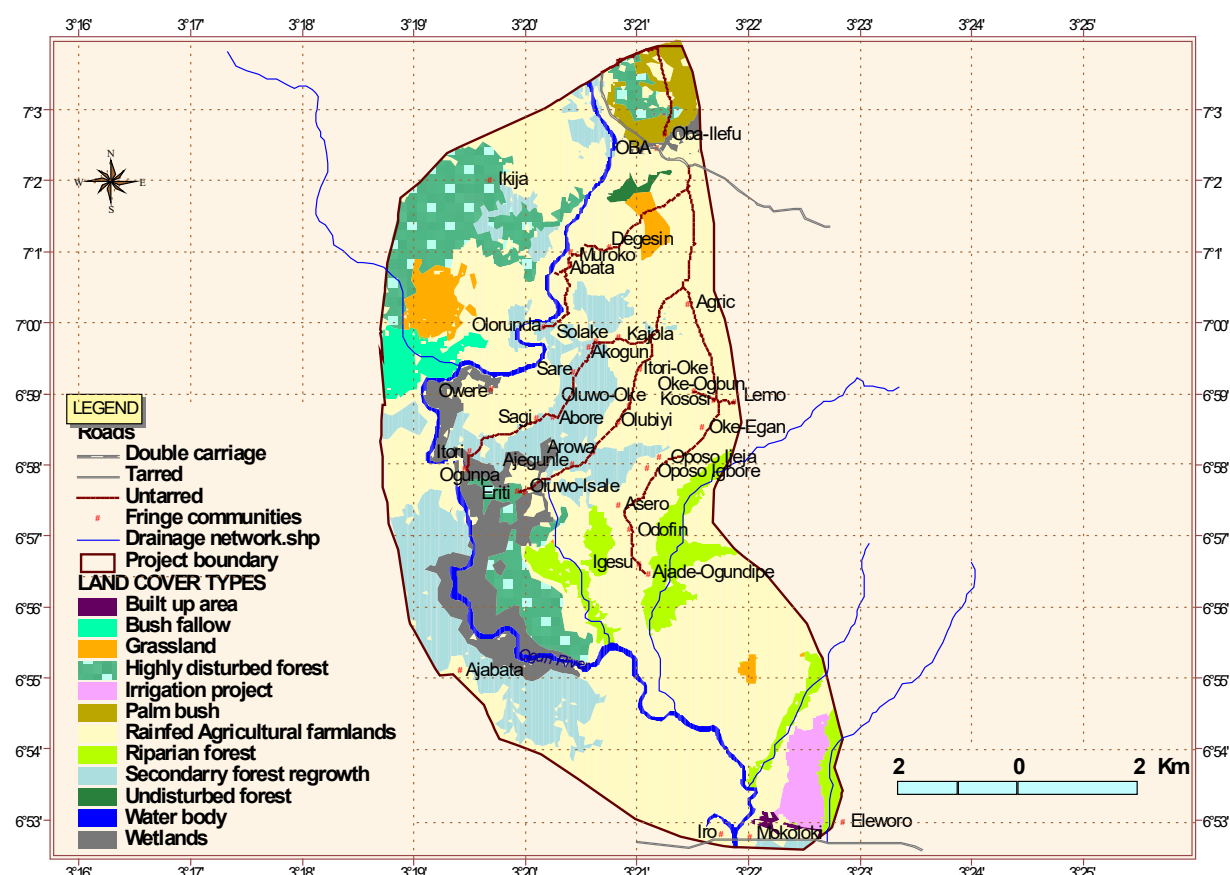
- 29 hectares degraded forests were upgraded by the project planting teak and gmelina in 2010.
- The forest is managed by a local community forest management committee.
- Teak is now being harvested by licensed buyers who harvest mature trees for timber for buildings, furniture, and firewood (trimmings after timber).
- Teak-harvesting licenses are paid for to the community who strictly monitor logging activities.
- Gmelina not yet ready for harvest.
- The forest is regenerated by wind dispersion, so the community area is now more forested than in the past.
- A challenge exists from unlicensed Fulani herdsmen who invade the forests for livestock feeding, cut firewood, set fire to harvest honey, etc.

Self-Reported Project Achievements (Ogun State)

32. According to a report provided to the GEF Evaluation Mission by the Ogun State Fadama Coordinating Office in April 2019 (OSFCO 2019), by project completion in 2011, the following had been achieved in Ogun State:

- The state watershed subcommittee was inaugurated on January 26, 2007, and have met 20 times since then, representing 100 percent achievement.
- The chairman and members have attended all the training organized for them by the National Fadama Coordinating Office.
- Membership in the state watershed subcommittee continued after the project completion.

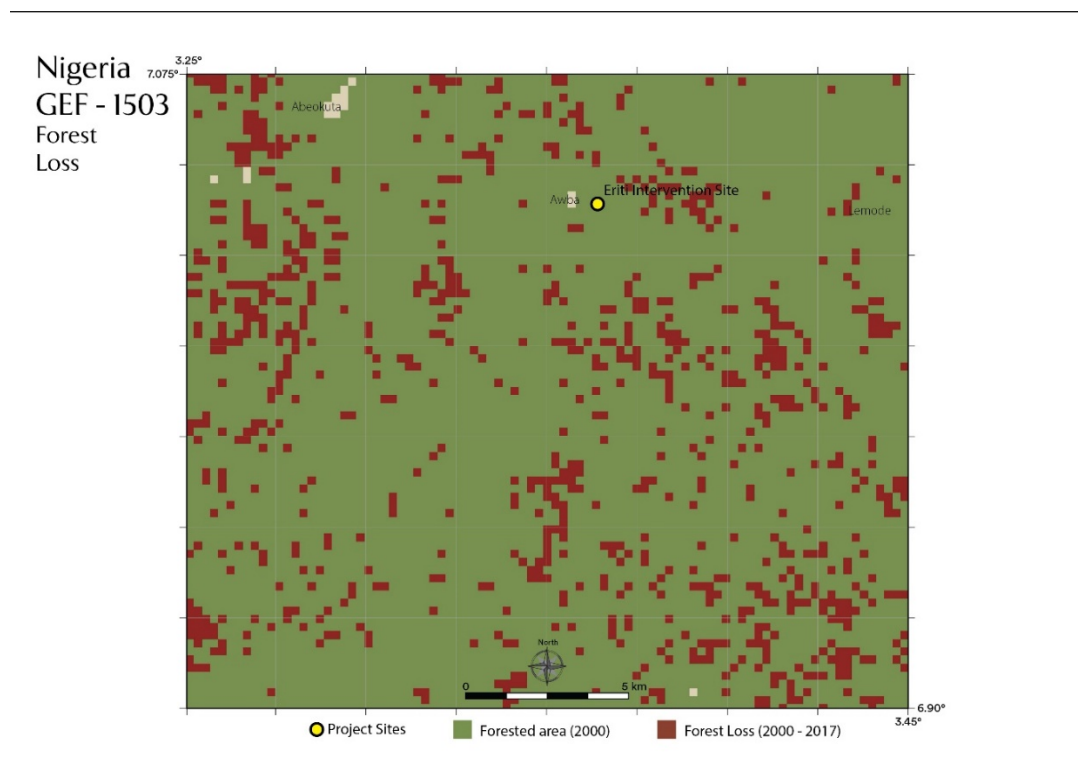
Figure 9: Ogun State Eriti Fadama intervention site (153 square kilometers)



Source: Ogun State Fadama Coordinating Office (OSFCO 2019)

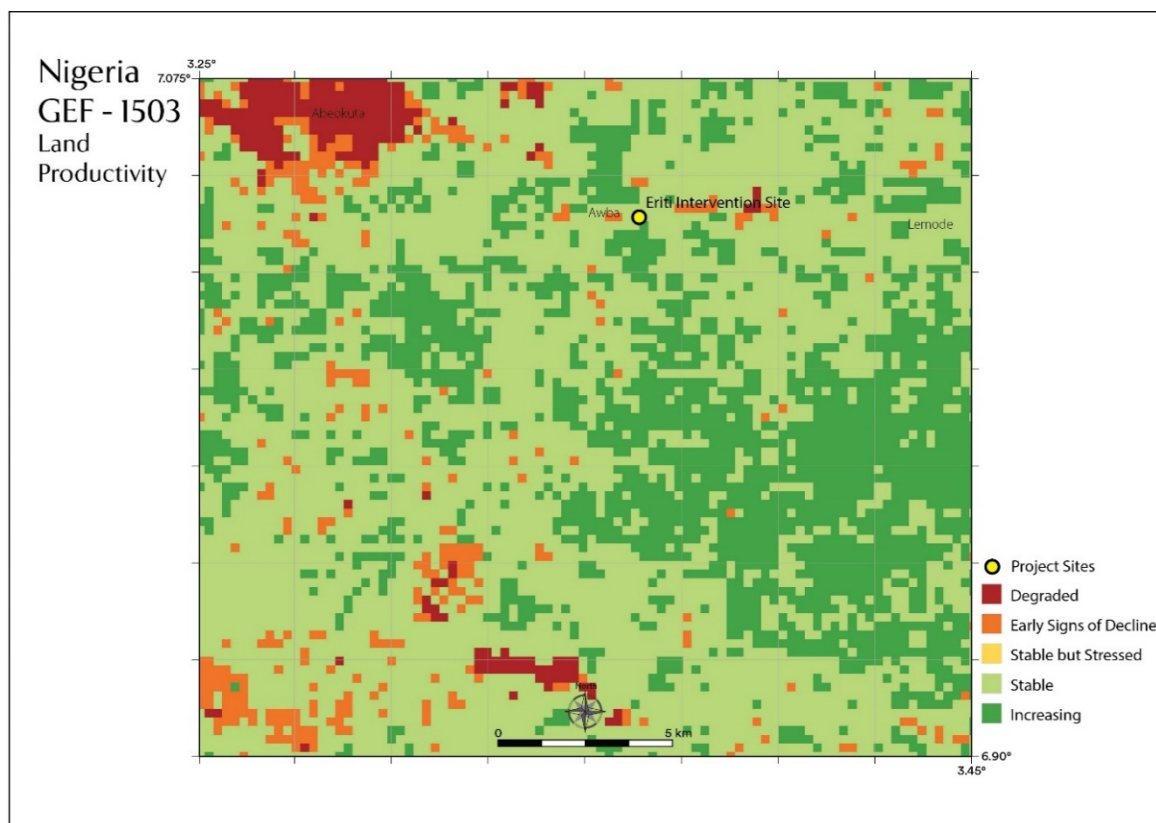
- A study on the Eriti Community Forest was carried out in March 2009. A management plan was also produced. A committee was inaugurated in May 2011 and has met 10 times since then. Part of the boundary of the forest was planted with teak seedlings
- Three groundwater monitoring wells were drilled in Oba, Eriti, and Itori. The contractor trained the farmers on the use of the wells. The project did train some of the farmer associations on the importance of well monitoring
- 178 microprojects have been implemented with communities (woodlots, orchards, apiculture, wrapping leaves, grasscutter rearing, snail rearing, community nurseries).
- Area under SLM: approximately 51 hectares are under direct planting (at present, the palm trees, woodlots, plantains, cashews, oranges, etc., have matured and are generating incomes to the beneficiaries). Approximately 35 percent of the area is not under bush burning because of apiculture and other SLM practices. The area under SLM in the project site has increased to 1117 hectares. This represents an increase of approximately 41 percent when compared with the baseline.

Figure 10: Eriti—forest loss around project site, March 2019



Source: Produced by the GEF IEO

Figure 11: Eriti—land productivity, March 2019



Site Visit Observations on the Sustainability of Main Interventions (Ogun State)

33. **Effect on deforestation.** Remote sensing maps of project sites visited (figure 10) show that forest loss has been prevented around project sites in the Eriti communities. This was confirmed by stakeholders interviewed during the site visit.
34. **Effects on land productivity.** Remote sensing data (figure 11), also show that land productivity is stable or is increasing around project sites in surrounding communities, which was also confirmed by stakeholders during the site visit.
35. **The observed sustainability in Eriti faces severe challenges.** The site contains the largest flood plain in Ogun State, which is much sought after by cattle rearers and supplies the majority of leafy vegetables in the state. Logging activities are ongoing in the riparian forest outside the wetlands. Erosion caused by high farming density and bush burning for wildlife hunting is also occurring. The exploitation of forest products, particularly the wrapping leaves (*Thaumatococcus Daniellie*) reduces the forest biodiversity.

Key Factors Driving Sustainability of Outcomes

- (a) Financing has been available for scaling-up activities:
- The state government has established an organic fertilizer production plant at Kotopo. The plant has a capacity to produce 12.5 metric tons per month. This is to reduce the use of chemical fertilizers that have adverse environmental implications. The plant is reportedly still functioning, although it is operating at low capacity because of low demand for its product.
 - A community-based waste management program has been initiated in the state. This is experiencing some implementation challenges, however.
 - In addition to the NFDP II/CEMP, a SLM project was executed in 2013. The Scaling-up SLM Practice, Knowledge and Coordination Project was a three-and-a-half-year incremental GEF grant to the Federal Republic of Nigeria focused on mainstreaming SLM in Nigeria's agricultural sector. This \$6.8 M GEF grant was fully integrated into and coordinated with the Fadama III operation. Two Fadama Community Associations (FCAs) of the NFDP II/CEMP were selected and participated in that SLM project, namely the Abaniseloluwa FCA in the Irogun village in Yewa-South local government area, and the Tapa FCA in Ipokia town in Ipokia local government area.
 - The state watershed subcommittees established under the NFDP II/CEMP continued into Fadama III and are still functioning.
 - Some autoexpansion of economic tree plantations was observed. An additional 4.5 hectares oil palm have been planted by the beneficiaries' postproject. However, autoexpansion is limited by lack of capital to purchase land.

(b) Individual versus group management of assets:

- Sustainability of group management of microprojects at farm level is a lot harder than group sustainability of civil infrastructure. For instance, plantation must have timely weeding on which group ownership may be the cause of delay. Even husbandry of animals must be timely and regular to which groups may not respond when due, because the degree of commitment is at different levels. Oil palm plantations established by the project, although community owned, are managed virtually on an individual basis.
- Small livestock-rearing activities (snails, grasscutters, apiaries) have largely failed. Service providers had limited technical knowledge so beneficiaries' learning was limited.
- Community groundwater monitoring wells are not being used by the communities, as the community management system of collecting and distributing the data to individual farmers was not designed to be self-sustainable.

(c) Postproject financing continues through the FADAMA III operation:

- Most of the activities under NFDP II/CEMP were taken over under FADAMA III. For instance, project vehicles were maintained (and some are still operational) or replaced, etc.

3. Observed Sustainability and The Environmental/Socioeconomic Nexus

36. In all project sites visited where there was a positive environmental/socioeconomic nexus in terms of promotion of synergies and mitigation of tradeoffs, the chances of sustainability of environmental benefits of the project interventions was much greater. The best examples of the environmental/socioeconomic nexus were the impact of tree plantations managed by communities with clear economic returns to individual community members. All the tree crop plantations established by the projects were in existence and flourishing. The environmental benefits of the plantations were:

- reduction in forest loss
- reduction in decline, or stabilization of land productivity
- increase in biodiversity
- provision of alternative income to beneficiaries (alternatives to income from exploitation of protected area resources)

37. The orchards planted (oil palm, rubber, cocoa) that are harvested over time are best for maintaining ground cover, increasing biodiversity, and controlling erosion. Trees that are felled for harvest, for instance, teak and gmelina, pose challenges as harvesters might clear fell and not replant; only coppicing trees such as gmelina work.

38. There is evidence that some degree of private sector (household) autoexpansion of tree crop plantations are taking place in recognition of the socioeconomic benefits of such investments, although autoexpansion is limited by lack of private capital to purchase land. Examples include:

- An additional 4.5 hectares oil palm have been planted by the beneficiaries' postproject in the Eriti community in Ogun State.
- Doubling the area of project-planted cashew in the Agblogba FUG in Kwara State, by purchasing and planting an additional 1-hectare orchard
- Planting of gmelina on purchased land by the Agbelore FUG in Kwara State

39. There is also clear evidence that alternative livelihood activities have a positive environmental/socioeconomic nexus in terms of promotion of synergies and mitigation of tradeoffs in the short term. Interventions such as grasscutter rearing, rabbitry, household market gardens, apiaries, and cattle fattening are designed to provide alternative incomes to households and communities so that they do not have to invade protected areas to exploit the resources (harvesting wild life, etc.). There is clear evidence that the strategy worked during project implementation. However, in virtually all cases, the interventions were not sustainable, not long surviving the end of the project-implementation phase. Failures appear to result mainly from a number of factors, including:

- Lack of familiarity of the interventions to the communities, for instance, fear bees among the locals
- Limitations of the technology introduced, for instance, inappropriate housing design for grasscutter rearing, and limited understanding of improved rearing and cultivation techniques introduced.
- Need for capital investment to replace worn-out processing machines, replace breeding stocks, repair irrigation systems, etc., which the beneficiaries could or would not provide, especially at the community level.

4. Relevance of GEF Support to the environmental challenges faced by the Country

Relevance to National Priorities and Strategies

40. The Nigerian society and the national economy depend on services provided by natural resources. Unsustainable land-use practices, overexploitation of natural resources, and ineffectively managed protected areas and their support zones all pose serious threats to the maintenance of ecosystem and habitats. To address some of these challenges, a National Biodiversity Strategy and Action Plan was adopted in November 1997 and ratified by the federal government in December 1997 (Federal Republic of Nigeria 1997). In 1999, the Federal Environmental Protection Agency (now the Federal Ministry of Environment, or ENV) produced a National Policy on the Environment (Federal Environmental Protection Agency 1989) and Nigeria's National Agenda 21 (Federal Republic of Nigeria 1999). These policies recognized that sustainable livelihoods require the pursuit of policies and strategies that simultaneously address issues of development, sustainable resource management, and

poverty alleviation. These policies provide a broad framework for support to environmental issues and strategies that promote sustainable natural resource management.

41. Furthermore, as a signatory to the Convention on Biological Diversity and the United Nations Convention to Combat Desertification, the government has committed to sustainable natural resource management and use (land, water, air, minerals, forests, fisheries, and wild flora and fauna) to produce ecosystem services that underpin the existence and welfare of human life. The National Action Program to Combat Desertification was produced by the government in 2001 (Federal Republic of Nigeria 2005).

42. GEF-supported projects in Nigeria are in line with the country's national environmental priorities and policies described here. GEF projects were designed within the framework of the national priorities. Their relevance is discussed in the following paragraphs.

43. **GEF ID 942: Local Empowerment and Environmental Management Program (LEEMP).** The GEF component of the LEEMP addressed the direct and indirect causes of degradation of protected areas, by undertaking activities that included (1) clarifying the policy and legislative environment governing management of protected areas and biodiversity conservation; (2) establishing effective mechanisms of institutional coordination among public agencies from the national to the state and local levels of government; (3) building capacity to monitor and enforce regulations; (4) stakeholders' participating in determining the management plans of protected area; and (5) promoting ecologically sustainable livelihoods in the support zone to reduce poverty and the dependence on resources in the protected areas. As observed during the field visit, beneficiaries within the support zones around targeted protected areas in two of the participating states have planned, cofinanced, and implemented, and are continuing to operate and maintain, environmentally sustainable and socially inclusive alternative livelihood microprojects.

44. **GEF ID 1503: National Fadama Development Program II (NFDP II): Critical Ecosystem Management project:** This project focused on another area of priority in the National Biodiversity Strategy and Action Plan (Federal Government of Nigeria 1997). Priorities for action identified in the plan include: (1) protecting ecosystems, especially watersheds, fresh water systems, and tropical high forests; (2) improving yields of both indigenous and exotic species facing high economic demand to sustain their supply, as well as protect their substitutes; (3) managing fragile soils to provide conditions conducive to the perpetuation of species of economic, medicinal, and genetic conservation value; (4) regulating and purifying water flow and protecting valley forests and wetlands; (5) maintaining conditions vital to the sustenance of protected areas and critical habitats that are threatened by species used for breeding and feeding; and (6) enhancing the efficient use of biodiversity resources to reduce their exploitation rate.

45. Furthermore, the National Action Program to Combat Desertification that was produced by the government in 2001 reported that between 50 and 75 percent of Bauchi, Borno, Gombe, Jigawa, Kano, Katsina, Kebbi, Sokoto, Yobe, and Zamfara States in Nigeria are being affected by desertification, whereas 10 to 15 percent of the lands in the Federal Capital Territory, Plateau, Adamawa, Taraba, Niger, Kwara and Kaduna States are threatened by desertification. In these areas, population pressure resulting in overgrazing

and overexploitation of marginal lands have aggravated desertification and drought. Entire villages and major access roads have been buried under sand dunes in the extreme northern parts of Katsina, Sokoto, Jigawa, Borno, and Yobe States.

46. To partially address these land degradation threats, the government of Nigeria requested support from the GEF. The GEF support strengthened the World Bank financed, Second National Fadama Development Project (NFDP-II). Consistent with its objective of enhancing the productivity of the Fadama areas and the livelihood systems they support through sustainable land use and water management, the GEF-funded CEMP has helped to provide an ecological framework for addressing root causes of declining productivity in Fadama and the negative impacts of unsustainable land use practices.

47. **GEF ID 1258: Enhancing Conservation of the Critical Network of Sites of Wetlands Required by Migratory Waterbirds Species of the African/Eurasian Flyways.** Although this project mainly focused at generating global environmental benefits, it also focused on local environmental benefits in Nigeria. The country had one of the 11 demonstration projects (Hadeija-Nguru Wetlands) implemented in 12 countries (one project being transboundary) across the migratory waterbirds species of the African/Eurasian flyway, with the intention of showcasing best practice in managing or in achieving certain conservation aims. Its objective was to demonstrate wetland restoration through community participation. Activities in the Nigeria site addressed the desires of the federal government and local community to develop economically viable and community-based management systems for wetlands under threat.

48. **GEF ID 4090: SPWA-BD: Niger Delta Biodiversity Project.** The primary threats to biodiversity in the Niger Delta are pollution, habitat degradation, and land-use change, overharvesting of natural resources, and invasive alien species. Threats related to oil spill pollution, affecting both land and water, as well as gas flaring and land clearings for establishing wells, pipelines, and plants are linked to the industry's activities. Other threats such as land clearings for agriculture and unsustainable harvest of trees, fish, and other biological resources cannot be attributed to industry and are also significant. The project is relevant in tackling these major environmental threats faced in the Niger Delta. Its objective is "to mainstream biodiversity management priorities into the Niger Delta oil and gas sector development policies and operations." The project's three main outcomes designed to achieve this objective are: (1) stakeholders strengthen the governance framework of law, policy, and institutional capacity to enable the mainstreaming of biodiversity management into the oil and gas sector in the Niger Delta; (2) government, the oil and gas industry, and local communities adopt and pilot new biodiversity action-planning tools for proactive biodiversity mainstreaming in the Niger Delta; (3) stakeholders support long-term biodiversity management and the use of these new tools in the Niger Delta by capitalizing the Niger Delta Biodiversity Trust with a collaborative engagement mechanism for local communities, oil and gas companies, and the government at its core.

49. Each of the three outcomes of this project reflects the project's focus on strengthening the governance of biodiversity in the Niger Delta. By mainstreaming biodiversity into the oil and gas sector of the Niger Delta, the project is strengthening the governance of those resources. The geographic focus of the project is on the four core Nigerian States within the Niger Delta (Akwa Ibom, Bayelsa, Delta, and Rivers States), which

combined encompass an area of 46,420 square kilometers (the “indirect landscape mainstreaming target”). The physical footprint of the oil and gas company assets within this area is admitted by the industry to be 600 square kilometers, which is considered the project’s initial “direct landscape mainstreaming target.”

50. **GEF ID 4907: GGW: Nigeria Erosion and Watershed Management Project (NEWMAP).** This project is highly relevant to Nigeria’s environment and development priorities and challenges. Up to 6,000 square kilometers—almost 6 percent of Nigeria’s land mass—are severely degraded at a time when population is increasing at over 2 percent per year and numerous sectors depend on the integrity of land resources to deliver on key sector objectives (Human Development Report 2009; UNDP 2009). Gully erosion is accelerating in the southeast. Southern Nigeria is affected by massive and expanding gully erosion, an advanced form of land degradation. There are an estimated 3000 gullies, which can be up to 10 kilometers long with multiple fingers spreading through the rural or urban landscape. In southeastern states, gullies and areas exposed to erosion tripled; the total area affected by rill, sheet, or gully erosion increased from approximately 1.33 percent (1021 square kilometers) in 1976 to approximately 3.7 percent (2820 square kilometers) in 2006 (World Bank 2011). Many of the region’s land degradation hotspots are also the most densely populated areas, such as Anambra State, the self-proclaimed gully capital of the world and the most densely populated region in Africa. The ongoing multisectoral project is responding to national needs by financing state-led interventions to prevent and reverse land degradation on a demand-driven basis, initially focusing on gully erosion sites that threaten infrastructure and livelihoods in the southeastern states.

Relevance to GEF Focal Areas

Biodiversity

51. All the GEF projects have significant components that contribute to generating global environmental benefits in the focal area of biodiversity.

52. **GEF ID 942.** The project produced global environmental benefits by focusing primarily on biodiversity conservation and management in and around the critical protected areas in Nigeria. The GEF-supported activities successfully promoted community involvement in the management of biodiversity and wildlife. Protected areas and their support zones in two states were supported under this component.

53. **GEF ID 1258.** The project addressed migratory waterbird species that are an important component of global biodiversity that is under serious threat. They migrate annually along predictable flyway routes in the African/Eurasian landmass, using different sites to feed, rest, winter, and breed along the way. Many of these sites are of critical importance to the continued survival of these species and are being exposed to a range of threats caused by increasing human population and unsustainable development. At particular risk are the lower latitude wetland sites that are used predominantly for resting, feeding, and wintering; breeding grounds in the circumpolar regions are considered to be under relatively less threat.

54. **GEF ID 4090.** The Niger Delta is home to the Global 200 Ecoregion no. 155 and is part of the Guinean Forest Hotspots (Myers et al. 2000). The Niger Delta harbors many locally and globally endangered species, and approximately 60 to 80 percent of all plant and animal species found in Nigeria. The delta's unique biogeographical attributes are responsible for the complex and rich milieu of habitats that enabled the evolution of this biological diversity.

55. This ongoing project is aligned with the GEF's strategic objective no. 2 for biodiversity (Mainstreaming Biodiversity in Production Landscapes/Seascapes and Sectors) and, within it, the strategic program no. 4 (Strengthening the Policy and Regulatory Framework for Mainstreaming Biodiversity). In doing so, the project targets the Nigeria's oil and gas sector, which is the backbone of Nigeria's economy, and touches upon the sector's interface with biodiversity. This is especially relevant, as the bulk of Nigeria's oil and gas resources are found in the biodiversity-rich Niger Delta Region.

56. Through the chosen mainstreaming approach, the project is dealing with the key threats to biodiversity in the Niger Delta, which include pollution, habitat change, and degradation that are linked to the overall footprint of the oil and gas sector in the Niger Delta (i.e., "inside the fence"). It will do so by bringing about change in the underlying drivers, which are the governance framework of the oil and gas sector and the ability of the oil and gas industry to engage in productive collaboration with the local communities and the government.

57. **GEF ID 4907.** The GEF and SCCF are intervening in the ongoing project to support the development of replicable local and community innovations on climate adaptation and soil, water, and biodiversity conservation that can be scaled up within the broader project. The project aims at delivering global environmental public goods by enhancing below and above ground biodiversity, as well as reducing land degradation and terrestrial carbon emissions. These global benefits are paired with local climate adaptation benefits. The operation contributes to the priorities in Nigeria's First National Communications for the United Nations Framework Convention on Climate Change, which prioritizes southern gullies, as well as the country's action plans for the United Nations Convention on Biological Diversity and the United Nations Convention to Combat Desertification. One of the components (Climate Change Response) of the ongoing project has the specific objective of strengthening Nigeria's capacity to promote low-carbon, climate-resilient development. To secure global environmental benefits, GEF resources specifically finance the establishment of community soil and water conservation zones in areas prone to erosion. It also enhances the country's effort to conserve its rich biodiversity assets.

58. GEF resources play a catalytic role in internalizing global environmental considerations in design and implementation of these activities that further enhance the global environment benefits, in particular biodiversity and forest carbon, both of which are under threat in some candidate sites for investment intervention under the project. Without GEF support, concerted and well-planned community conservation efforts to protect biodiversity assets and local forestlands would not achieve traction. This would result in continued loss of species as the southern Nigeria landscape continues to buckle from erosion and a heavy human footprint.

5. Cross-Cutting Issues

59. The selected projects, except the most recent ongoing project (GEF ID 4907), were not designed explicitly with gender mainstreaming considerations in mind. However, all the projects were implemented in a gender-sensitive manner, with clear evidence of women's inclusion and women's empowerment at the project level. From discussions with stakeholders, it was evident that there were positive social impacts of the project with women feeling empowered as their income has increased through proceeds from the livelihood activities introduced by the projects.

60. There is there evidence of resilience thinking or resilience considerations in the earlier completed GEF projects. However, in the two recent and ongoing projects resilience considerations are evident and are integrated as an incremental change in the multiple-benefits framework.

Gender

61. Project GEF ID 942 did not have a gender analysis completed at CEO Endorsement; however, the project appraisal document (PAD) referred to gender, stating that the project will put special emphasis on women and vulnerable groups within the watersheds, which will empower them and improve their economic and social conditions.¹⁷

62. There was no gender mainstreaming strategy or plan at CEO Endorsement, nor was a gender-responsive results framework, including gender-disaggregated Indicators, included. However, a gender mainstreaming strategy or plan was developed after the start of implementation and as the terminal evaluation study revealed, 43 percent of capacity-building beneficiaries were women, and there was fair representation (22.73 percent) of women in the composition of operational officers (OOs) who assisted in facilitation and supervision (UNEP 2010, 48).

63. There was evidence of women's inclusion and empowerment in the project. For example, it was reported (UNEP 2010, 48) that many women gained skills related to mill grinding, but less than 20 percent of women were trained in the other skill areas. Also, as reported in the terminal evaluation review, and confirmed by reports obtained during the site visits, there was no discrimination in the consideration of women, youth, or the disabled in appointments for posts in the executive or other areas of responsibility in the project. Women were involved in the project selection and implementation of all projects for which women were the direct beneficiaries.

64. The regional project GEF IF 1258 did not have a gender analysis completed at CEO Endorsement, neither did it include a gender mainstreaming strategy or plan. However, the project incorporates a gender-responsive results framework, including gender-disaggregated indicators, at CEO Endorsement. Activity 3.2 of outcome 3 was to develop procedures for improved management/use of resources, especially for fish-breeding sites and oyster- and shellfish-collection sites. This was planned to involve a program of participative rural community meetings, especially with fishing cooperatives and women's

¹⁷ GEF ID 492 Project Appraisal Document, page 53.

groups, who are involved in oyster collection.¹⁸ Stakeholders include women's groups.¹⁹ Training and awareness programs in four subregions focused on women's groups.²⁰

65. The national project GEF IF 1503 had no gender analysis completed at CEO Endorsement, nor did it include a gender mainstreaming strategy or plan. However, as for the other projects, there is evidence of women's inclusion and empowerment during project implementation. Women benefited from project interventions. For example, in Ogun State, 251 (46 percent) of 548 beneficiaries were women. Overall, 2276 out of the 7688 (30 percent) beneficiaries were women. This group of beneficiaries took the lead in alternative livelihood support, including marketing of the various agricultural products. Furthermore, out of the 38 Fadama Community Associations that participated in the project, 46 percent were led by women.²¹

66. The ongoing project GEF ID 4090 does not have gender analysis completed at CEO Endorsement, nor does it include a gender mainstreaming strategy or plan, or gender-disaggregated indicators.

67. For the ongoing project GEF ID 4907, the most recent of the projects selected for site visit, there is no gender analysis completed at CEO Endorsement, but the project appraisal document includes a gender mainstreaming strategy or plan. Gender mainstreaming is key to the attainment of the project objectives, given the community engagement required in the project. To address gender issues, community consultations and empowerment target women, building on community practice for gender roles and preferences.

68. Gender dimensions are integrated into the implementation of the activities in component 1, especially the livelihoods subcomponent. For example, by relying on gender roles for certain project activities such as drainage maintenance, small livestock, mushroom, snail, and honey production, and land management and farming or tree planting. For other activities, such as land use and watershed planning and beneficiary verification, gender equity will be emphasized. During the overall process of community mobilization, outreach will specifically ensure that women's voices are fully represented.²²

69. The project also incorporates a gender-responsive results framework, including gender-disaggregated indicators:

- Expected outputs: 9200 households benefiting from direct livelihood-enhancement activities under the project; 45,000 people receiving project-supported advisory support services in integrated land/water management practices, planning, and/or monitoring under the project indicators
- Number of direct project beneficiaries with indication of the percentage of females (core indicator)

¹⁸ GEF ID 1258 Project Appraisal Document, page 257.

¹⁹ Ibid., page 136.

²⁰ Ibid., page 146.

²¹ GEF IEO Terminal Evaluation Review, page 27; and presentation to mission.

²² Request for CEO Endorsement, page 17.

- People receiving project-supported advisory support services in integrated land/water management practices, planning, and/or monitoring under the project
- Households benefiting from livelihood-enhancement activities under the project

Resilience

70. In project GEF ID 4090, resilience thinking is integrated into the multiple-benefits framework as incremental change. The project's strategic approach calls for increasing the ecological representation and ecosystem resilience of a system of state- and community-based protected or specially managed areas. The strategy is to mainstream biodiversity-management objectives into oil and gas laws, policies, and oil company operations to ensure mainstreaming actions consider the Niger Delta's ecological integrity and sustainability. However, there are no clear linkages in project documents toward country priorities on resilience, because country priorities have not been established or documented.

71. In project GEF ID 4907, there is also evidence of resilience thinking in project documents as it is integrated into the multiple-benefits framework also as an incremental change. The project development objective is to reduce vulnerability to soil erosion in targeted subwatersheds. The project (NEWMAP) is designed to support the country's transformation agenda to achieve greater environmental and economic security.

72. Project GEF ID 4907 aims to primarily support state-led investments to enhance resilience to soil erosion, and associated climate variability and change in specific subwatersheds. In the first years with replicable models for priority in southern gully sites and getting northern states and their interventions are to be introduced, while capacities to promote long-term climate resilient, low-carbon development are raised.

73. As is the case for the earlier project, there are no clear linkages in project documents toward country priorities on resilience.

6. Summary of Emerging Findings and Conclusions

74. The *Annual Performance Report 2017* (GEF IEO 2018) ratings for the four projects completed between 2007 and 2014, selected for the Nigeria Case Study, were:

- GEF ID 942—outcome: negative, and sustainability: negative
- GEF ID 1093—outcome: positive, and sustainability: positive
- GEF ID 1258—outcome: positive, and sustainability: positive
- GEF ID 1503—outcome: negative, and sustainability: positive

75. As indicated earlier, visits could only be made to project sites of Project 942 and 1503. Based on results obtained during this case study field verifications, the assessment is that Sustainability is assessed as positive for both projects. Two key factors appear to have fostered sustainability of outcomes:

Postproject Financial Support

76. One of the factors that has ensured that project outcomes have been sustained years after project completion for both projects, is the continued availability of financial support.
77. In the case of project GEF ID 942, this was assured by the fact that the project had been fully integrated into the normal activities of the NPS, which has been continually funded by the federal government.
78. As an example, in 2012, three years after the project closed, the NPS as the lead implementing agency was able to secure a counterpart fund of NGN 210.0 M from the federal government as a takeoff grant for the Sustainable Livelihood, Biodiversity Conservation and Outreach Fund (SLBCOF), to replace the seed grant that was not accessed during the project, as well as counterpart contribution of NGN 20.0 M each from the three participating states. The SLBCOF was thus commissioned in the first quarter of 2013, and operational up to December 2016. However, from January 2017 to date, activities have slowed down because of nonpayment of further counterpart contributions from the three participating states after their initial contributions.
79. Another example is the recent establishment of a 5-hectare tree crop orchard in Ibbi, a surrounding community of the Kainji Lake Nature Reserve, by the NPS, 10 years after project completion using the same model as the project, thus continuing to expand the impact of the project. Also, the NPS has continued to maintain the ecocenters built by the project, providing the designed services to the surrounding communities.
80. In the case of project GEF ID 1503, continued financial support has been assured by the fact that a World Bank-funded project, FADAMA III, and the GEF-funded SLM project that commenced in 2013, continued to support and expanded the activities of the CEMP under Fadama II. Project vehicles were maintained and replaced when necessary, and communities continued to receive support for tree crop plantations and other alternative livelihood activities.

Relevant Alternative Livelihood Support Activities

81. Support to alternative livelihood (income-generating) activities have made an important contribution to encouraging surrounding communities not to invade protected areas to exploit the natural resources and to reducing pressure on fragile Fadama ecosystems, thus reducing the rate of forest loss and land degradation. However, not all alternative livelihood activities have proved to be sustainable or to have a positive effect on environmental sustainability.
82. First, activities that require minimum postproject maintenance, but yield benefits over time, are most likely to be sustainable. Plantation crops fall into this category: cashew in Kwara State, oil palm in Ogun State. Timber trees such as teak and gmelina have also proved to have a positive effect on the environment and are maintained by the beneficiary communities; however, because of their longer gestation periods and susceptibility to invasion by itinerant cattle herders, they appear to be less attractive to local communities.

83. Second, alternative livelihood activities that have a positive environmental/socioeconomic nexus in terms of promotion of synergies and mitigation of tradeoffs are also the most sustainable as they provide increased incomes to local communities at the same time as environmental benefits. Again, the tree crop plantations have proved to be the most successful. Their environmental benefits include increased ground cover, thus reducing erosion and increasing biodiversity. Annual crop and livestock-rearing activities, except for the cattle-rearing in Kwara State, appear to have less of a positive environment-socioeconomic nexus.

84. Third, activities that are under individual or semi-individual control as opposed to community or group control are likely to be more sustainable. Sustainability of group management of subprojects at farm level is a lot harder to achieve than sustainability of group management of civil infrastructure. For instance, plantations must have timely weeding, for which group ownership may be the cause of delay. Even husbandry of animals must be timely and regular to which groups may not respond to when due because of the different degrees of commitment by group members.

Cross-cutting Issues

85. The selected projects, except the most recent ongoing project (GEF ID 4907), were not designed explicitly with gender mainstreaming. However, all the projects were implemented in a gender-sensitive manner, with clear evidence of women's inclusion and women's empowerment at the project level. From discussions with stakeholders, it was evident that there were socially positive impacts of the project with women feeling empowered as their personal income has increased through proceeds from the livelihood activities implanted by the projects.

86. There is evidence of resilience thinking or resilience considerations in the earlier completed GEF projects. However, in the two recent and ongoing projects resilience considerations are evident and are integrated as an incremental change in the multiple-benefits framework.

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Annex A: List of interviewees

Date	GEF ID	Title	Name	Organization	Position
April 1, 2019			Mr Ahmed Maidabino	Planning Statistics and Research, Federal Ministry of Environment	Director/GEF—Operational Focal Point
			Mt Kusimo David	Ministry of Environment	GEF Desk Officer
			Mr Kayode Bello	Ministry of Environment	Assistant GEF Desk Officer
April 1, 2019	4907	GGW: Nigeria Erosion and Watershed Management Project (NEWMAP)	Ms Okon Esther Uduak	Nigeria Erosion and Watershed Management Project (NEWMAP)	Principal Scientific Officer
			Mr Mukhla Y. Tanko	NEWMAP	Monitoring and Evaluation (M&E) Specialist
			Ms Rizziya Ahmad	NEWMAP	M&E Officer
	1503	National Fadama Development Program II (NFDP II): Critical Ecosystem Management	Mr Alabi Samuel	National Fadama Coordination Office	M&E Officer
April 1, 2019	942	Local Empowerment and Environmental Management Project (LEEMP)—Micro Watershed and Environmental Management Project	Mr Danjuma Magari	National Parks Service	
			Mr Joshua W. Ibrahim	Forestry Dept, Federal Ministry of Environment	
April 2, 2019	942	Local Empowerment and Environmental Management Project	Mr Emmanuel Babiem	National Parks Service	Management Information Specialist

Date	GEF ID	Title	Name	Organization	Position
		(LEEMP)–Micro Watershed and Environmental Management Project	Mr Andrew David Adejo	Director of Forestry, Federal Ministry of Environment	
April 4, 2019	1503	National Fadama Development Program II (NFDP II): Critical Ecosystem Management	Alh Yusuf I. Agbabiaka	Kwara State Project Coordinator, FADAMA III	
April 5, 2019	942	Local Empowerment and Environmental Management Project (LEEMP)–Micro Watershed and Environmental Management Project	Usman Paeko	Kainji Lake Nature Reserve, IBBI Community Centre	Sector Head, National Parks Service
			Usman Bello	Tunga Bala Community Orchard	Chair, Tunga Bala Community Association
			Mr Saidu Mohamed Nasiru	National Park Service	GEF Desk Officer, Kainji Lake
April 6, 2019	1503	National Fadama Development Program II (NFDP II): Critical Ecosystem Management	Ms Funke Idriss	Agasse Ipo intervention site, Kwara State	Chair, Agbeloba Fadama User's Group,
			Ms Ariganye Thabat	Agasse Ipo intervention site, Kwara State	Member, Agbelore Fadama User's Group,
			Mr Bukoye J. Sunday	Irepodun Fadama Users Group, Oyun local government area, Kwara State	Chair, Fadama Community Association
			Mr Afolabi Sikiru	Agasse Ipo intervention site, Kwara State, Sanmora Community Forest	Chair, Forest Management Committee

Date	GEF ID	Title	Name	Organization	Position
April 8, 2019	1503	National Fadama Development Program II (NFDPP II): Critical Ecosystem Management	Engineer Mathew G. Adebayo	Ogun State Project Coordinator Fadama III Abeokuta	Environmental Officer
			Mr Samuel Olatoye,	Eriti intervention site	Secretary, Oba Fadama Users Association

Annex B: List of sites visited

Date	GEF ID	Title	Name of Site	Coordinates
April 5, 2019	942	Local Empowerment and Environmental Management Project (LEEMP)–Micro Watershed and Environmental Management Project	Ibbi Community Ecocenter, Kainji Lake National Park, Kwara State	N 9°39' 48.36517" E 4°54' 25.04359"
			Tunga Bali, Surrounding Community, Kainji Lake National Park, Kwara State	N 9°52' 55.72028" E 4°44' 23.64854"
			Ibbi Surrounding Community Orchard, Kainji Lake National Park, Kwara State	N 9°39' 5.13411" E 4°54' 58.02591"
April 6, 2019	1503	National Fadama Development Program II (NFDP II): Critical Ecosystem Management	Ajasse Ipo intervention site, Kwara State, community woodlot and orchard	N 8°15' 7.48355" E 4°47' 59.09608"
			Ajasse Ipo intervention site, Kwara State, Sammora Community Forest	N 8°15' 19.30576" E 4°48' 11.6289"
April 8, 2019	1503	National Fadama Development Program II (NFDP II): Critical Ecosystem Management	Eriti intervention site, Ogun State, Oba site	N 7°2' 21.15208" E 3°21' 50.68295"

Annex C: Photos

NEWMAP—EVIDENCE-BASED PICTURES (NEWMAP 2019)²³



Ikot Ekpo site in Cross River (Before)



Ikot Ekpo site in Cross River (After)



Atakpa site in Cross River State (Before)



Atakpa site in Cross River State (After)

²³ All photos in the appendix are taken by the consultant during field visits.



***Ajali Water Works site in Enugu (Before)
(After)***



Ajali Water Works site in Enugu



Forest regeneration in Tunga Bali, surrounding community, N9°52'18.46445; E4°43'47.25254, April 5, 2019



Tunga Bali cashew orchard (coordinates), N9°52'55.72028; E4°44'23.64854. April 5, 2019



New Outreach Ibbi community orchard, Kainji Lake Reserve surrounding community, Kwara State, planted 2019, N°39'5.13411; E4°54'58.02591, April 05, 2019

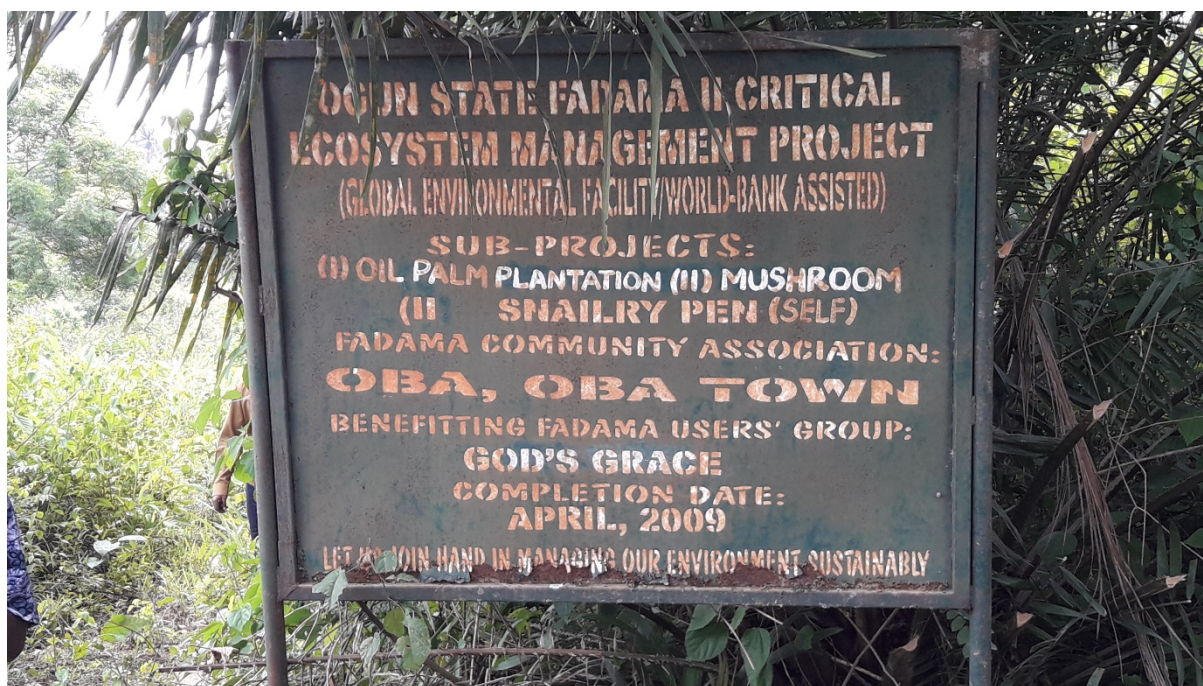


Ajasse Ipo intervention site, Kwara State, woodlot and orchard, N8°15'7.48355; E 4°47'59.09608, April, 2019





Sanmora Community Forest Reserve, Kwara State, $N8^{\circ}15'19.30576$; $E4^{\circ}48'11.6289$, April, 2019





Eriti oil palm plantation, Oba, Ogun State, N7°2'21.97479; E3°21'52.20769, April 2019

TECHNICAL DOCUMENT 7 - MALI CASE STUDY REPORT

April 2020

Abbreviations

ACC	adaptation to climate change
AIG	Intercommunal Gourma Association
APR	annual performance report
CMDT	Malian Cotton Development Company (Compagnie Malien de Développement Textiles)
DNEF	National Directorate for Water and Forests
ERSAP	Expansion and Strengthening of Mali's PA System
FAO	Food and Agriculture Organization
FFS	farmer field schools
FONDESA	Development Fund for the Sahelian Zone
GEF	Global Environment Facility
IEO	Independent Evaluation Office
IFAD	International Fund for Agricultural Development
IPPM	integrated production and pest management
NGO	nongovernmental organization
PA	protected area
POP	persistent organic pollutant
PCVBGE	Valorisation Biodiversite du Gourma et des Elephants
SCA	Sub-Saharan Africa
SCCE	Strategic Country Cluster Evaluation

SPWA-BD	Strategic Program for West Africa—Sub-Component Biodiversity
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme

1. Introduction, Context, And Methodology

Background

1. Case studies are the main component of the Sub-Saharan Africa (SSA) Strategic Country Cluster Evaluation (SCCE): Sahel and Sudan-Guinea Savanna Biomes. They focus on the two overarching evaluation objectives:
 - To understand the determinants of sustainability
 - To assess the relevance to and performance of the Global Environment Facility (GEF) in tackling the main environmental challenges in the two biomes
2. In its latest annual performance report (APR) (GEF IEO 2018), the GEF Independent Evaluation Office (IEO) has conducted a desk review finding that the following contributing factors were at play in those cases in which past outcomes were not sustained:
 - Lack of financial support for the maintenance of infrastructure or follow-up
 - Lack of sustained efforts from the executing agency
 - Inadequate political support, including limited progress on the adoption of legal and regulatory measures
 - Low institutional capacities of key agencies
 - Low levels of stakeholder buy-in
 - Flaws in the theory of change of projects
3. Building on the APR desk review findings, this evaluation aims at exploring in depth, through country case study analysis, the factors contributing to or hindering the sustainability of project outcomes. The aim is to cross-check the APR findings as well as to identify any other nuances to the six factors above, or new factors that either hinder or contribute to the sustainability of project completion outcomes. In addition, country studies also cover relevance issues such as GEF support modalities, expansion of GEF Agencies, and cross-cutting issues such as gender, resilience, and fragility.

Coverage

4. Projects selected for study in the Mali case study are:
 - **GEF ID 1093** (regional). Title: Reversing Land and Water Degradation Trends in the Niger River Basin. GEF Agency: World Bank/United Nations Development Programme (UNDP); GEF focal area: international waters; GEF phase: GEF-3; GEF modality: full-size project; project status: closed (implementation: May 10, 2004 to February 2, 2011).
 - **GEF ID 1152** (national). Title: Biodiversity Conservation and Participatory Sustainable Management of Natural Resources in the Inner Niger Delta and Its Transition Areas,

Mopti Region. GEF Agency: International Fund for Agricultural Development (IFAD); GEF focal area: biodiversity; GEF phase: GEF-3; GEF modality: full-size project; project status: completed/closed (implementation April 28, 2008 to July 21, 2013).

- **GEF ID 1253** (national). Title: Gourma Biodiversity Conservation Project. GEF Agency: World Bank; GEF focal area: biodiversity; GEF phase: GEF-2; GEF modality: full-size project; project status: Completed: closed (implementation September 9, 2005 to December 31, 2012).
- **GEF ID 1420** (regional). Title: Reducing Dependence on POPs and Other Agro-Chemicals in the Senegal and Niger River Basins through Integrated Production, Pest and Pollution Management. GEF Agency: United Nations Environment Programme (UNEP); GEF focal area: multifocal; GEF phase: GEF-3; GEF modality full-size project; project status: closed (implementation April 23, 2009 to December 31, 2014).
- **GEF ID 3377** (national). Title: SIP: Fostering Agricultural Productivity in Mali. GEF Agency: World Bank/UNDP; GEF focal area: land degradation; GEF phase GEF-4; GEF modality: full-size project; project status: under implementation (start date December, 17, 2010).
- **GEF ID 3763** (national). Title: SPWA-BD: Expansion and Strengthening of Mali's PA System. GEF Agency: UNDP; GEF focal area: biodiversity; GEF phase: GEF-4; GEF modality: full-size project; project status: closed (implementation December, 23, 2013 to December, 31, 2016).
- **GEF ID 3979** (national). Title: Integrating Climate Resilience into Agricultural Production for Food Security in Rural Areas. GEF Agency: Food and Agriculture Organization (FAO); GEF focal area: adaptation to climate change; GEF phase: GEF-4; GEF modality full-size project; project status: closed (implementation May 31, 2011 to December 1, 2016).
- **GEF ID 5270** (national). Title: GGW Natural Resources Management in a Changing Climate in Mali; GEF Agency: World Bank; GEF focal area: multifocal; GEF phase: GEF-5; GEF modality: full-size project; project status: under implementation (start date December 6, 2013).

Methodology

5. Individual interviews were conducted with project staff in the capital city Bamako. During these central level interviews, discussions were held with stakeholders (listed in annex A) on the key evaluation questions relevant for Mali.

- (a) What are the key factors influencing sustainability of outcomes in the two biomes?
- (b) In what way, if any, does the environmental and socioeconomic development/livelihoods nexus (or lack thereof) help explain the sustainability of outcomes in the two biomes?

- (c) To what extent has GEF support been relevant to the main environmental challenges the countries face in the two biomes, and are there any gaps?
- (d) To what extent have gender and resilience been taken into consideration in GEF programming in the two biomes?

6. As recommended in the case study guidelines,²⁴ key questions 1, 2, and 3 were the main focus of the case study data-gathering effort. However, key questions 4 and 5 were also addressed through central level interviews with key stakeholders in the capital and through project document reviews, the “SCCE: Project Review Protocols on Relevance and Sustainability” in particular.

7. One limitation of the study was that no in-country interviews could be conducted for GEF ID 1093 as in-country project staff could not be identified, and for GEF ID 3377 because of unavailability of project staff.

8. Because of the security guidelines for the country, no site visits were allowed by the international consultant. However, site verification visits were made by the national consultant to:

- (a) Nioro du Sahel of the ongoing project GEF ID 5270 (GGW Natural Resources Management in a Changing Climate in Mali: PGRN-CC), where the sites selected for this evaluation were.
 - Gadjaba Gadjel-Guétéma: Protected forest perimeter with a water tower and intermunicipal pastoral development area
 - Yéréré: Income-generating activities including market gardening
- (b) Kenieba in the Kayes area of project GEF ID 3763 (SPWA-BD: Expansion and Strengthening of Mali's PA System). The sites selected for the evaluation of this project were:
 - Wildlife reserves of Néma would and Mandé would and the village of Limakoulé (Kita)
 - Market gardening, processing mill, and other small agricultural equipment in the village of Niarikira (Kenieba)
- (c) Dioila and Bla, of project GEF ID 1420 (Reducing Dependence on POPs and Other Agro-Chemicals in the Senegal and Niger River Basins through Integrated Production, Pest and Pollution Management). The development of networks at the village, national, and subregional levels was one of the components. The sites visited were:
 - Dioila farmer field school (FFS) area
 - Zoumanabougou (15 kilometers from Bla) FFS area

²⁴ GEF-IEO, Strategic Country Cluster Evaluation (SCCE): Sahel and Sudan-Guinea Savanna biomes Guidance Note for Country Case Studies, February 2019

9. Dyadic interviews^{1F25} were conducted for one project pair, GEF ID 3763 (child) and GEF ID 1253 (standalone). It was not practicable to assemble the project leaders for the other project pair selected for dyadic interviews during the mission.

2. Key Factors Driving the Observed Sustainability of Outcomes

Biodiversity Conservation and Participatory Sustainable Management of Natural Resources in the Inner Niger Delta and Its Transition Areas, Mopti Region (GEF ID 1152)

10. Project GEF ID 1152, Biodiversity Conservation and Participatory Sustainable Management of Natural Resources in the Inner Niger Delta and Its Transition Areas, Mopti Region, was a full-size project implemented from 2008 to 2014, managed by the national agency Development Fund for the Sahelian Zone (FONDESA), with IFAD as the GEF Agency.

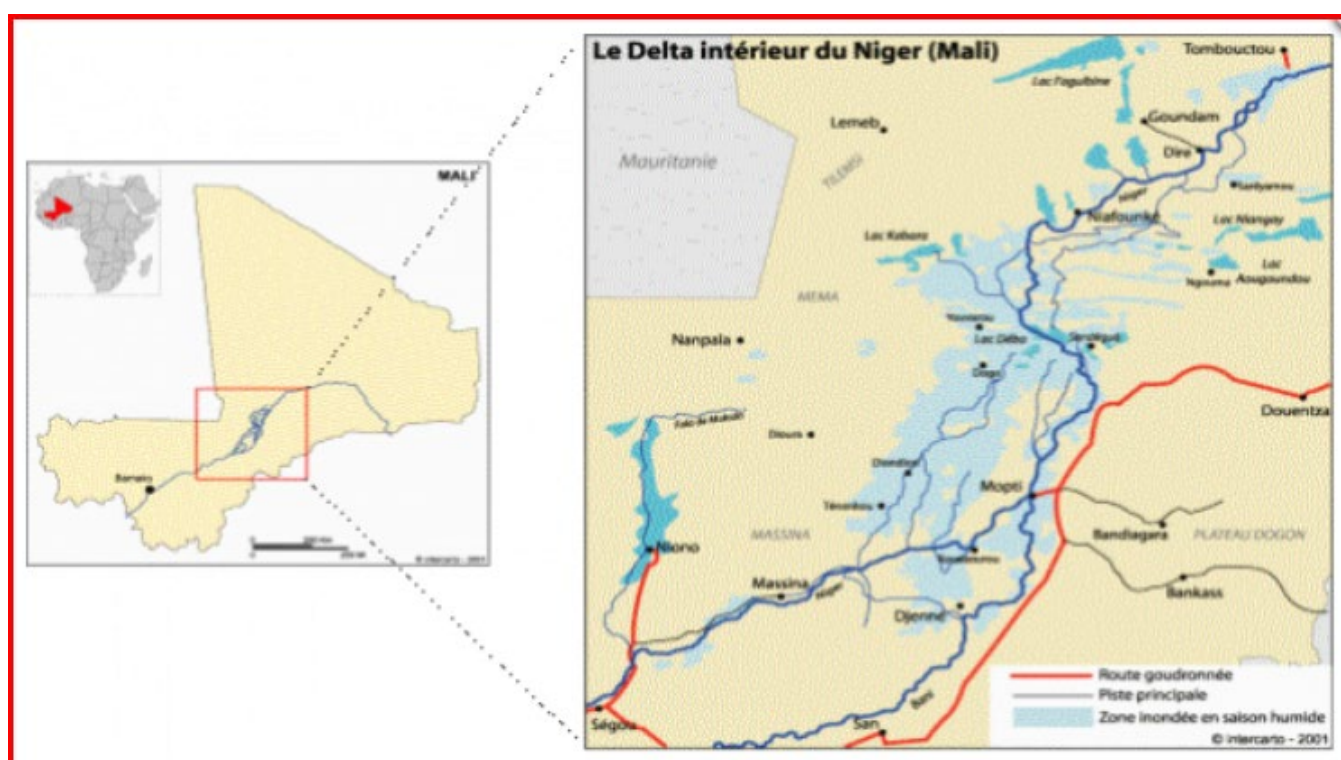
11. The overall development goal of the project was to promote a community-based sustainable development process in the Sahelian regions of Mali (Koulikoro, Ségou, Kayes, and Mopti) in order to: (1) reduce poverty and improve the living conditions among rural populations through sustainable management of natural resources; (2) increase the incomes of the people, most particularly those of women and the poorest; and (3) strengthen the capacity of farmer organizations and other stakeholders. The overall objective of the GEF resources was the restoration, conservation, and sustainable management of the ecosystems and their biodiversity in the Inner Delta of the Niger River and its transition zones.^{2F26}

12. The inner delta of the Niger River (figure 1), covering an expanse of 30,000 square kilometers, comprising four out of the eight “*cercles*” of the Mopti region located in the Sahelian areas of Mali, is one of the rare large inland deltas in the world. Characterized by diverse and complex ecosystems, it constitutes a unique refuge zone for a large number of paleo-arctic migratory birds and other wildlife, with several endemic and often endangered species, such as manatees or hippopotami. The bourgou (*Echinochloa stagnina*) is center of biodiversity and livelihoods in the area.

²⁵ Strategic Country Cluster Evaluation (SCCE): Sahel and Sudan-Guinea Savanna Biomes and Least Developed Countries (LDC). Guidance Note for Dyadic Interviews, January 2019.

²⁶ GEF ID 1152 Project Appraisal Document, page 7.

Figure 4: The Inner Niger Delta, zone of project intervention



Source: GEF ID 1152 Project Appraisal Document.

(a) Self-Reported Project Achievements

13. According to a report provided to the mission by FONDESA, the national execution agency, the main results obtained by project completion were (FONDESA n.d.):

- Development and restoration of 1444 hectares of bourgou plantations (300 percent more than the original objective)
- Significant increase in biodiversity observed in the project areas: decrease in the mortality rate of fauna and flora, return of many other animal species (migratory birds, water birds, fish)
- Improving the incomes and living conditions of the rural poor and improving the financial autonomy of the cooperatives
- Establishment of a local governance system (local agreement) to which all members of the cooperative have joined (which has allowed greater efficiency of the cooperative's activities)
- Establishment of strong partnership links between Korombana Community Council and Korientzé Livestock Cooperative
- Increased knowledge of bourgou regeneration and management in Inner Niger Delta by state agencies and at local level: mastering of regeneration techniques of bourgou (seeds, chips, cuttings) by pastoralists and establishment of a storage mechanism for bourgou seeds, etc.

- Evidence of “broader adoption,” especially scaling up of project results by number of new projects using the results of GEF ID 1152 (European Union/Dutch project Durable Development in the Interior Niger Delta)

Postproject Achievements—Sustainability of Main Interventions

14. Because of the current security situation in Mali, it was not possible for the consultants to visit the project areas. The following assessment (table 1) is based on discussions with the former project manager, Mr. Mamadou Tiero, who is currently the director general of FONDESA. Eight years after the end of the project, he reports on the sustainability of project interventions in the current situation. This is based on his personal experience and anecdotal reports he received since the project ended.

Table 1: Assessment of sustainability of main interventions of the GEF ID 1152 project, April 2019

Projects Activities	Area/Sector	Sustainable Acts (Still Working Postproject*)
The elaboration of the Programme de Développement Economique Social et Culturel (PDSEC) and the Programme Communal d’Action Environnemental (PCEA) of the communes	Planning	Success. Allows integration of local priorities into community plans into which project activities fit
The construction of vaccination parks	Livestock rearing	Success initially. Not sure currently because of the lack of financing and rebel activities that have reduced vaccination activities
Digging of wells for watering of livestock in the pastoral zones	Livestock rearing	Success. Allows pastoralists to stay longer in their grazing area and reduces pressure on the bourgou fields to which they migrate later. But approximately half of the beneficiaries expressed dissatisfaction with the number of wells dug and the poor workmanship in well construction
The fixation of dunes	Fixing dunes	Success. Labor demanding but once biological nitrogen fixation occurs stays in operation
Construction of rock bunds	Antierosion	Success. Maintained by individual families
Planting of live fences/hedgerows	Antierosion	Success. Maintained by individual families
Protection of banks (lakeshore)	Antierosion	No current information

Projects Activities	Area/Sector	Sustainable Acts (Still Working Postproject*)
Vetiver planting for protection on the banks of the Bani River	Antierosion	Success. Very rigorous plant that works once established
The realization of Zaï (small water harvesting pits/basins) in the communes	Antierosion	No current information
Drilling boreholes in agroforestry perimeters	Vegetable growing	No current information
Market gardening	Vegetable growing	No current information
Construction of fish ponds	Fishing	Partial success. Labor intensive and needs maintenance to prevent sanding up. Not sure whether it has continued given climate pressure and rebel activities
Smoking of the fish (Chockor ovens)	Fishing	Success. Liked by women (income generation)
Forest protection (closure)	Natural regeneration	Failure. Village management committee unsuccessful, and rebel invasion of protected areas
Eucalyptus and <i>acacia nilotica</i> plantations—woodlots	Natural regeneration	Success. Community woodlots now being used, autoplanting at family level
The regeneration of bourgou (nursery and replanting)	Natural regeneration	Success. Major impact on economy and livelihoods of the community. Case of positive environment (increase in biodiversity—return of migrating birds, increased fish stocks)/socioeconomic nexus (livestock feed, increased fishing, etc)
Replanting of forests—dour palm (<i>Hyphaene thebaica</i>)	Natural regeneration	Failure. Plants well liked but establishment difficult for farmers and growth takes a long time
Mechanization of hay making of bourgou	Livestock	Failure. Operation of equipment not cost effective
Knowledge generation at local and national levels	Capacity building	Success. Important outcome of the project

*Assessment based on discussions with the project manager.

Persistent Organic Pollutants Project (GEF ID 1420)

15. Project GEF ID 1420, Reducing Dependence on POPs and other Agro-Chemicals in the Senegal and Niger River Basins through Integrated Production, Pest and Pollution Management, was a full-size regional project implemented from 2007 to 2010, managed by the UNEP.

Self-Reported Project Achievements

16. In Mali, the project achievements at the end of the project were reported as follows (UNEP/FAO 2012):

- **Component 1: Awareness and basic situational assessment.** The results of the baseline situation and of the assessment of water pollutants were returned and validated at the level of the communities of the selected sites and other relevant stakeholders (decision makers, and Stockholm, Rotterdam, and biodiversity conventions).
- **Component 2: Assessment of water pollutants.** There was capacity building of the Central Veterinary Laboratory and the development of a quality assurance plan. Models were developed to estimate risks to human health, transport, and the fate of pesticides.
- **Component 3: Development of best practices for pollution prevention.** There was a curriculum development workshop, and curriculums developed for FFS to take into account the concerns of the communities of the sites concerned, which covered topics such as good agricultural practices, integrated vector-management of water-related diseases, rice-fish culture, etc. Training of trainers took place at FFS sites on the new tools developed for integrated production and pest management (IPPM); two of the Malian trainers participated in training the nucleus of trainers in Guinea; the bulk of producers were trained in IPPM in FFS.
- **Component 4: Network development.** Development of networks at the local and national level by creating community-monitoring networks at the level of villages that are in the same watershed, and at the national level to share information from communities.
- **Component 5: Project coordination and management.** A national coordination unit for the project was set up to carry out national project activities, and a project steering committee was set up that met at least twice a year.

Postproject Achievements—Sustainability of Main Interventions

17. The terminal evaluation states that at project end, most direct outcomes linked to the planned and achieved outputs were achieved. The capacity and knowledge of relevant stakeholders (farmers, governmental bodies, laboratories, etc.) throughout the Niger and Senegal River basins were reinforced. A clear picture was established on the contaminant type

and level of threat to humans and environment from pesticide-contaminated waters. Risks to farmers and aquatic environment from exposure to pesticides were estimated (Human Health Risk Assessment), but unfortunately not communicated.

18. The governments in Senegal, Mali, Niger, and Mauritania had started to adopt IPPM in their national training curriculums for farmers. The Permanent Interstate Committee for Drought Control (Comité permanent inter-État de lutte contre la sécheresse au Sahel) at the regional level was increasingly working toward better regulation in the use of agrochemicals. It was expected that in the long run, the impact will be achieved by enrolling more farmers in similar programs and by securing stronger government support.

19. At the time of the terminal evaluation, there was no indication of a significant reduction in the level of water toxicity by the project activities. Similarly, the increase of production was marginal. Elimination of persistent organic pollutants' (POPs) pesticide-use and substantial reduction/elimination of toxic pesticides used in agriculture in the project area was not achieved because the original design was too ambitious, and the scale of the effort needed too large compared with the time and budget of the project. It was, however, also acknowledged that the project did manage to do a commendable job, within the available resources, of setting up a foundation on which further work on attaining the stated goal can be based.

20. The terminal evaluation further reported that there was no evidence of broader adoption during project implementation. It was reported that there was inappropriate and insufficient technology/approach and it was a mistake for the project to follow an approach that promoted the use of neem for any sort of disease and pest control in farmers plots. Neem as the primary alternative proposed in the FFS is not good for diseases, weeds, and certain pests, so the alternative FFS proposed was not a comprehensive solution for producers. It is harder to regain farmers' confidence once they try and fail when using a recommended practice. The project was trying to be completely against pesticides when this may not have been appropriate in some circumstances.

21. Other project design factors that the terminal evaluation claimed to be contributing to unsustainability of the approach were:

- **Poor project design.** The project sought to address a very large and complex issue. However, the size of the budget relative to the geographic region target and number of interventions was not sufficient and did not permit for implementation at scale to have the desired impact.^{3F27}
- **Ineffective funding mechanism.** Although the project theory of change and design was quite strong and evidence based, the funding mechanism was organized in such a way that it undermined the ability of project staff to carry out the project according to the theory of change, which led to the project being implemented gradually as tranches of funding became available, which was not necessarily linked to the theory of change.^{4F28}

²⁷ GEF ID 1420 Terminal Evaluation, page 7.

²⁸ Ibid.

Findings of SCCE Site Visits

22. Consultations with stakeholders during the SCCE mission showed that in Mali producer training in IPPM was successful using the following Biological Control agents:

- Neem flour
- Root powder of *Securidaca longepedunculata* (dioro)
- Crushed neem seed
- Chopped fresh organs from *Physalis*
- Broth of fresh organs of *Hyptis suaveolens* (soso jiri)
- Chopped fresh organs of *Cassia nigricans* (dialaniba)

23. These resulted in the following benefits:

- **Economic.** Reduced cost of pest control
- **Health.** Reduced poisoning of population
- **Environment.** Increased biodiversity

24. The SCCE site verification visits to Dioila and Bla, eight years after the end of the project, provided clear evidence of the sustainability of the IPPM approach introduced by the POPs project as follows:

- Interviews with the extension personnel in Dioila (the agriculture sector manager and staff) who reported that IPPM is the method that his service advises for use in market gardening. They further asserted that the seven perimeters to which extension support is provided in the area extensively use biopesticides (figure 2).
- In Bla, as observed, and according to the agricultural officer, IPPM techniques have been widely adopted in market garden perimeters. According to him, the risk run by this program is the pressure of the Malian Cotton Development Company (Compagnie Malien de Développement Textiles—CMDT), which for market reasons does not want a competitor in terms of supply of alternative pesticides and fertilizers to farmers.
- During interviews with the beneficiaries in Dioila (president of the IPPM network), it was reported that the investment made by the IPPM project is beneficial to them. They reported that in their area today, some farmers take the chemicals offered by the company because they are afraid of retaliation from CMDT, and then sell them and treat their fields with biopesticides. They reported that after chemical treatment, the farmers have headaches and colds all day, and the vegetables produced could not be eaten or sold because of the smell of the

chemicals. All this end with IPPM. According to them, nobody who has experienced these two situations will go back to the use of chemicals. That is why IPPM will never be abandoned.

25. Beneficiaries also reported that since the GEF project, many support projects have been implemented in the basins of Senegal and Niger Rivers using IPPM, which is evidence of broader adoption. These different projects have enabled the following actions to be implemented:

- Producer training on good agricultural practices and plant protection at lower cost
- Set-up and equipment of three perimeters (market gardening equipment, fencing, seeds, and small equipment, etc.)
- Deepening of the well in the women's garden
- Implementation of agro-meteorology
- Investigation of the degree of pollution of water bodies

Figure 5: (1) Water tower with solar panels for water supply; (2) materials for the production of biopesticides; (3) results of treatments with biopesticides, market garden perimeter in the Koulikoro region, Cercle de Dioila, Dioila district



Source: Photos taken by the consultant during field visits

26. In Bla, according to the president of the IPPM network, there is great satisfaction with IPPM because in the three sectors of Bla (Bla, Yangasso, and M'pèssoba), 6000 farmers who received training since 2015 no longer use chemicals (pesticides and fertilizers). Growers use neem seed products to treat crops and *Cassia nigricans* for grain conservation. They cultivate 17,000 hectares, reporting that it takes 20,000 XAF (French African CFA francs) to treat 1

hectare, so use of IPPM results in a savings of 340,000,000 XAF by the CMDT and by the state for nonuse of chemicals and fertilizers.

27. The group president cited the following evidence of positive change:

- **Improved health of farmers.** What farmers called “diseases of low water,” which are known to be caused by the chemicals used have disappeared among network members who no longer use chemicals.
- **Increased biodiversity.** Bees are now more and more present in beehives that previously were no longer inhabited by bees, because of the diminution in use of chemical products: “today we know the beneficial insects and we protect them and we eliminate pests such as *elico verpa* which pierce the green pod of cotton; this last insect has been eliminated by its natural enemies and not by chemical products.”
- **Improved crop production.** Improved cropping techniques and soil studies have resulted in improved production.

28. The network president claimed that the main factor that negatively influences the sustainability of IPPM use is a personal income problem, because the company that supplies the chemical inputs to the CMDT has among its members some managers of CMDT, as well as producer union members. They claim that The National Directorate of Agriculture also has a share of the blame as it only pays lip service to the network use of IPPM. The network is only left alone because of the aggressive defense by its members.

29. In view of all these almost irreversible changes, community members say that a small revolution is taking place, and CMDT should have an interest in supervising rather than fighting it.

Adaptation to Climate Change Project (GEF ID 3979)

30. Project GEF ID 3979, Integrating Climate Resilience into Agricultural Production for Food Security in Rural Areas, commenced in 2011 and was supposed to have closed in 2016, but actually closed at the end of 2018. The project was directly implemented by the GEF Agency FAO.

31. The project objective was to enhance the capacity of Mali's agricultural sector to cope successfully with climate change, by incorporating climate change adaptation concerns and strategies into ongoing agricultural development initiatives, and mainstreaming climate change adaptation issues into agricultural policies and programming.^{5F29}

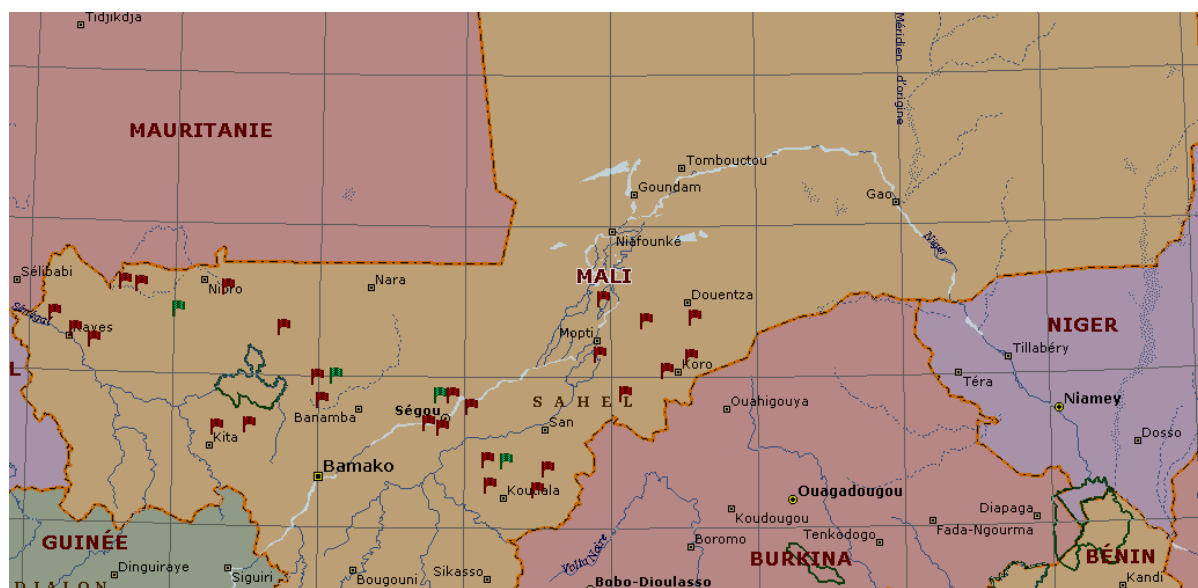
Self-Reported Project Achievements

32. The project was implemented in communes identified in three regional workshops. The number of communes increased from 30 at the start of the project to 180 at the end, in contrast to nine in the project document. The distribution of these 180 communes by region

²⁹ GEF ID 3979 Request for CEO Endorsement, page 1.

is as follows: 56 in Kayes, 37 in Koulikoro, 15 in Sikasso, 22 in Segou, and 50 in Mopti (figure 3)

Figure 6: Project intervention sites for GEF ID 3979, Integrating Climate Resilience into Agricultural Production for Food Security in Rural Areas



Source: GEF ID 3979 Project Appraisal Document

33. The main achievements of the project were (FAO n.d.):

- A list of 38 good agricultural practices was developed, proposing adaptation measures to a shorter growing season and to the problem of retention of rainwater. The signing of several partnership agreements has resulted in the incorporation of selected adaptation to climate change (ACC) techniques into agricultural production systems on 123,168 hectares.
- The project trained 1293 FFS facilitators (10 percent female) in ACC methods, who conducted 1709 FFSs, in which 41,117 farmers (29 percent female) were trained.
- Integration of ACC measures into the action plans of the national structures and operational programs and projects of the rural sector and municipalities was achieved thanks to the advocacy made with institutions, communities, projects, and programs through the following:
 - The signing of eight partnership agreements in three ecosystems and four production systems (cotton-maize, millet-sorghum, rice, and market gardening)
 - The definition of 38 good practices in ACC and the support of 872 seed producers, who produced 31 adapted varieties of millet, sorghum, groundnut, market garden crops, cowpea, rice, maize, and sesame
 - 34 local FFS initiatives supported by an ACC fund

- Conducting a study on endogenous adaptation knowledge
- The establishment of mechanisms for intersectoral coordination and sensitization on the ACC (Steering Committee, Working Group) and high-level advocacy with three institutions of the Republic—the National Assembly with the deputies; the High Council of Local Authorities; and the Economic, Social and Cultural Council

34. According to available reporting (FAO n.d.) and interviews with the project manager that could not be verified postcompletion, by project end, these activities resulted in:

- a. An increase in national crop yields from 1.39 metric tons/hectare in 2010 to 1.70 metric tons/hectare in 2016 (an increase of 22 percent), compared with average yields obtained by beneficiary farmers in the FFS of 2.14 metric tons/hectare, an increase of 54 percent in 2016
- b. Increase in beneficiary incomes as a result of the introduction and reinforcement of new crops such as sesame (early and high yield varieties), new agricultural activities (seed and feed production), and diversification of their food supply through the market gardening as a source of financial income for women and men
- c. Simultaneous adoption of ACC measures by farmers trained by the project as well as nonproject farmers
- d. The realization of agroforestry perimeters (alley cropping with moringa hedgerows), which increased forage availability and the use of moringa in food and human health
- e. The increase in biodiversity by the return of small animals in certain cotton zones after the use of biopesticides
- f. Coverage of the annual seed needs in the project intervention areas after the training of seed producers
- g. The lightening of women's housework loads, thanks to the support provided by ACC funds (mills, modern wells, motor pumps, etc.)
- h. Advocacy with the institutions of the republic helped to strengthen their conviction on climate risks, and, therefore, their inclusion in major projects and programs of the agricultural sector
- i. The extension of the project to zones not initially planned in its formulation (30 communes in 2012 to 180 in 2016) because of its success

Expansion and Strengthening of Mali's Protected Area System Project (GEF ID 3763)

35. The Strategic Program for West Africa—Sub-Component Biodiversity (SPWA-BD) project, Expansion and Strengthening of Mali's Protected Area System, was implemented between June 2011 and December, 2017. It was managed by the National Directorate for Water and Forests (DNEF), with UNDP as the GEF Agency.

36. The project objective was to expand the coverage of Mali's protected estate and significantly strengthen the management effectiveness of the protected area system,

focusing on the southwest region and piloting new management models based on international protected area (PA) categories.^{6F30} The purpose of this project was to contribute to the conservation of globally important biodiversity in Mali and, in particular, the rich biodiversity of southwestern Mali, where mammals, including West African chimpanzees (*Pan troglodytes verus*) and the giant elands (*Taurotragus derbianu*), are present.

37. The project aimed to strengthen the national PAs in southwestern Mali by consolidating biosphere reserves through gazetting of PAs. Three new PA units were planned, to increase the Mali PA system by 82,130 hectares. Furthermore, by extending PA management to the buffer and transition zones of the two Transboundary Biosphere Reserves (Boucle de Boulé and Bafing-Famélé) in southwestern Mali, the project was expected to expand the PA estate by an additional 3,149,132 hectares. The total PA estate (including biosphere reserves' buffer and transition zones) will have expanded from 4.7 percent to 7.2 percent of the national territory, and PA coverage will better represent the globally significant and critical ecosystems in Mali. The project area covered the Bafing-Famélé complex, covering three cercles in the Kayes region, Bafoulabé, Kita, and Kéniéba.

Self-Reported Project Achievements

38. Activities undertaken by the project covered: (1) studies and various consultations, (2) capacity building, (3) development of protected areas, (4) ecological monitoring of protected areas, and (5) organization and support to boundary communities in protected areas.^{7F31}

39. New PAs (Mande Wula, Nema Wula, Faragama, and Flawa) were demarcated and mapped, and sign posts were erected at the main axes of access to the different areas.

40. The project introduced three PA management models: (1) the state management model, (2) the public-private partnership management model through the nongovernmental organization (NGO) Synergie Environnement (the lease contract between the DNEF and Synergie Environnement was signed November 8, 2012, and the memorandum of understanding between the DNEF and the NGO for the support of the project was signed on December 5, 2013), (3) the community/private management model by communities and mining companies

41. As support to boundary communities, training of women in nontimber forest products processing took place in the villages of Niarakira (Kouroukoto Commune), Foré (Koundian Commune), and Samou (Bayé Commune) in 2012 and 2013; training of women in production and processing of vegetable products was held in the village of Makadougou in November 2013; and a 1-hectare market gardening site was built, fenced with wire mesh, and made available to women from the village of Makadougou.

Project Achievements at Completion

³⁰ GEF ID 3763 Request for CEO Endorsement, page 1.

³¹ PowerPoint presentation by M.S. Kone at the GEF-7 National Dialogue Initiative workshop in Bamako, August 2018.

42. At the end of the project, as reported in the terminal evaluation (Staub and Tangara 2018), the main successes of the project resided mainly in (1) the various communication actions implemented around the protected areas, aimed at the local populations; (2) the various actions of capacity building for the forest agents, the local populations, and the local elected representatives; and (3) the various reports produced that now make it possible to better understand the baseline situation of PAs and the needs for an effective management. These actions have allowed the local populations to better organize themselves and to better understand the interest of PAs. It is important to note the proper consideration of the "gender" dimension in the trainings organized. However, too few income-generating activities have been organized to have a real impact on the use of natural resources in protected areas.

43. Although the new law establishing the principles of management of fauna and its habitat has not yet been adopted, the draft is ready and many work sessions were organized. The hope was that the law would be adopted very soon, but that has not yet happened. The creation of the National Board for the Management of Protected Areas that was envisaged in the project appraisal document will not be created, but an alternative has been proposed. One option could be to restructure the National Directorate of Water and Forests in the Directorate General of Water and Forests and attach a unit to it. This has not yet happened, and the biggest problem that still remains is the availability of staff.

Postproject Achievements—Sustainability of Main Interventions

44. By the time the terminal evaluation was prepared in February 2018, factors hindering the sustainability of the project were evident and highlighted as follows³²:

- In its design, the project did not consider current limitations in terms of human and financial resources. In addition, it is important to note that the country was significantly behind in managing its PAs, most of which were "paper parks" at the beginning of the project. The 2012 coup d'etat was also a drag on the project, especially since a very large number of partners withdrew, with significant consequences for the available budget. The nonrealization of some actions and especially those favoring riparian communities was badly perceived by those who felt left behind.
- Although many actions had been implemented, their real impacts on the ground remain quite limited, and human pressures are still very present (gold panning, agro-pastoral activities timber exploitation, transhumance, mining, cultivation cotton), as well as the conflicts between the neighboring populations and the agents of the State.

Finding of SCCE Site Visits

³² GEF ID 3763 Terminal Evaluation, page 18.

45. **Nema wula and Mandé wula PAs.** Site visits to the project area two years after its closure revealed that the new PAs, Nema wula and Mandé wula, have been rejected by the local population, as illustrated by figure 4A, showing that all the demarcating signs have been knocked down by the villagers to demonstrate their rejection. Additionally, analysis of vegetation productivity, as measured by the Normalized Difference Vegetation Index, through time between the protected areas and adjacent nonprotected areas, demonstrates that the protection of these areas yielded no measurable impact on vegetation dynamics (figure 4B). This further supports the conclusion that these protected areas have been rejected by the communities. The area (over 93,000 hectares) was “leased” by the state and handed to a Lessor (Armodiator), the NGO (Synergy Synergie Environnement) to manage. The leased PA includes a large village (Limakolé) with a population of over 3000, with a school and other social infrastructure, which the Armodiator has tried to evacuate. Hamlets have been reinstalled in the reserve (figure 5). Forest officers are considered as accomplices of the Armodiator and future collaboration with the local communities is being compromised. There is open conflict between the populations and the Amodiator.

46. Important factors that have contributed to the nonsustainability of the intervention include:

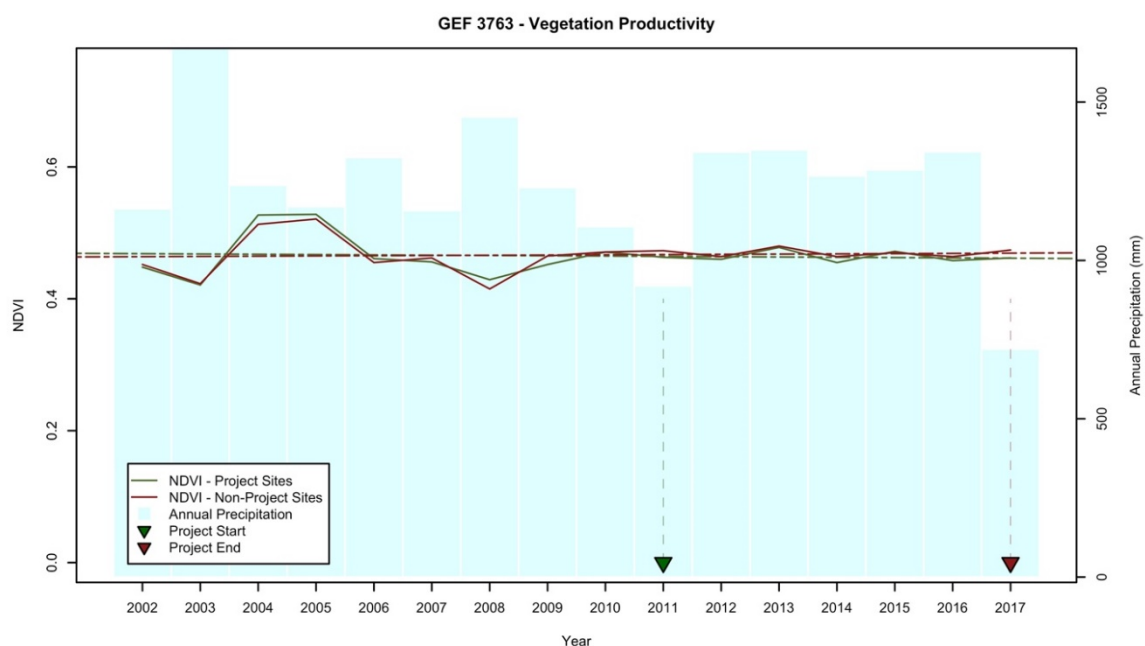
- **The nonrespect of the classification procedure** that provides for the development phase of the project before classification, to avoid villages near the area to be classified, and especially to avoid villages in the forest to be classified. However, if there exists isolated plantations within the limits chosen, they must be declared as enclaves that will be delimited, limited, and not included in the classified areas. If these principles had been respected at the time of the classification, the current explosive situation would have been avoided.

Figure 7A: Signpost marking the start of the Néma wula reserve, knocked down by villagers to demonstrate their rejection of the reserve



Source: Photo taken by the consultant during field visits

Figure 4B: Time series of annual vegetation productivity for Néma Wula reserve and a buffer area, demonstrating no change in productivity before, during, and after project implementation and no difference inside and outside of the reserve.



Source: Prepared by GEF IEO

Figure 8: Hamlet linked to Limakolé reinstalled inside the Néma wula reserve



Source: Photo taken by the consultant during field visits

- **Noncompliance with the law** No. 95-031 establishing the conditions for management of wildlife and its habitat, Article 20, which states "a leased area is an area whose right of exploitation is granted to a natural or legal person called a hunting guide in an area of hunting interest, a wildlife reserve or a special reserve." If this provision had been respected, the entire Mandé wula Wildlife Reserve and the entire Nema Wula Wildlife Reserve and its buffer zones would not have been leased for a total area of 93,740 hectares. The current mode of leasing is a key factor influencing the sustainability of the results. This mode excludes populations from management and prevents them from carrying out vital economic activities for them (cotton growing, gold mining).
- **Lack of long-term support.** Project support must be able to develop in the form of a program divided into three phases of the PA: the first phase called creation (which ends with the official creation of the PA), the second phase that aims for the operationalization and consolidation of management, and finally the phase of "autonomy" (achieved when the PA reaches an advanced degree of technical, organizational and financial autonomy). In the case of this project, all the phases were programmed to be implemented at the same time.
- Basing the exploitation of these reserves only on hunting as the current Amodiator does is a big risk to sustainability. As proposed in the project appraisal document, ecotourism should have been introduced and given much prominence.

47. **Market garden and livelihood systems.** In the intervention village of Niarikira visited by the mission, the alternative livelihood intervention in the affected population was for income generation, to provide alternatives to exploitation of natural resources in the PAs for livelihoods. However, the village of Niarikira that received income-generating support is located in an entirely agricultural area, 7 kilometers from the Kouroufing reserve, far from gold mining sites, so the indicated market gardening intervention can only be considered as an intervention for enhanced resilience to climate change.

48. The population reported to the visiting mission that there was no market gardening support from the Expansion and Strengthening of Mali's PA System (ERSAP) project. Income-generating support was only provided for mills and equipment for the processing of nontimber forest products. They also claim that they did not receive any small agricultural equipment.

49. The mission found that the villagers initially enjoyed the use of the donated equipment (mill and nontimber forest products). The equipment allowed them to make peanut paste for their sauces and soap for the households. They also appreciated the solar street lights installed by the project that are well maintained and the batteries replaced as needed.

50. Currently, however, two years after end of the project, the mission found that the donated mill (figure 6) has not been functioning for two months because of worn-out gear and lack of financial resources to make the necessary repairs. As for the processing of

nontimber forest products (production of soap, hibiscus juice), they reported that raw materials are currently lacking. In addition, for the hibiscus juice there is a problem of market availability and conservation of the product.

Figure 9: Broken down mill in Niarikira



Source: Photo taken by the consultant during field visits

51. So, postproject, there is total cessation of processing activities of nontimber forest products and the mill because of a lack of working capital. It can be said that poor organization and mismanagement are at the basis of the shutdown of the mill and the cessation of NTFP processing activities. Villagers did not receive enough management and technical training to operate the enterprises, and there was no follow up or technical support postproject. It is also questionable whether availability of raw materials and markets for sustainable operation had been properly assessed prior to initiation of the interventions

Gourma Biodiversity Conservation Project 1253

52. Project GEF ID 1253, Conservation, Valorisation Biodiversite du Gourma et des Elephants (PCVBGE) Gourma Biodiversity Conservation Project, was to commence implementation in 2004 and close in 2012, but it actually commenced in 2006 and closed in 2014. The World Bank was the GEF Agency and the National Agency was the Department of Water and Forests.

53. The original global environment objective as indicated in the GEF Grant Agreement was “to assist the Recipient in implementing environmental protection and biodiversity conservation activities in the Sahelian priority area of Gourma through improved sustainable management of natural resource use and improved returns for the local population.”^{9F33}

³³ GEF ID 1253 Terminal Evaluation, page 14

The development goal of the project evolved over time (A. Sow, annex A). We can distinguish two periods:

- (a) **From April 2006 to April 2010**, during which the development objective (initially spread over six years) was formulated as follows: "To work by 2011 to stop and sometimes reverse, trends in biodiversity degradation at project intervention sites."
- (b) **From May 2010 to December 2012**, during which the development objective was redefined as follows: "Assist the beneficiary (Government of Mali) in the implementation of Protection Area activities of the environment and biodiversity conservation in the Sahel with priority of the Gourma area, through sustainable use and management of natural resources that create improved income for local populations."

Self-Reported Project Achievements

54. According to the terminal evaluation, by the time the project was restructured in 2011, approximately 85 percent of the GEF grant had been disbursed and some of the projected operational outputs had already been realized.^{10F34} These outputs were: (1) improved knowledge and awareness in biodiversity within the Gourma population; (2) creation of four conservation areas; and (3) creation of the Intercommunal Gourma Association (AIG). In addition, the following key activities were on track: (1) organization of 18 mayors into an intercommunal committee; (2) demarcation and formalization of the conservation areas through a consultative and participatory process; (3) organization of communities into cohesive groups responsible for managing communal conservation areas; and (4) building the capacity of OGAC for conservation area management.

55. At the closing of the project in 2012, the following outputs were noted in both project files and in the Government's report^{11F35}: (1) over 2750 square kilometers in the Gourma area had been established as biodiversity conservation areas (against the target of 2200 square kilometers, meaning a 125 percent achievement of set target; (2) four communal and intercommunal conservation areas had been formally created (against the target of four); (3) 63 biodiversity microprojects had been developed by local communities (against a target of 50); and (5) 23 communes had included biodiversity activities in their economic, social, and cultural development plans (against a target of 20). Most importantly, the AIG had been established and is managing and monitoring environmental protection and biodiversity conservation activities in the Sahelian priority area of the Gourma.

56. Because of the political instability that brought insecurity in the project implementation area with most of the Gourma area occupied and inaccessible, the government of Mali had relocated all technical staff to Bamako in 2012.

Postproject Achievements—Sustainability of Main Interventions

³⁴ GEF ID 1253 Terminal Evaluation Review, page 26.

³⁵ Ibid.

57. The government of Mali continues with the Gourma biodiversity program for future operation in the sector. At the end of the external funding of PCVBGE in December 2012, a project consolidation unit was set up whose main mission is the consolidation of important achievements and the preparation of a new phase. The operation of the field activities was successfully transferred to AIG in September 2012. The project implementation unit reported to the terminal evaluation that the government had demonstrated ownership of AIG by providing financial support to its operations in the order of 150 million XAF for fiscal year 2013, and a pledge of 228 million XAF for fiscal year 2014. It was agreed that the four PAs created and their management bodies need support to equip them with operational capacities for the sustainable management of biodiversity resources, particularly Gourma elephants.

58. According to A. Sow (annex A) postproject, from 2012 to 2014, three boreholes for watering of animals equipped with solar panels were established in Maifata, Tin sabara, and Chartatane, and from 2015 to 2016, the following were undertaken:

- Participatory diagnosis carried out as part of the research and location of water points on the elephant route
- Geomorphological study for the location of water points
- Elaboration of a three-year program for the consolidation of the achievements of the PCVBGE (short preconcept), which was submitted to the Special Investment Budget (Budget Special d'Investissement) in 2017 for financing
- Beginning of discussions on the reactivation of the law for creation of a special reserve for elephants (law of 1959) in order to adapt it to the current context recognized by the World Wildlife Fund (process temporarily suspended)
- Construction of a borehole equipped with solar panels, fountains, water tower, and circular basins serving as drinking water points for animals in Wami (village of Galou) rural municipality of Hombori, Cercle de Douentza
- Refurbishment of the offices housing the management unit (former International Union for Conservation of Nature office) after moving with the PCVBGE in 2015, and equipment of the office (still in progress)

59. So, there is some evidence that broader adoption is taking place:

- **Sustaining**—funding by the government of the operations of AIG envisioned to manage and monitor environmental protection and biodiversity conservation activities in the Sahelian priority area of the Gourma
- **Mainstreaming**—follow-on interventions designed
- **Scaling-up**—the government of Mali has indicated that in addition to UNDP, Japan and Denmark have expressed an interest to bilaterally contribute to future operations

60. However, interviews during the SCCE mission indicates that the security situation has compromised the sustainability of some project achievements, as currently:

- The three boreholes equipped with solar panels have been vandalized and stolen despite a number of repairs, as a result of the security situation inherent to the crisis in the north.
- The NGO appointed by the DNEF to coordinate management activities of the PAs is not able to carry out its functions because of insecurity in the project area and lack of financing.
- All attempts to get people and elephants to move away from central Lake Banzena in the PA to reduce biodiversity pressure have failed since the infrastructure created for watering of livestock and elephants have all failed. There is a new GEF project to build new infrastructure (result not likely to be different from past!).
- But, alternative income-generation activities under individual household control (market gardens, small ruminants, credit associations) seem to have worked and are still working even in the current insecurity situation—the lesson is that there are higher chances of sustainability with individual versus community management of alternative income activities.

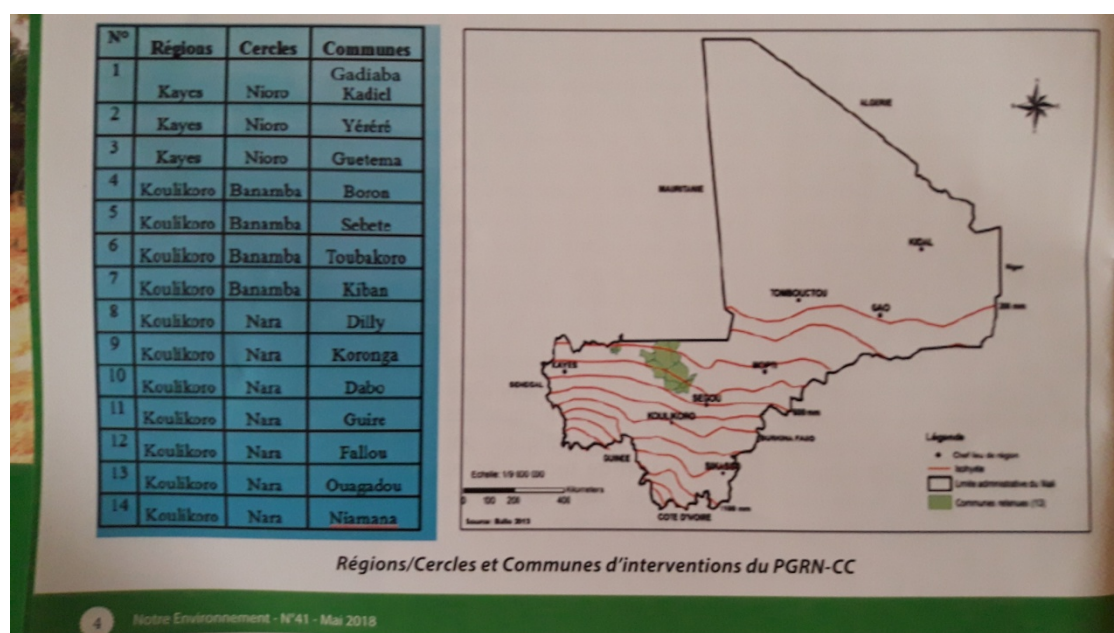
Great Green Wall Project 5270

61. GEF ID 5270, GW Natural Resources Management in a Changing Climate in Mali, is a full-size project under the World Bank that commenced implementation in June 2013, and is scheduled for closure in September 2019. It is managed by the Agency for the Environment and Sustainable Development (Agence pour l'environnement et le Développement durable).

62. The project development objective is to expand the adoption of sustainable land and water management practices in climate-vulnerable targeted communes in Mali.

63. The identification of sectors, communities, and areas most vulnerable to variability and climate change resulted in the selection of the Kayes region (Cercle de Nioro) and the Koulikoro region (Cercles des Nara and Banamba), where the communities are at the heart of the rainfall and climatic turmoil in Mali. The intervention sites of the project consist of 14 communes (figure 7)

Figure 10: Great Green Wall project—location of project intervention communes in the Nioro du Sahel region



Source: Photo taken by the consultant during field visits

Self-Reported Project Achievements

64. From 2014 to 2017, the project on natural resource management in a changing climate, Projet de Gestion des Ressources Naturelles et Changements Climatiques (PGRN-CC), reportedly achieved remarkable results in terms of improving climate information services, strengthening the institutional and political governance framework, realizing concrete adaptation measures on the ground, improving access to training for local producers, and strengthening the capacity of national and local institutions, as well as climate finance and investments (PGRN-CC 2017).

65. Other results include (PGRN-CC 2018):

- Pastoral perimeters: delimited with beacons in the communes of Guetema, Gadiaba Kadiel, and Yérére in Nioro (water tower, borehole, basins, guardian lodge, shop, generator shelter, toilets)
- Pastoral cisterns: Kiban in the Cercle de Banamba
- Forest perimeters: in Gadiaba Kadiel, and Guetema (fenced with grids donating 25 hectares of enrichment, 10 hectares of protection, and 200 hectares of farmer-managed natural regeneration with drilling, water tower, ponds)
- Recovery: 940 hectares of degraded lands restored in Gadiaba Kadiel and Guetema
- Transhumance tracks: 245 kilometers of transhumance tracks delimited with beacons in Nara and Banamba

- Automatic weather stations: in Guetema, Toubacoro, and Fallou
- Delineation and marking: of Lorack Bane and Nioro forests
- Rain gauges: implantation of 1400 rain gauges in the fields of selected producers
- Market gardening perimeters: in all the communes of except in Guiré and Koronga (drilling, castle, ponds, solar panels with fencing of 2 to 4 hectares)
- Bovine and ovine fattening yards: in all communes
- Livestock facilities: in Boron and Yérééré
- Perimeters of arboriculture: in Yérééré
- Workshops of metal craftsmen: in Yérééré
- Pottery workshops: in Fallu
- Fish pond: in Mourdiah
- Multiplication of improved seeds: in all communes

66. Field observations during the SCCE mission revealed that the main activities currently being carried out by the project are as follows:

- Forest and pastoral management
- The management of the ponds
- Market gardening
- Soil restoration in the fields using the Zai (planting pits) system (figure 8)
- Seed production (sorghum, peanut and millet)
- Income-generating activities in the areas of livestock fattening, preparation of production plans, and arts and crafts

67. All its activities are in progress because they respond to real concerns of the people. It was pointed out by participants that the PGRN-CC project is their most consistent partner, with full commitments, regular presence in the field, and effective communication. According to them, it is important that such a project continues.

Postproject Achievements—Sustainability of Main Interventions

68. The project is still under implementation, but the SCCE mission identified the following factors likely to contribute to the sustainability of the interventions:

- **Governance structure at the local level**—setting of priorities and management at local level in community plans and subsequent investments made following their priorities. Moreover, it can be noted that the beneficiaries actually participate in the financing of the activities in the market gardening perimeters by taking care of the guards and the purchase of the inputs after the first endowment by the project.
- **No new institutions were created**—working with existing decentralized institutions
- **Multiple institutional collaboration in project execution**—water and forestry, livestock, etc.
- **Positive economic impact of the activities**—vegetable farming and gardening, planting of fruit trees, fishing, artisanal (crafts), forestry management
- **Capacity building** at local and central agency levels
- **Gender participation**—women comprise 76 percent of all participants in alternative livelihood microprojects, and people with disabilities are also involved.

Risks Factors for Sustainability

- **Climate change**—reduced rainfall that leads to loss of seeds, for instance in 2017. Seeds restocked the following year by project. Who will do that without project?
- **Lack of finance to support communities**—for instance, restocking seeds in face of losses during drought
- **Social risks** – security risks of conflict zones spreading to the project area

Figure 11: Intercommunal forest management of Gadjabakadjel-Guétéma Zai (planting pits) site restoration and enrichment—Zai site with significant regrowth of grass on a totally bare ground before



Source: Photo taken by the consultant during field visits

3. Observed Sustainability and the Environmental/Socioeconomic Nexus

69. In project sites visited where there were clear examples of a positive environmental/socioeconomic nexus in terms of promotion of synergies and mitigation of tradeoffs, the chances of sustainability of environment benefits of project interventions was much greater.

70. The POPs project (GEF ID 1420) shows positive nexus between environment gain and socioeconomic benefits. IPPM results in the following benefits:

- **Economic**—reduced cost of pest control in market gardening
- **Health**—reduced poisoning of population
- **Environment**—increased biodiversity

71. In GEF ID 1152, clear examples of positive environmental/socioeconomic nexus include:

- The regeneration of bourgou (nursery and replanting) that was a success as it had a major impact on economy and livelihoods of the communities. The system of regeneration exploits the synergy between environment (increase in biodiversity—return of migrating birds, increased fish stocks) and increased income generation (livestock feed, increased fishing, etc.)
- Planting of *Eucalyptus* and *Acacia nilotica*—Woodlots that were a success as the community woodlots now are being used even in the present insecurity situation. Autoplanting at family level is taking place.

72. By contrast where the nexus does not exist, or project introduced alternative livelihood activities that are not economically viable, sustainability of environmental benefits is compromised.

- In GEF ID 1152, mechanization of hay making of bourgou for livestock feeding failed as the operation of the equipment was not cost effective, and replanting of forests with doum palms (*Hyphaene thebaica*) failed because their establishment was difficult for farmers, and growth takes a long time despite the fact that the plants are well liked by farmers.
- In GEF ID 3763, alternative livelihood activities failed—Two years after end of the project equipment is no longer operational. There is a lack of savings for repairs and lack of working capital, as well as lack of raw materials and markets in nonwood forest products processing

73. It is also evident that where there is a positive environmental/socioeconomic nexus, individual, household/family control of activities and benefits are more likely to lead to sustainability of outcome compared with community control.

74. In GEF ID 1152, even under the insecurity of the area, the fixation of dunes is sustainable even though it is labor demanding. Once biological fixation occurs they are still in operation; the construction of rock bunds and planting of live fences/hedgerows as an antierosion measure are maintained by individual families. By contrast, forest protection (closure) has failed because the village management committee is unsuccessful in the face of rebel invasion of the protected areas

75. The PGRN-CC project (GEF ID 5270) has carried out many actions in the communes of Gadjaba Kadjel, Guétéma Yéréré, and in the Cercle de Nioro. These actions have given concrete results that are appreciated by the people, and managed by individual family groups.

76. GEF ID 1253 demonstrates that if there is positive socioeconomic/environment nexus, insecurity not an overarching issue. For instance, alternative income-generation activities under individual household control (market gardens, small ruminants, credit associations) seem to have worked and are still working even in the current insecurity

situation. The lesson is that there are higher chances of sustainability with individual versus community management of alternative income activities.

4. Relevance of GEF Support to the Environmental Challenges faced by the Country

Relevance in Relation to National Priorities and Strategies

77. Mali signed the United Nation Convention on Desertification in October 1995, the Convention on Biological Diversity in September 1995, the Ramsar Convention in September 1987, and the Climate Change Convention in March 2002.

78. Mali produced an Initial National Communication on the context of its commitments under the United Nations Framework Convention on Climate Change in 2000 and completed its National Action Plan of Adaptation to Climate Change in 2007. As Mali's agricultural sector is highly dependent on climatic factors, it is generally agreed that climate change will produce great impacts in this sector. Scientific assessments carried out in the context of the Initial National Communication have shown that climate change will most probably lead to significant losses in crop production.

79. Earlier, in 1998, Mali approved its National Environmental Protection Policy, *Politique nationale de protection de l'environnement*, which integrates three strategic axes: (1) strengthening and dissemination of technical and methodological results and tools available for environment protection; (2) promoting a multisector approach to environmental issues; and (3) protecting and restoring deteriorated areas and cultivated land. For the government of Mali, desertification and land degradation are key issues to be urgently tackled at the national level. The environment is recognized in the document as an important cross-cutting theme in terms of sustainable development and food security.

80. To address growing food security concerns, Mali now has a National Food Security Strategy (*Stratégie Nationale de Sécurité Alimentaire*), adopted in 2002. Based on this established strategy, the National Food Security Program (*Programme National sur la Sécurité Alimentaire*), covering the period from 2007 to 2011, was developed with support from the United States Agency for International Development and FAO.

81. The sustainable land management program, recently developed by the Ministry of Environment and Sanitation, is an important step toward integrating land management strategies, adaptation climate change, and food security. The program is supported by partners of the TerrAfrica Platform, including the World Bank (as the lead Agency), and the global mechanisms of the United Nations Development Assistance Framework, UNDP, and the German Technical Cooperation Agency (*Deutsche Gesellschaft für Technische Zusammenarbeit*).

82. All local community development plans are required to follow the national environment plan in that they should include the environment, climate change, and biodiversity conservation issues in their plans.

83. GEF-supported projects in Mali are in line with the country's national environmental priorities and policies as described. GEF projects were designed within the framework of the

national priorities. All GEF projects have assisted communities in preparing their local community development plans, which have incorporated GEF project activities.

84. GEF ID 1152: Biodiversity Conservation and Participatory Sustainable Management of Natural Resources in the Inner Niger Delta and its Transition Areas, Mopti Region. The overall objective is the restoration, conservation, and sustainable management of the ecosystems and their biodiversity in the inner delta of the Niger River and its transition zones. The project addresses deforestation and land degradation as well as threats to land-based biodiversity. The GEF intervention supported implementation of a number of key policies and strategies for environmental protection and natural resource management, as well as priority activities defined in the National Strategy for Biodiversity Conservation and the Strategy for the Conservation of Biological Diversity in a key area of environmental challenge in Mali, the Mopti region. Furthermore, it supported the development of the National Wetlands Policy through its collaborative linkages and sharing of site-specific information and experiences with the Ministry of Environment and its decentralized services, Wetlands International, International Union for Conservation of Nature, local NGOs, and local stakeholder groups. It also contributed to strengthening Mali's protected area system through its collaboration with the Boucle du Baoulé project (an IFAD/UNDP-GEF initiative) and the World Bank-GEF Gourma Biodiversity Conservation project.

85. GEF ID 1253: Gourma Biodiversity Conservation Project. The global environment objective was "to assist the Recipient in implementing environmental protection and biodiversity conservation activities in the Sahelian priority area of Gourma through improved sustainable management of natural resource use and improved returns for the local population." The main environmental challenges addressed by the project was threats to land-based biodiversity. The project recognized that variable climatic conditions, which impede stable growth, are compounded by the degradation of natural resources, including vegetation cover and biodiversity.

86. GEF ID 1420: Reducing Dependence on POPs and Other Agro-Chemicals in the Senegal and Niger River Basins through Integrated Production, Pest and Pollution Management. The objectives of this regional project that includes Mali are to raise awareness of problems and alternatives, and to determine baseline values for agricultural practices and water quality; then, begin first efforts to monitor the aquatic systems, develop and extend feasible and sustainable alternatives, and help improve organizational and decision-making capacities within and among stakeholders and communities in the six riparian countries of the Senegal and Niger Rivers. As assessed by the independent evaluator and reported in the terminal evaluation, the project was highly relevant to the needs of the beneficiary countries, including Mali.³⁶ By trying to reduce the use of POPs and other agrochemicals, it addressed the needs of several communities along the Senegal and Niger River basins. Most of these communities recognize the need for such a project but were provided little support by their governments and partners.

87. GEF ID 3763: SPWA-BD: Expansion and Strengthening of Mali's PA System addresses the challenge highlighted in the "Programme of Work on Protected Areas of the

³⁶ GEF ID 1420 Terminal Evaluation, page 51.

Convention on Biodiversity in Mali,”^{13F37} developed in collaboration with the International Union for Conservation of Nature, which indicated that the country’s existing system of protected areas does not provide sufficient coverage (4.7 percent of the land surface), but it is also not effective in conserving critical, globally significant biodiversity, which is under accelerating pressure from numerous human activities. The analysis showed that an area of particular concern is southwestern Mali, the area of focus of this project, where population density is relatively high and pressures on scarce resources are particularly strong, including land, water, and biological resources. Because of the level of threat to biodiversity in this part of the country, the project also addressed the issue of PA management within the context of larger landscape management in order to make conservation efforts ecologically, socially, and financially sustainable.

88. **GEF ID 3979: Integrating Climate Resilience into Agricultural Production for Food Security in Rural Areas** contributes to the implementation of the Malian National Action Plan of Adaptation to Climate Change. Given the country-wide vulnerability of small-scale farmers and the intensification of climate-related impacts on rural livelihoods, the project was designed as an integrated country-wide project, with a focus in field activities on three regions. The project specifically contributed toward the achievement of at least four of the seven priorities for the agricultural sector in the National Action Plan of Adaptation to Climate Change—development of an adaptation training package for rural populations, strengthening the resilience of local grain production systems to climate change through the dissemination of seeds adapted to changing climatic conditions, diversification of revenue sources in rural communities as a means to enhance food security of vulnerable households, and restoring soil fertility through climate-resilient techniques.

89. **GEF ID 3377 (ongoing): SIP: Fostering Agricultural Productivity in Mali** focuses on one of the main environmental challenges in Mali—deforestation and land degradation.

90. **GEF ID 5270 (ongoing): GGW Natural Resources Management in a Changing Climate in Mali.** The project development objective of the project is to expand the adoption of sustainable land and water management practices in targeted communes in Mali. The Interim Strategy Note (2014–15)^{14F38} considers climate change challenges and recurrent droughts among the critical threats to the sustainable development of the country, and, therefore, aims at “contributing to building the knowledge base and establishing priority actions to help build resilience in a changing climate and start addressing vulnerabilities specific to the Drylands.” The Natural Resources Management in a Changing Climate project is listed among the principal operations of the Interim Strategy Note to achieve this objective.

Relevance in Relation to GEF Focal Areas

- **Biodiversity**

91. The GEF projects have significant components that contribute to generating global environmental benefits in the focal area of biodiversity— Global Environmental Benefit 1:

³⁷ <https://www.cbd.int/protected/implementation/actionplans/country/?country=ml>.

³⁸ <http://documents.worldbank.org/curated/en/165011468281401293/Mali-Interim-strategy-note-for-the-period-FY14-15>.

Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society.

92. **GEF ID 1152** addresses the major benefits resulting from this project as the restoration, conservation, and rational use of the unique and complex ecosystem of the Niger Inner Delta, improvement of the living condition and income (poverty alleviation), increased productivity, and strengthened food security.^{15F}³⁹

93. In **GEF ID 1253**, Global Environmental Benefit 1 is generated through (1) increased ecological security of flora and fauna that are rare or threatened on a regional and global scale, including the northernmost populations of African elephants; (2) preservation of a representative area of the West Africa Sahelian natural ecosystems that are exceptional on a national, regional, and global scale; and (3) preserving genetic diversity within ecologically, economically, and culturally important species in natural populations within their historical ranges.^{16F}⁴⁰

94. In **GEF ID 3763**, for Global Environmental Benefit 1, the project contributed to conserving globally significant biodiversity in Mali and more specifically in the biodiversity-rich southwestern Mali where endangered mammals such as the giant eland and the West African chimpanzee are still found.^{17F}⁴¹

- **Land Degradation**

95. **GEF ID 3377** addresses Global Environmental Benefit 2: Sustainable land management in production systems (agriculture, rangelands, and forest landscapes). It focuses on increasing the use of sustainable land and water management practices and increasing the productivity of smallholder agricultural and agribusiness producers in the targeted productions systems and project areas. For example, it aimed to have water conservation techniques applied on 10 percent of farmland, increased discharge capacity of key relief canals, to have the number of water locations assessed and supply improvements implemented, a comprehensive assessment of solid waste generation established, and increase of vegetative cover by at least 25,000 hectares by project end, etc.

- **Climate Change Adaptation and Mitigation**

96. **GEF ID 3979** addresses Global Environmental Benefit 4: Support to transformational shifts toward a low emission and resilient development path. The project aimed to reduce the annual growth of greenhouse gas emissions from fossil fuel-based activities in the country by approximately 2 percent. renewable energy-based energy system project implementers are reporting biannually the energy and greenhouse gas reduction impacts of their respective projects, cumulative CO2 reductions exceeding triple the direct impacts over an additional 10-year period, and there should be an increase for carbon sequestered. Although there is no quantitative report on the exact achievements, the activities of the project are presumed to have had positive effects. These included the piloting of improved climate- resilient agriculture, capacity building, and promotion of improved agricultural

³⁹ GEF 1152 Project Appraisal Document, page 95.

⁴⁰ GEF 1253 Project Appraisal Document, page 14.

⁴¹ GEF 3763 CEO Endorsement, page 8.

practices through FFS, and mainstreaming of climate change considerations into agricultural sector policies and programs.

5. Cross-Cutting Issues

General Findings on Cross-Cutting Issues

97. All the selected projects in Mali were not designed explicitly with gender mainstreaming considerations in mind. However, all the projects were implemented in a gender-sensitive manner, with clear evidence of women's inclusion and women's empowerment at the project level. From discussions with stakeholders, it was evident that there were socially positive impacts of the project with women feeling empowered as their personal income has increased through proceeds from the livelihood activities introduced by the projects.

98. Not surprising for Mali, there is evidence of resilience thinking or resilience considerations in all except one of the GEF projects, with resilience considerations being integrated as an incremental change in the multiple benefits framework.

99. Also, as expected, Mali is classified as fragile in all except one of the projects. Paradoxically, it is only in the project that Mali was not classified as fragile that implementation had to stop during the project because of fragility issues. So, once flagged at project design, project implementation proceeded despite the fragile status of the country, probably because projects were not designed to be located in conflict areas of the country.

Gender

100. **GEF ID 1152** did not have a gender analysis completed at CEO Endorsement, nor did it include a gender-mainstreaming strategy or plan. However, it incorporated a gender-responsive results framework, including gender-disaggregated indicators. There is evidence of women's inclusion and empowerment during project implementation: the percentage share of women targeted as direct beneficiaries was 49 percent; the intensification of market garden production (three growing seasons per year) and the conservation of products dried for several months to be sold at higher prices contributed to significantly increasing women's incomes; improved fish smoking by using the chorkor oven involved 80 women who generated an average of nearly seven times the average annual income in Mali; the results of the project monitoring surveys have shown that the change in the status of women has evolved positively, with 36 percent of female-headed households among the two richest classes in 2013 against 19 percent in 2008.^{18F⁴²}

101. **GEF ID 1253** did not have a gender analysis completed at CEO Endorsement, but its development was implied. It did not include a gender mainstreaming strategy or plan, neither did it incorporate a gender-responsive results framework, including gender-disaggregated indicators, at CEO Endorsement. But as with other projects, there is evidence of women's inclusion and empowerment during project implementation: 47 percent of

⁴² GEF ID 1152 Terminal Evaluation, page 34.

direct beneficiaries were women^{19F43}; women's groups in Dimamou that received skill development training on scaling, smoking, and trading fish have seen their revenues increase by 5 to 15 million XAF in a 3-year period.^{20F44}

102. **GEF ID 1420** did not have a gender analysis completed, neither did it have a gender mainstreaming strategy or plan at CEO Endorsement. But it incorporated a gender-responsive results framework, including gender-disaggregated indicators; for component 3, one of the expected outcomes is "Substantial participation by women in FFS assured: at least 50 percent in market gardening, 30 percent in rice and 20 percent in cotton by 2012".^{21F45} Furthermore, there is evidence of women's inclusion and empowerment in the project, and it ended up reaching more women than men.^{22F46}

103. **GEF ID 3377** also did not have a gender analysis completed but its development was implied, neither did it have a gender mainstreaming strategy or plan at CEO Endorsement. But it incorporated a gender-responsive results framework. Unlike other projects, despite the project implementation guidelines, for some sites, the participation rate of women is still low. Overall, of the 355 representatives of trainees, only 55 women (15 percent) participated, attributable to women's limited access to land and traditional roles. Efforts are being made with support from the various stakeholders at the local/community level to improve this rate.

104. **GEF ID 3979** did not have a gender analysis completed but its development was implied, neither did it have a gender mainstreaming strategy or plan at CEO Endorsement. But it incorporated a gender-responsive results framework. There is also evidence of women's inclusion and empowerment in the project; in accordance with the recommendations of the midterm evaluation, the project undertook a number of actions for the empowerment of women and to increase their capacity for resilience in the face of climate change.^{23F47}

Resilience

105. Not surprising for Mali, there is evidence of resilience thinking in all the project documents. In GEF ID 1152, it is a cobenefit incremental change integrated into the multiple benefits framework. In GEF ID 1253, it is a risk management cobenefit integrated into the multiple benefits framework; whereas in GEF ID 1470, it is a risk management cobenefit in a static system/engineering sense, integrated into the multiple benefits framework.

106. In GEF ID 3377 and GEF ID 3979, there is mention of resilience or resilience thinking in the project documents: vulnerability, adaptability, adaptive capacity, as a risk management cobenefit in a static system/engineering sense, integrated into multiple benefits framework.

⁴³ GEF ID 1253 Terminal Evaluation, page 58.

⁴⁴ GEF ID 1253 Terminal Evaluation, page 27.

⁴⁵ GEF ID 1420 Project Appraisal Document, page 20.

⁴⁶ GEF ID 1420 Terminal Evaluation, page 51.

⁴⁷ GEF ID 3979 Terminal Evaluation 2016, page 75.

107. GEF ID 3979 is unusual in that, unlike the other projects, there are clear linkages in project documents toward country priorities on resilience. Mali is located in a very fragile geographical area subject to climate fluctuations that are characterized by prolonged droughts, giving rise to a need to strengthen the capacity of producers to develop production systems that are more resilient to drought and the collateral effects of the climate.^{24F}⁴⁸

108. Only in GEF ID 3763 is there is no mention of resilience or resilience thinking in the project documents.

Fragility

109. In GEF ID 1152 (GEF-3), the country was not classified as fragile, but GEF activities were on hold during implementation although they continued later. The delay in the implementation of the agreement with the Agence Nationale d'Investissement des Collectivités Territoriales and the political crisis in the project area in 2012 and 2013 greatly penalized the financing of the microprojects. As a result of this situation, following the supervision mission in April 2013, 22 contracts amounting to 110 million XAF were cancelled.^{25F}⁴⁹ However, other activities continued.

110. In all the other project documents, as expected, Mali is classified as fragile. However, in none of the projects does the contextual description in the project documents talk about the county's fragility status, as they should have.

111. However, in none of the projects did GEF interventions stop or get put on hold because of the fragility status during project implementation. There are several reasons for this:

- Most of project areas were outside conflict zones, so activities continued. Apart from the earliest GEF-3 project GEF ID 1152, all the projects have been implemented in the middle or south of Mali, the areas subject to least insecurity.
- Most project investments were not likely to be of economic benefit to looting rebels; for instance, in GEF ID 1253, whereas other investments in rebel areas survived, the three boreholes equipped with solar panels have with the security situation inherent to the crisis of the north been vandalized and stolen.
- Beneficiaries in control of interventions (individual versus communal control) that had a positive environmental/socioeconomical nexus, and farmers able to continue their livelihood activities even under rebel threats, for instance in the livelihood activities of GEF ID 1253.
- Physical infrastructure that requires little maintenance by the beneficiaries postproject, so they do not have to expose themselves to rebel attacks. For instance, the fixation of dunes in GEF ID 1152, which is labor demanding but once biological fixation occurs, it continues to yield benefits under rebel occupation,

⁴⁸ GEF ID 3979 Terminal Evaluation 2016, page 19.

⁴⁹ GEF ID 1152 Terminal Evaluation 2016, page 30.

and construction of rock bunds requires little maintenance postproject by individual families.

6. Summary of Emerging Findings and Conclusions

112. The APR 2017 ratings for the completed projects selected for the Mali Case Study were:

- GEF ID 1253—outcome: negative, and sustainability: negative.
- GEF ID 1093—outcome positive, and sustainability: positive
- GEF ID 1420—outcome positive, and sustainability: negative
- GEF ID 1152—outcome no rating, and sustainability: no rating.

113. As indicated earlier, visits were made to project sites of GEF ID 1420, and GEF IDs 3763 and 5270. Based on results obtained during this case study field mission (stakeholder discussions in the capital and site visits), the assessment of the sustainability of environmental outcomes of projects that had ended at the time of the SCCE mission is as follows:

- GEF ID 1253—sustainability: negative for infrastructure, positive for livelihood activities
- GEF ID 1093—no rating, project not assessed
- GEF ID 1420—sustainability: positive
- GEF ID 1152—sustainability: positive
- GEF ID 3763—sustainability: negative

114. Key factors that affect the sustainability of environmental outcomes in Mali appear to be (1) project design and implementation, (2) postproject funding that is closely related to country ownership, (3) the security situation, and (4) the existence of relevant alternative livelihood-support activities with a clear positive environmental/socioeconomic nexus that are under individual rather than community management.

115. GEF ID 3763 provides clear evidence of nonsustainability attributable to poor project design/implementation as follows: (1) The PAs (Nema wula and Mandé wula) were demarcated with nonrespect of the classification procedure that provides for the development phase of the project before classification, to avoid villages near the area to be classified, and especially to avoid villages in the forest to be classified; (2) noncompliance with the law establishing the conditions for leasing and management of wildlife and its habitat that provided for inclusion of affected populations in management of the reserves and allowing them to continue to carry out vital economic activities for them (cotton growing, gold mining); (3) to shorten a project support phase to allow proper establishment of a PA (a PA is viable only after 10 to 15 years operation) (4) basing the exploitation

of these reserves only on hunting as opposed to ecotourism as proposed in the project appraisal document; (5) insufficient time allowed in the project log frame for adoption of the law for establishment of community managed PA.

116. GEF ID 1253 shows the effect of postproject financing in assuring sustainability of outcomes. At the end of the external funding of PCVBGE in December 2012, a project consolidation unit was set up whose main mission was the consolidation of important achievements and the preparation of a new phase. The operation of the field activities was successfully transferred to the community management group AIG in September 2012. The government demonstrated ownership of AIG by providing financial support to its operations in the order of 150 million XAF for fiscal year 2013, and a pledge of 228 million XAF for fiscal year 2014. It was agreed that the four PAs created and their management bodies need support to equip them with operational capacities for the sustainable management of biodiversity resources, particularly Gourma elephants.

117. So, despite the constraints because of insecurity, there is evidence that broader adoption is taking place in the postproject era:

- **Sustaining**—funding by the government of the operations of AIG envisioned to manage and monitor environmental protection and biodiversity conservation activities in the Sahelian priority area of the Gourma
- **Mainstreaming**—follow-on interventions designed
- **Scaling-up**—the government of Mali has indicated that in addition to UNDP, Japan and Denmark have expressed an interest to bilaterally contribute to future operations

118. That insecurity is an important factor in sustainability is illustrated in the case of GEF ID 1253; interviews during the SCCE indicated that the security situation has compromised the sustainability of project achievements, as currently:

- The three boreholes equipped with solar panels have with the security situation inherent to the crisis of the north been vandalized and stolen despite a number of repairs.
- The NGO appointed by the DNEF to coordinate management activities of the PAs is not able to carry out its functions because of insecurity in the project area and lack of financing.
- All attempts to get people and elephants to move away from central Lake Banzena in the PA to reduce biodiversity pressure have failed, because the infrastructure created for watering of livestock and elephants detailed here have all failed. There is a new GEF project to build new infrastructure (result not likely to be different from past!)

119. However, insecurity is not a factor if other elements are working. For instance, even in GEF ID 1253, alternative income-generation activities under individual household control (market gardens, small ruminants, credit associations) seem to have worked and are still

working even in the current insecurity situation. The lesson is that there are higher chances of sustainability with individual versus community management of alternative income activities.

Evidence of Relevance in Relation to National Priorities

120. GEF-supported projects in Mali are in line with the country's national environmental priorities and policies. GEF projects were designed within the framework of the national priorities. All GEF projects have assisted communities in preparing their development plans (PDSEC), which have incorporated GEF project activities.

121. There is also relevance in relation to GEF focal areas:

- **Biodiversity**—The GEF projects have significant components that contribute to generating global environmental benefits in the focal area of biodiversity; Global Environmental Benefit 1: Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society.
- **Land degradation**—One project, GEF ID 3377, addresses Global Environmental Benefit 1: Sustainable land management in production systems (agriculture, rangelands, and forest landscapes).
- **Climate change adaptation and mitigation**—One project, GEF ID 3979, addresses Global environmental benefit 4: Support to transformational shifts toward a low emission and resilient development path.

General Findings on Cross-Cutting Issues

122. All the selected projects in Mali were not designed explicitly with gender-mainstreaming considerations in mind. However, all the projects were implemented in a gender-sensitive manner, with clear evidence of women's inclusion and women's empowerment at the project level. From discussions with stakeholders, it was evident that there were socially positive impacts of the project with women feeling empowered as their personal income has increased through proceeds from the livelihood activities introduced by the projects.

123. Not surprising for Mali, there is evidence of resilience thinking or resilience considerations in all except one of the GEF projects, with resilience considerations being integrated as an incremental change in the multiple benefits framework.

124. Also, as expected, Mali is classified as fragile in all except one of the projects. Paradoxically, it is only in the project that Mali was not classified as fragile that implementation had to stop during the project because of fragility issues. It would appear that once flagged at project design, project implementation proceeded despite the fragile status of the country, probably because projects were not designed to be located in conflict areas of the country.

Dyadic Discussion Issues (Projects GEF ID 1253 and 3763)

125. The SCCE mission found no apparent difference between child and stand-alone projects from the point of view of sustainability of activities (to note, both projects managed by the same local agency—Department of Water and Forests):

- Failure of follow-up activities for the same reasons (lack of finance and security situation)
- Success factors the same: enhanced when under individual rather than community control, and when positive nexus between economic and sustainability benefits

126. There were also no apparent differences in management experience between the two types of projects. Therefore, there is no apparent advantage of project outcomes from projects implemented as part of a program and as standalone projects with respect to sustainability of outcomes. The same information could be obtained by individual interviews.

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Annex A: List of Interviewees

Date	GEF ID	Title	Name	Organization	Title/Position
March 18, 2019			Emeran Serge Menang Evouma	World Bank	Senior Environmental Specialist
March 19, 2019			Issa Fahiri Kone	Ministry of the Environment and Sustainable Development	Specialist in Rural Forestry and Decentralized Management of Forests— Global Environment Facility (GEF) Operational Focal Point
			M. Bamoussa Kone	Ministry of Economy and Finance	National Director of Development Planning—GEF Political Focal Point
March 21, 2019			Boubacar Walbani	World Bank	Senior Operations Officer
March 22, 2019	1253	Gourma Biodiversity Conservation Project	Amadou Sow	Department of Water and Forestry, Ministry of Environment, Drainage and Sustainable Development	Project Manager
March 21, 2019	1420	Reducing Dependence on POPs and other Agro-Chemicals in the Senegal and Niger River Basins through Integrated Production, Pest and Pollution Management	Ballar Sissoko		Member, Project Steering Committee
			Mohamed Soumare	Food and Agriculture Organization (FAO)/ United Nations Environment Programme (UNEP)	Project Manager

March 20, 2019	1152	Biodiversity Conservation and Participatory Sustainable Management of Natural Resources in the Inner Niger Delta and Its Transition Areas, Mopti Region	Mamadu Tiero	Development Fund for the Sahelian Zone of Mali (FODESA)	Project Manager
March 21, 2019			Bakary Coulibaly	International Fund for Agricultural Development (IFAD)	
March 22, 2019	3763	SPWA-BD: Expansion and Strengthening of Mali's PA System	Mohamed Salif Kone	Department of Water and Forestry, Ministry of Environment, Drainage and Sustainable Development	Project Manager
			Cdt Amadou Diallo	Dept of Water and Forestry, Ministry of Environment, Drainage and Sustainable Development	Division Chief, monitoring and evaluation
March 21, 2019	3979	Integrating Climate Resilience into Agricultural Production for Food Security in Rural Areas	Mohamed Soumare	FAO/UNEP	Project Manager
	3377	SIP: Fostering Agricultural Productivity in Mal			
March 20, 2019	5270	GGW Natural Resources Management in a Changing Climate in Mali	Boureima Camara	Directeur General, Agence pour l'environnement et le Développement durable, Ministry of Environment and Sustainable Development	Project Manager

N°	Date	GEF ID	Title	Name	Organization	Title/Position
1	April 15, 2019	5270	Projet de Gestion des Ressources Naturelles et Changements Climatiques (PGRN-CC)	Bourema Camara	Agence pour l'environnement et le Développement durable	Directeur Chef de Projet
2	June 7, 2019	5270	PGRN-CC	Moustapha Kanté	Administration	Préfet de Nioro
3	June 7, 2019	5270	PGRN-CC	Amadou Thiam	Chef de Cantonnement des Eaux et forêts Nioro	Membre de l'équipe technique locale du projet Nioro
4	June 7, 2019	5270	PGRN-CC	Kalifa Dansoko	Chef de service Production et industrie animale	Membre de l'équipe technique locale du projet Nioro
5	June 7, 2019	5270	PGRN-CC	Moussa Dembelé	Chef de service Agriculture	Membre de l'équipe technique locale du projet Nioro
6	June 7, 2019	5270	PGRN-CC	Yacouba Diallo	Maire Gadjaba kadjel	Equipe communal Gdjaba kadjel
7	June 7, 2019	5270	PGRN-CC	Issaka Dembélé	2eme Adjoint du Maire	Equipe communal Gdjaba kadjel
8	June 7, 2019	5270	PGRN-CC	Issa Touré	Secrétaire Général Mairie	Equipe communal Gdjaba kadjel
9	June 8, 2019	5270	PGRN-CC	Kalifa Dabo	Stagiaire au Cantonnement	Représentant Equipe local
10	June 8, 2019	5270	PGRN-CC	Gagny Diawara	Maire de Yérééré	Equipe communale de Yérééré
11	April 16, 2019	3763	Projet Extension et renforcement du système des	Mamadou Salif Koné	Direction Nationale des Eaux et forêts	Coordinateur du projet ERSAP

N°	Date	GEF ID	Title	Name	Organization	Title/Position
			aires protégées (ERSAP)			
12	June 9, 2019	3763	ERSAP	Mme Fatoumata Traoré	Chef de Cantonnement des Eaux et forêts Kita	Coordinatrice locale du projet ERSAP
13	June 9, 2019	3763	ERSAP	Amadou Gadio	Chef de poste central Kita	Chargé d'appui-conseil niveau communal
14	June 9, 2019	3763	ERSAP	Moussa Kamissoko	Chef de village de Limakolé	Habitant village concerné
15	June 9, 2019	3763	ERSAP	Mory Kamissoko	Conseiller du chef de village	Habitant village concerné
16	June 9, 2019	3763	ERSAP	Nouhoum Kamissoko	Conseiller du chef de village	Habitant village concerné
17	June 9, 2019	3763	ERSAP	Mahamadou Kamissoko	Conseiller du chef de village	Habitant village concerné
18	June 9, 2019	3763	ERSAP	Mamadou Foula Diallo	Conseiller du chef de village	Habitant village concerné
19	June 9, 2019	3763	ERSAP	Famakan Kamissoko	Notable village	Habitant village concerné
20	June 9, 2019	3763	ERSAP	Founefing Dembélé	Notable village	Habitant village concerné
21	June 9, 2019	3763	ERSAP	Drissa Kamissoko	Notable village	Habitant village concerné

N°	Date	GEF ID	Title	Name	Organization	Title/Position
22	June 9, 2019	3763	ERSAP	Mady Kamissoko	Notable village	Habitant village concerné
23	June 9, 2019	3763	ERSAP	Sangara Moussa Kamissoko	Notable village	Habitant village concerné
24	June 10, 2019	3763	ERSAP	Boubacar Diakité	Administration	Préfet de Kita
25	June 10, 2019	3763	ERSAP	Mamadou Kamissoko	Consultant indépendant local	Ressortissant de la zone
26	June 11, 2019	3763	ERSAP	Idrissa Kané	Administration	Préfet de Kénieba
27	June 11, 2019	3763	ERSAP	Seydou Coulibaly	Cantonement des Eaux et forêts	Chef de Cantonement Kénieba
28	June 11, 2019	3763	ERSAP	Bakary Koné	Secteur Agriculture	Chef secteur Kénieba
29	June 11, 2019	3763	ERSAP	Luc Coulibaly	Poste central Eaux et forêts	Chef de poste
30	June 11, 2019	3763	ERSAP	Adama Fofana	Poste des Eaux et forêts de Kroukoto	Chef de poste de Kroukoto
31	June 11, 2019	3763	ERSAP	Sansan Keita	Village de Niarikira	Chef de village de Niarikira
32	June 11, 2019	3763	ERSAP	Adama Cissoko	Village de Niarikira	Habitant village concerné
33	June 11, 2019	3763	ERSAP	Bamba Keita	Village de Niarikira	Habitant village concerné

N°	Date	GEF ID	Title	Name	Organization	Title/Position
34	June 11, 2019	3763	ERSAP	Moussa Keita	Village de Niarikira	Habitant village concerné
35	June 11, 2019	3763	ERSAP	Saaba Kanouté	Village de Niarikira	Habitant village concerné
36	June 11, 2019	3763	ERSAP	Sayon Keita	Village de Niarikira	Habitant village concerné
37	June 11, 2019	3763	ERSAP	Falaye keita	Village de Niarikira	Habitant village concerné
38	June 11, 2019	3763	ERSAP	Namory Keita	Village de Niarikira	Habitant village concerné
39	June 11, 2019	3763	ERSAP	Finèmous so Kanouté	Village de Niarikira	Habitante village concerné
40	June 11, 2019	3763	ERSAP	Badjala Dansira	Village de Niarikira	Habitante village concerné
41	June 11, 2019	3763	ERSAP	Balouta Soucko	Village de Niarikira	Habitante village concerné
42	June 11, 2019	3763	ERSAP	Sako Dansira	Village de Niarikira	Habitante village concerné
43	June 15, 2019	1420	Reduire la dependance des POPs et autres produits agro-chimiques	Mohamed Soumaré	FAO	Coordinateur national du projet
44	June 12, 2019	1420	Réduction des POPs/ Programme de gestion intégrée de la production et des déprédateurs (GIPD)	Dédéou Maiga	Administration	Gouverneur de la Région de Dioila

N°	Date	GEF ID	Title	Name	Organization	Title/Position
45	June 12, 2019	1420	Réduction des POPs/GIPD	Samuel Diarra	Cantonement des Eaux et forêts	Chef de cantonnement Dioila
46	June 12, 2019	1420	Réduction des POPs/GIPD	Dembélé	Chambre d'agriculture	Représentant
47	June 12, 2019	1420	Réduction des POPs/GIPD	Lassina Sountera	Réseau GIPD Dioila	Président du réseau GIPD Dioila
48	June 12, 2019	1420	Réduction des POPs/GIPD	Sambou Sidibé	Réseau GIPD Dioila	Vice Président Réseau GIPD Dioila
49	June 12, 2019	1420	Réduction des POPs/GIPD	Mariam Diarra	Réseau GIPD Dioila	Membre du réseau
50	June 12, 2019	1420	Réduction des POPs/GIPD	Fanta Tangara	Réseau GIPD Dioila	Réseau GIPD Dioila
51	June 12, 2019	1420	Réduction des POPs/GIPD	Traoré	Secteur Agriculture	Chef de service
52	June 14, 2019	1420	Réduction des POPs/GIPD	Bouacary Traoré	Administration	Préfet de Bla
53	June 14, 2019	1420	Réduction des POPs/GIPD	Adama Diallo	Poste central des Eaux et forêts	Chef de poste Bla
54	June 14, 2019	1420	Réduction des POPs/GIPD	Bréhima Coulibaly	Secteur Agriculture	Chargé de suivi-évaluation Bla
55	June 14, 2019	1420	Réduction des POPs /GIPD	Gaoussou Coulibaly	Réseau GIPD Bla	Président du réseau
56	June 14, 2019	1420	Réduction des POPs/GIPD	Mama Coulibaly	Village de Zoumanabougou	Chef de village

Annex B: List of Field Sites Visited

Project GEF ID 1152

Région de Kayes, Cercle de Kita, Arrondissement de Sagabary
Début de la réserve de Néma wula
Coordonnées GPS N : 12,46136 W : 009,48055

Région de Kayes, Cercle de Kénieba, Arrondissement de Kouroukoto Village de
Niarikira

Project GEF ID 5270

Région de Kayes, Cercle de Nioro, Arrondissement central, Commune de Gadjaba
Kadjel
Périmètre pastoral
Coordonnées GPS
N : 15. 09965°

Région de Kayes, Cercle de Nioro, Arrondissement central, Commune de Gadjaba
Kadjel
Périmètre pastoral
Coordonnées GPS
N : 15, 09965°

Project GEF ID 1420

Région de Koulikoro, Cercle de Dioila, Arrondissement Dioila, Périmètre maraicher
Coordonnées GPS
N : 12,49813°
W : 006 79296°
Alt : 997

Région de Ségou, Cercle de Bla, Arrondissement central, Village de Zoumanabougou
Coordonnées GPS :
N : 12,79859°
W : 005,755 645°

TECHNICAL DOCUMENT 8 - MAURITANIA CASE STUDY REPORT

April 2020

Abbreviations

ACCC	Adaptation to Climate Change - Responding to Shoreline Change and Its Human Dimensions in West Africa through Integrated Coastal Area Management (Projet d'Adaptation aux changements climatiques côtiers)
ALS	alternative livelihood systems
CBRD	Community-Based Rural Development Project
GEF	Global Environment Facility
IFAD	International Fund for Agricultural Development
PACBV	Community-Based Watershed Management (Projet d'aménagement communautaire des Bassin Versants)
PDDO	Promoting Sustainable Land Management in the Oasis Ecosystems of Mauritania (Programme de Développement Durable des Oasis)
PNBA	Parc National du Banc d'Arguin
PNISER	Programme National Integre dans le Secteur de l'eau en Milieu Rural
SCCE	Strategic Country Cluster Evaluation
SLM	sustainable land management

1. Introduction, Context, and Methodology

Background

1. Case studies are the main component of the Sub-Saharan Africa Strategic Country Cluster Evaluation (SCCE): Sahel and Sudan-Guinea Savanna Biomes. They focus on the two overarching evaluation objectives:
 - To understand the determinants of sustainability
 - To assess the relevance to and performance of the Global Environment Facility (GEF) in tackling the main environmental challenges in the two biomes
2. In its latest annual performance report (GEF IEO 2018), the GEF Independent Evaluation Office has conducted a desk review and found that the following contributing factors were at play in those cases where past outcomes were not sustained:
 - Lack of financial support for the maintenance of infrastructure or follow-up
 - Lack of sustained efforts from the executing agency
 - Inadequate political support, including limited progress on the adoption of legal and regulatory measures
 - Low institutional capacities of key agencies
 - Low levels of stakeholder buy-in, and
 - Flaws in the theory of change of projects
3. Building on the annual performance report desk review findings, this evaluation aims at exploring in depth, through country case study analysis, the factors contributing to or hindering the sustainability of project outcomes. The aim is to cross-check the annual performance report findings as well as to identify any other nuances to the six factors above, or new factors that either hinder or contribute to the sustainability of project completion outcomes. In addition, country studies also cover relevance issues such as GEF support modalities, expansion of GEF Agencies, and cross-cutting issues such as gender, resilience, and fragility.

Coverage

4. Projects selected for study in the Mauritania case study are:
 - **GEF ID 1258** (regional). Title: Enhancing Conservation of the Critical Network of Sites of Wetlands Required by Migratory Waterbirds on the African/Eurasian Flyways. GEF Agency: United Nations Environment Programme; GEF focal area: biodiversity; GEF phase: GEF-3; GEF modality: full-size project; project status: closed—implementation June 1, 2006 to December 1, 2010.

- **GEF ID 2459** (national). Title: Community-based Watershed Management Project. GEF Agency: World Bank; GEF focal area: land degradation; GEF phase: GEF-3; GEF modality; full-size project; project status: closed—implementation January 26, 2007 to March 31, 2013.
- **GEF ID 2614** (regional). Title: Adaptation to Climate Change - Responding to Shoreline Change and Its Human Dimensions in West Africa through Integrated Coastal Area Management. GEF Agency: United Nations Development Programme (UNDP); GEF focal area: climate change; GEF phase: GEF-3; GEF modality; full-size project; project status: closed—implementation May 28, 2008 to December 31, 2011.
- **GEF ID 3379** (national). Title: SIP: Participatory Environmental Protection and Poverty Reduction in the Oases of Mauritania. GEF Agency: International Fund for Agricultural Development (IFAD); GEF focal area: land degradation; GEF phase: GEF-4; GEF modality; full-size project; project status: closed—implementation April 7, 2011 to April 5, 2014.
- **GEF ID 3893** (national). Title: Support to the Adaptation of Vulnerable Agricultural Production Systems. GEF Agency: IFAD; GEF focal area: land degradation/climate change. GEF phase: GEF-4; GEF modality; full-size project; project status: under implementation, start date—April 15, 2013.
- **GEF ID 5190** (national). Title: Improving Climate Resilience of Water Sector Investments with Appropriate Climate Adaptive Activities for Pastoral and Forestry Resources in Southern Mauritania. GEF Agency: African Development Bank; GEF focal area: climate change; GEF phase: GEF-5; GEF modality; full-size project; project status: under implementation, start date—June 23, 2015.

Methodology

5. Individual interviews were conducted with project staff in the capital city Nouakchott. During these central level interviews, discussions were held with stakeholders (listed in annex A) on the key evaluation questions relevant for Mauritania.

- (a) What are the key factors influencing sustainability of outcomes in the two biomes?
- (b) In what way, if any, does the environment and socio-economic development/livelihoods nexus (or lack thereof) help explain the sustainability of outcomes in the two biomes?
- (c) To what extent has GEF support been relevant to the main environmental challenges the countries face in the two biomes, and are there any gaps?
- (d) To what extent have gender and resilience been taken into consideration in GEF programming in the two biomes?

6. As recommended in the case study guidelines,⁵⁰ key questions 1, 2, and 3 were the main focus of the case study data-gathering effort. However, key question 4 was also addressed through central level interviews with key stakeholders in the capital and through project document reviews, particularly, the “SCCE: Project Review Protocols on Relevance and Sustainability.”

7. Although initially the issue of how GEF support is affected by fragility situation—covered by key question 5 in the SCCE Approach Paper—was not expected to be covered in Mauritania, a GEF project was affected by political instability resulting from a coup d’état in August 2008, and a number of Al Qaeda terrorist attacks on European visitors in other parts of the country. The case is discussed in chapter 5.4 of this report.

8. Site visits were made to, and interviews conducted with stakeholders in the Banc d’Arguin National Park (GEF ID 1258), the Beilougue Litama Watershed in Gorgol Province (GEF ID 2459), and the Coastal littoral of the city of Nouakchott (GEF ID 2614).

2. Key Factors Driving the Observed Sustainability of Outcomes

Wings Over Wetlands Project GEF ID 1258

9. The regional Enhancing Conservation of the Critical Network of Sites Required by Migratory Waterbirds on the African/Eurasian Flyways project, commonly known as the Wings Over Wetlands project, had two key objectives: (1) to conserve globally significant migratory waterbirds and wetlands in the African-Eurasian flyways, (2) to strengthen strategic capacity to plan and manage the conservation of migratory waterbirds and the critical sites along their flyways.

10. It had three components:

- **Component 1.** Conservation activities strengthened through the development and use of a comprehensive, flyway scale, critical site network planning and management tool.
- **Component 2.** Establishing a basis for strengthening decision-making and technical capacity for wetland and migratory waterbird conservation.
- **Component 3.** Improved conservation status at sites critical for waterbirds; knowledge is generated on how to enhance conservation across the African-Eurasian flyways
- **Component 4.** Catalyzing the exchange of information for wetlands and migratory waterbird conservation.

Project Achievements at Completion

11. The terminal evaluation (Edwards 2010) reported that in Mauritania, for the project site Parc National du Banc d’Arguin (PNBA), the objective of increasing equitable

⁵⁰ GEF-IEO, Strategic Country Cluster Evaluation (SCCE): Sahel and Sudan-Guinea Savanna biomes Guidance Note for Country Case Studies, February 2019.

biodiversity-friendly tourism, by an increase in park revenues from tourism, proved impossible to achieve because of significant external factors, notably a coup d'état in August 2008 and in the two years after that, a number of Al Qaeda terrorist attacks on European visitors in other parts of the country, all of which brought about a major reduction in tourist numbers and revenues to the country as a whole. However, there are no reliable statistics relating to visitor numbers/revenue to the park, so it is impossible to objectively measure the degree of achievement of the indicator. But the Wings Over Wetlands project also worked outside of its remit with FIBA (Foundation International du Banc d'Arguin) to address structural barriers to tourism, most notably by elaborating a bird ecotourism strategy as part of a wider ecotourism strategy incorporated within the park management plan for 2010–14, funded by GTZ, and the elaboration of a bird ecotourism communication strategy.

12. The project also promoted the engagement of community members in providing services to visitors as an alternative income-generating activity: a total of 18 people (2 park staff and 16 Imraguen villagers) have undergone 18 months of training in French as well as in a number of modules including ecology, ornithology, geography, history and Imraguen society, geographic positioning system and cartography, administration (law) of the park, communication skills, and ecoguiding for tourists. Assessment of the guides' skills at the end of the project suggested they fell into three groups—those that made efforts to observe wild life on their own and who displayed good competence in identification of species and communication of this; those that made little effort to observe wild life on their own and whose identification of species was poor or restricted but whose communication skills were adequate; and those whose French skills remained poor and for whom communication remained difficult. Only two of the guides (based at Iwik, the main tourist hub of the park) were optimistic that there would be enough visitors for them to make a living as guides.

Postproject Achievements—Sustainability of Main Interventions

13. With the assistance of the PNBA management, the mission visited the Mamghar village site in the park. An interview with one of the three trained ecotourism guides in the village revealed that since completion of the training in 2011, none of the three trainees has had any engagement as a guide. Apparently, the few tourists visiting the area have not required the assistance of guides.

14. Both of the bird-watching hideouts erected in Mamghar are in good condition and fully functional, a testimony to the robustness of their construction (figure 1). They have required very minimal maintenance, mainly brushing of the woodwork and clearing of vegetation around them. However, guides reported that they are little used, associated with the low tourist numbers to the PNBA.

Figure 12: One of two bird-watching hideouts constructed by the Wings Over Wetlands project at Mamghar, eight years after construction, July 2019



Source: Photos taken by the consultant during field visits

Figure 13: View from hideout in Mamghar



Source: Photos taken by the consultant during field visits

15. It can be concluded that both the demonstration site interventions (training and bird-watching hideouts) are sustainable in that they still exist and can provide services long after project closure. However, the intended economic benefits have not been achieved—alternative livelihoods to fishing has not been effective, nor has there been any effect on biodiversity.

16. The Community-Based Watershed Management—Projet d'aménagement communautaire des Bassin Versants (PACBV) project was developed by the World Bank and the GEF in response to the government's official request for complementary support to the Community-Based Rural Development Project (CBRD), funded by the World Bank, referred to here as the "baseline project."⁵¹ Whereas the CBRD primarily focused on village-level investments to improve the living conditions of project-supported village communities in terms of sustainable income increase and access to basic socioeconomic services, the PACBV project was envisioned as complementing and broadening that baseline effort by working across communities to foster sustainable land management (SLM) practices that could improve natural resource management at the watershed and landscape levels. Thus, this enabled the World Bank, the GEF, and the government of Mauritania to support their shared objectives.

17. The primary beneficiaries of the GEF-funded PACBV project were the rural populace in four watersheds:

- (a) Greiguel (Wilaya de l'Assaba)⁵²—some 13,218 inhabitants in 24 villages and four communes (rural municipalities) covering 1,780 square kilometers.
- (b) Tengharada (Wilaya de Adrar)—some 3,100 inhabitants in 19 villages and one commune covering 243 square kilometers.
- (c) Saïla (Wilaya de Hodh-El-Chargui)—some 5,600 inhabitants in 23 villages and two communes covering 439 square kilometers.
- (d) Beilougue Litama (Wilaya du Gorgol)—some 13,800 inhabitants in 42 villages and five communes covering 515 square kilometers.

18. In sum, the PACBV project would have about 36,000 direct beneficiaries residing in 108 villages over an area of approximately 3000 square kilometers.

Project Achievements at Completion

19. The global environment objective of the PACBV project was "to limit land degradation and to safeguard critical ecosystem functions through community-driven SLM activities that improve agrosilvopastoral management and increase vegetation cover while securing livelihoods and global environmental benefits (i.e., reduced sedimentation of waterways, improved interconnection and integrity of ecosystems, enhanced carbon storage rates, and increased opportunities for biodiversity conservation)."

20. Progress toward the global environment objective was to be measured through the following outcome indicators: (1) appropriate implementation of the sustainable land management process by the Watershed Management Associations (Associations de Bassins Versant) in the project area; (2) two-thirds of the activities introduced generate positive

⁵¹ International Development Association Credit 3883—Memorandum of Understanding, signed in 2004.

⁵² A Wilaya is an administrative region/province.

income flow for the communities; and (3) 25 percent biomass increase in project areas treated, indicating sustainable regeneration of grass and shrubs.

21. The terminal evaluation (World Bank 2014) concluded that the PACBV achieved all three core objectives, measured by the above outcome indicators: (1) the Watershed Management Associations manage and maintain intercommunal SLM investments; (2) approximately 64 percent (or 106 out of 165) subprojects generate income for the beneficiaries; and (3) based on the assessment of 13 trial sites where SLM practices were introduced, an increase in biomass of approximately 31 percent was achieved.

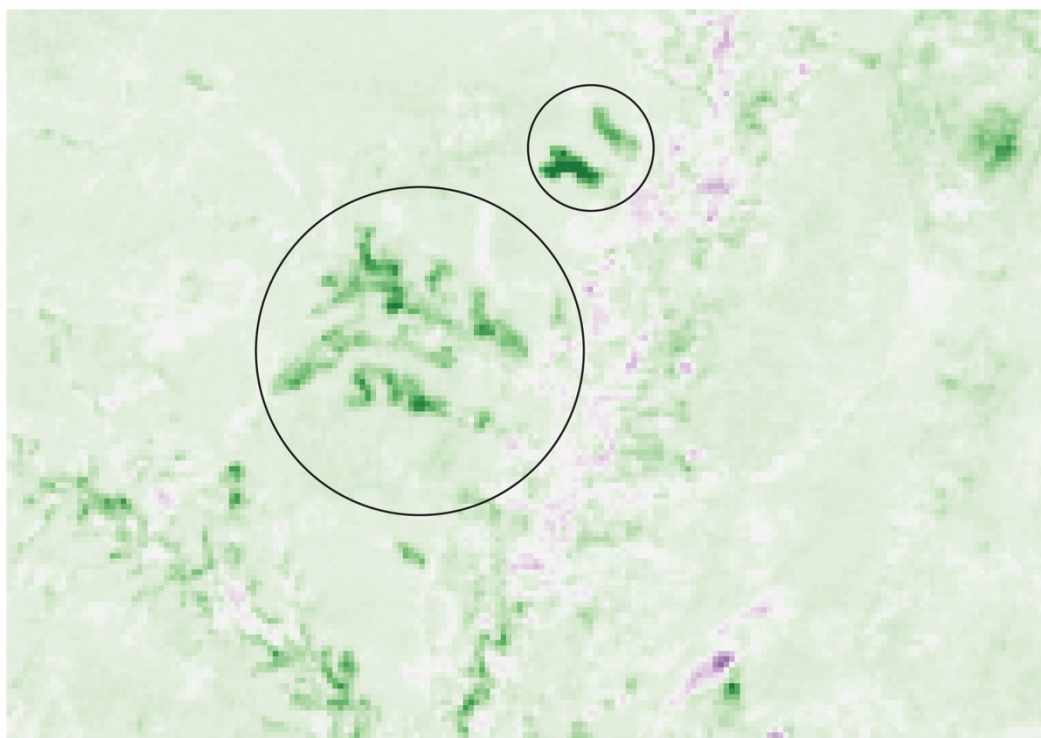
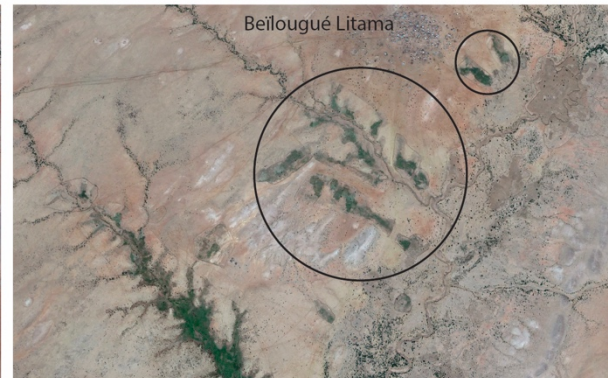
22. According to the terminal evaluation (World Bank 2014), the SLM of the PACBV in the Beilougue Litama watershed made it possible to recover land that had been denuded and degraded by wind and water erosion and put it to productive use. An estimated 3200 hectares of degraded land has been recovered (1225 hectares for agricultural use, 450 hectares for forestry, and 1525 hectares for pastoral purposes). Field measurements of vegetative cover indicate that biomass increased by 31 percent on average. The 5537 hectares of agricultural land protected by fencing allowed 4430 tons of produce to be grown (average yields were 800 kilograms per hectare). Visual examination of satellite images from 2016 (figure 3A and 3B) show increased vegetation cover into the early dry season within recovered areas. Additionally, comparing the vegetation productivity before and after restoration, as measured by the Normalized Difference Vegetation Index, shows distinct positive changes in productivity within the restored areas (figure 3C). This is confirmed with a time series of annual productivity (figure 4) as measured by the index. There is a greater positive trend in productivity from the recovered sites than for areas outside. Furthermore, although the interannual variability is driven by rainfall, the trend is not reflected in a simultaneous increasing trend in rainfall. This provides good evidence that the land recovery efforts are enhancing vegetation productivity dynamics on the ground.

Figure 3: Satellite images of recovered sites for late dry season (A) and post wet season (B), and the difference in average productivity before and after recovery efforts were implemented (C).

A. Dry Season Image (04-19-2016)



B. Post Wet Season Image (11-11-2016)

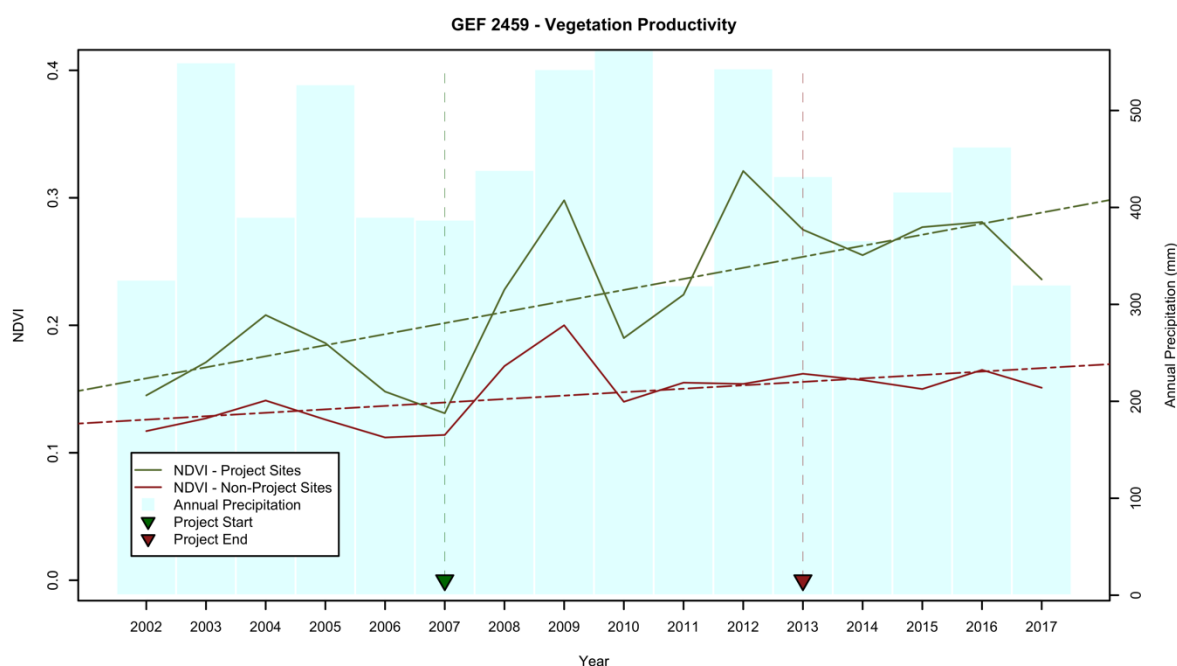


C. Change in productivity pre project mean (2002-2006) to post project mean (2013 - 2018).

○ Key restoration sites

Source: Prepared by GEF IEO

Figure 4: Time series of vegetation productivity as measured by the Normalized Difference Vegetation Index from Landsat 5, 7, and 8. The increasing trend within recovered area is greater than the trend outside recovered areas and not coupled to changes in rainfall



Source: Prepared by GEF IEO

Postproject Achievements—Sustainability of Main Interventions

23. As reported in the TER (2014), with the ending of the CBRD project, the Central Coordination Unit prepared a proposal for a second phase of the CBRD/PACBV project, which would have scaled up the project's activities to cover 1200 new villages and additional watersheds and completed the work initiated under the first phase in 300 of the 856 villages and the four watersheds. However, given the limited International Development Association envelope for Mauritania and the government's overall priorities, financing for a second phase was not feasible.

24. With the official closing of the CBRD project in December 2011, the project staff of the Central Coordinating Unit that had handled both projects was reduced to a minimum. The PACBV project continued to function with the skeleton staff. With the closing of the PACBV project on March 31, 2013, the staff was disbanded. Since there was no planned, systematic absorption of any of these personnel into the Ministry for Rural Development or Ministry of Environment, the staff members were obliged to look for other opportunities. Consequently, the institutional memory of the PACBV project is dispersing with these individuals. On a more positive note, most of the technical field staff involved in and trained by the project in SLM techniques remain within Ministry for Rural Development, where their knowledge can be mobilized and updated by future operations.

25. Visit by the mission to the Beilougue Litama watershed in Gorgol Wilaya showed that infrastructure constructed by the project (rock bunds, fencing to exclude livestock, and small rock dams) are mostly still in operation six years after the end of the project, thus

showing a measure of sustainability in the medium term and improvement in biodiversity and carbon sequestration.

26. The rock bunds across gulleys have resulted in the gulleys being filled up and enabling cropping in the surrounding area (**Error! Reference source not found.5**). Rock bunds installed in fields have enabled cropping as a result of improved water infiltration, thus extending the crop season to enable successful cropping of sorghum and millet (**Error! Reference source not found.6**); while small rock dams constructed in the valleys of periodic streams have allowed infiltration in surrounding fields, thus extending cropping season and allowing improved growth of native vegetation (Figure 7). Fencing has protected crop lands from livestock, allowing cropping and improved grow of vegetation (**Error! Reference source not found.8** and Figure 9)

Figure 5: Boumeye rock bunds across old gully now filled in with vegetation in area with water infiltration and vegetation (time 10.46.32)



Source: Photo taken by the consultant during field visits

Figure 6: Boumeye rock bunds field with vegetation (time 10.46.32)



Source: Photo taken by the consultant during field visits

Figure 7: Beilougue Litama Block dam, installed 2014, still functioning, cropping area with shrubs in background (time 11.38.05)



Source: Photo taken by the consultant during field visits

Figure 8: Tachott Moukhaitire—destroyed fence showing fenced area with vegetation and cropping (right) and area outside fence (left) with no vegetation and cropping (time 10.35.07)



Source: Photo taken by the consultant during field visits

Figure 9: El Boubacar—fenced area with cropping with good vegetation within enclosure (background) compared with poor vegetation in uncropped area outside fence (foreground) (time, 10.57.46)



Source: Photo taken by the consultant during field visits

27. However, the long-term sustainability of the investment is threatened by the cost and complexity of the interventions to allow for maintenance and repairs by the beneficiary communities. Apart from minor repairs to rock bunds in fields by periodic gap filling with a few rocks, beneficiary communities have not carried out any maintenance to the structures built by the project. This is illustrated by the breakage of the Ehel Menkousse rock dams five years after construction (**Error! Reference source not found.**10). During the life of the installation, the community reports much benefit from the installation in terms of enabling cropping in the surrounding fields and allowing the construction of shallow wells in the dry stream valley that provided drinking water for humans and livestock in the dry season. Once

the head dam broke two years ago (and the other two downstream followed), the villagers have collected rocks for rebuilding, but find that they do not have the technical knowledge to reconstruct the dam. An appeal to the Ministry of Environment has so far gone unanswered for two years.

Figure 10: Ehel Menkousse - Rock dam across stream broken in 2017, with no cropping downstream since then (time 11.12.17)



Source: Photo taken by the consultant during field visits

28. The mission found no evidence of broader adoption. Because of the cost of the infrastructure, there has been no self-financing; that is, construction of any new installations by beneficiaries who report that the requirements in terms of labor and other costs, and the technical knowhow needed, are beyond their means. And there has been no follow-up postproject financing or support, except for general extension support provided by the Ministry of the Environment in the province.

ACCC Project GEF ID 2614

29. The principal objective of the Adaptation to Climate Change - Responding to Shoreline Change and Its Human Dimensions in West Africa through Integrated Coastal Area Management (Projet d'Adaptation aux changements climatiques côtiers—ACCC) project was to develop and pilot a range of effective mechanisms for reducing the effects of climate change-induced coastal erosion in vulnerable regions of five West African countries (Cape Verde, The Gambia, Guinea Bissau, Mauritania, and Senegal) (**Error! Reference source not found.11**). This objective was to be attained through the five expected outputs:

- **Output 1.** Protection, improvement, and rehabilitation of productive coastal wetlands along the West African shoreline that are vulnerable to climate variability and change.

- **Output 2.** Bases for sustainable management of areas bordering productive coastal wetlands (including watershed basins) established or consolidated.
- **Output 3.** The needs of local populations affected by both the constraints of protecting coastal wetlands and the effects of climate variability and change are increasingly met through the implementation of practices that are mindful of these ecosystems.
- **Output 4.** Climate change adaptation integrated in policy and planning tools governing areas related to the management of productive coastal wetlands (fisheries, tourism, extractive industries, etc.).
- **Output 5.** The project has enhanced the capacities of local elected officials and coastland wetlands management bodies with regard to designing practical tools for adaptation and mitigation of the effects of climate variability and change.

Figure 11: Pilot sites selected for the ACCC project



Source: GEF ID 2614 Project Appraisal Document

30. The selected site for the Mauritania component of the project was the coastal dune of Nouakchott, between the wharf and the fish market (Thiam n.d.). This national component consists essentially of the reconstitution of the ecosystem and the biodiversity of a part of the dune on 4 kilometers (approximately 50 hectares), to make it possible to secure the city against ocean incursions.

31. The dune is narrow, approximately 150 meters in average width. It is generally low and had numerous gulleys that prevented it from playing its role as a bulwark against ocean incursions and flooding of the lower areas of the city. Before the project it was subject to a combination of erosion factors that included the presence of infrastructure, the passage of vehicles, grazing by cattle herds, and wind erosion. The ecosystem associated with it had almost completely disappeared and the sands were very mobile. In fact, its once abundant vegetation had completely disappeared because of repeated droughts and anthropogenic activity. Finally, this sand dune had been severely damaged by sand extraction and resulting erosion south of the Port of Friendship and the many other amenities it houses.

Project Achievements at Completion

32. Various activities funded by the Mauritania component of this GEF regional project were carried out in 2009, 2010, and 2011 to meet the objective of raising and fixing coastal dunes in order to restore biodiversity and provide better protection for the city of Nouakchott (Diagne 2014). In June 2010, two nongovernmental organizations, AVES and Nafore, planted 25,000 seedlings in a nursery, including 10,000 destined for the mainland. They were also in charge of fixing the dunes. A total of 30 hectares of coastal dunes out of 50 hectares along a 4-kilometer stretch was reforested between July and November, 2010, in a move to restore the biodiversity to its past levels and to contribute to protecting Nouakchott. Altogether, 40 hectares of the coastal dune belt were fully restored. May 2011 saw the launch of work to fix a further 10 hectares of dunes and to produce 10,000 seedlings (3000 *Tamarix*, 5000 *Nitraria*, and 2000 *Atriplex*), which was carried out with support of AVES and Agro-Forest International.

33. A part-time communications expert was recruited between 2010 and 2011 to assist the project in its various activities by designing tools to facilitate communication about the project. Part of his mandate was also to organize project activities at both local and national levels, with audiovisual productions. An exchange site visit was organized with the minister of the environment and the regional ACCC coordinator, who were accompanied by representatives of the network of parliamentarians from countries in the ACCC zone. Trainees from the University of Nouakchott toured the project site in 2010 and 2011, while students from the fauna school in Garoua, Cameroon, paid a visit in 2011. Thanks to these activities, the project's visibility was enhanced and stakeholders and beneficiaries learned more about coastal vulnerabilities and the adaptive responses to be implemented.

Postproject Achievements—Sustainability of Main Interventions

34. A visit to the site of the rehabilitated coastal dune found that the stabilized dune was still in place and performing its role eight years after the end of the project (**Error! Reference source not found.** and Figure). The intervention to protect coastline vulnerable to climate change was sustainable. As an example of broader adoption, based on the demonstrated success with dune stabilization by the ACCC project, a GIZ (German Agency for International Development Cooperation, Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH) project worked in the same area to reinforce the dune by establishing a second dune on the shoreside of the ACCC dune. Dune stabilization by the GIZ project involved importation of sand that was formed into a shoreside dune, compacted mechanically and planted by shrubs (**Error! Reference source not found.**)

Figure 12: Seaside dune stabilized by the ACCC project, July, 2019



Source: Photo taken by the consultant during field visits

Figure 13: Vegetation on seaside dune, eight years after planting by the ACCC project, July 2019



Source: Photo taken by the consultant during field visits

Figure 14: Shoreside dune constructed and stabilized by follow-up GIZ project, with view of seaside dune stabilized by the ACCC project, July 2019



Source: Photo taken by the consultant during field visits

35. However, the mission observed that there has now emerged a serious threat to the long-term sustainability of the outcome. In the last few months, and to the surprise of the Nafore chairman who accompanied the mission, part of the land and the dune have apparently been acquired by private investors who have fenced the area for building purposes, and bulldozed the vegetation on parts of the dune (**Error! Reference source not found.**). This has returned the dune to its original state before the project with the attendant risk of it becoming unstable once more and liable to being breached by the ocean waves.

Figure 15: Vegetation on protected coastal dune bulldozed as access road to building site, July 2019



Source: Photo taken by the consultant during field visits

PDDO Project GEF ID 3379

36. The project SIP: Participatory Environmental Protection and Poverty Reduction in the Oases of Mauritania, also known as Promoting Sustainable Land Management in the Oasis Ecosystems of Mauritania (Programme de Développement Durable des Oasis—PDDO), aimed to combat land degradation and desertification in the arid and semiarid Oases territory, as well as to conserve rangeland ecosystems in their periphery.⁵³ The environmental objectives for the project (the GEF component) were to manage the land and water resources of the Oases in a sustainable manner, and to conserve local biodiversity so as to control and mitigate land degradation and desertification, and protect the natural integrity, functions, and services of Oases ecosystems resources in the arid and semiarid plateaus of Mauritania.⁵⁴

37. More specifically, the development objectives for the project were the sustainable improvement of the livelihoods of oasis residents, farmers and herders by (1) significantly reducing land degradation and enhancing land and water productivity through targeted on-the ground investments (thus demonstrating a successful and sustainable reversal of land

⁵³ GEF ID 3379 Project Document 2009, page 20.

⁵⁴ GEF ID 3379 Project Document 2009, pages 76–77.

productivity decline in hot spots), and (2) to promote environmentally-friendly income-generating activities and energy-saving options.⁵⁵ Note that the intention was for the balance between the environmental and development objectives to “work in favor of a better maintenance of the ecological integrity of the oases and their peripheral rangelands, while concurrently ensuring that local populations realize the economic value of their environment.”⁵⁶ The GEF component of the PDDO, operating in the same zone as the PDDO, was to directly affect 1000 peasant/pastoralist households, that, approximately 6000 people in 12 oases.

Project Achievements at Completion

38. The achievement of the technical components of the project are reported as follows (IFAD 2015):

- (a) Creating an enabling environment for SLM integration in decision-making processes
- (b) Public awareness and capacity building
- (c) Rehabilitation of land productivity and poverty reduction through investments in SLM

39. This component had the highest level of investment and directly affected oases. Achievements were mainly:

- Improving the efficiency of water lifting and irrigation techniques, thus reducing the negative impacts on the environment, using solar powered pumps, etc.: 57 installations servicing 35.6 hectares of palm groves (4938 palm trees), used by 134 producers
- The protection of oases against floods, silting, and the destruction of crops and natural vegetation by stray animals
- Wadi protection and dune fixation in two stages: (1) mechanical protection—establishment of palisades and weaving of palm leaves to stop the movement of the sand; (2) biological protection—installation of perennial tree and grass vegetation to permanently fix the dune. In total, dune fixation works covered 244 hectares, to protect 609 hectares of palm groves (117,800 palm trees), used by 3449 producers
- The protection of palm groves, natural grasslands (grara) and agropastoral sites: the project supported the establishment of community fences surrounding blocks containing annual crops, pasture, or reforestation sites. The fences were made of single twist wire or barbed wire, considered to be more durable than traditional fencing made of wood and palms, reducing the amount of wood needed for poles, and live fencing that is not adapted to the

⁵⁵ GEF ID 3379 Project Document 2009, pages 77–78.

⁵⁶ GEF ID 3379 Project Document 2009, page 23.

oasis context as it requires much input and management including watering of plants. In total, the project supported the construction of 178,150 meters of fencing to protect 1103 hectares, all sites combined.

- Alternative livelihood systems (ALS): improved access for the poorest households to environmentally friendly income-generating activities. In total, the project supported the realization of 20 very different types of ALS: (1) five butane gas depots; (2) three workshops for couscous manufacturing; (3) three workshops for production of nets for protection of dates; (4) two stone cutting workshops; (5) two date packaging workshops; (6) one artisanal fishery; (7) one craft workshop; (8) one hen house; (9) one grain mill; and (10) one income-generating activity for the valorization of forest products.
- Biological control of date palm pests, conservation of the biodiversity, and the genetic heritage of the date palm and selection and availability of quality pollen for phoeniculturists, mainly: (1) the creation of four collections of date palms coupled with nurseries for the dissemination of seedlings of rare varieties and; (2) the preservation of wetlands bordering the oases.

Postproject Achievements—Sustainability of Main Interventions

39. No site visit was undertaken by the mission because all the project oases are a long way from Nouakchott—two days travel, so not practicable to visit, given available time. In discussions with project staff, the mission found that with regards to **water lifting and irrigation systems** that are mainly in Andrar province, solar pumping systems are sustainable and still functioning. Solar powered pumps are highly valued by farmers over motor pumps, and many producers have bought them from their own funds. By contrast, as revealed in a study on the performance of irrigation and extension systems supported by the PDDO conducted in October 2013, other water lifting and irrigation systems introduced, such as drip irrigation and motorized pumping systems, are not sustainable and have not survived because they are too complex or too costly to operate.

40. **Wadi boundary protection and dune fixation**—In three of the four oases, dune fixations have not been sustainable as the biological fixation phase was too labor demanding and time consuming and therefore not economically beneficial to the farmers. Only in one site (Hodh El Chargui) did biological fixation succeed and the dunes were fixed and are being used by the farmers (**Error! Reference source not found.**). Interestingly, the costs for dune fixation were the highest at this site, estimated at US\$ 4931/hectare compared with US\$ 1320–3753/hectare for the other sites.

Figure 16: GEF-funded dune fixation site in Hodh El Chargui Wilaya



Source: IFAD 2015

41. **Alternative livelihood systems**—Most of the systems (exception is artisanal fishing) introduced are no longer functioning, because beneficiaries have not been able to generate operating funds and capital replacement funds; in other words, they are not cost effective from the point of view of the beneficiaries.

42. **Follow-up financing**—There has been no follow-up financing for the GEF project. Although a follow-up PDDO project funded by the government and FADES (Fonds Arabe de Développement économique et Social) is being implemented, working the same Wilayas and with the same project coordinator as the first PDDO project that included the GEF project, the project manager reported that it is not using the same techniques, nor is it providing follow-up support of the completed GEF activities. According to the project manager, the only link of PDDO with the predecessor GEF project is that it is working in the same Wilayas.

PASK II Project GEF ID 3893

43. The project Support to the Adaptation of Vulnerable Agricultural Production System, jointly with Poverty Reduction Project in Aftout South and Karakoro—Phase II (PASK II), is an on-going (national) project financed by IFAD and GEF, with a global objective to increase incomes and improve the living conditions of the poorest rural populations, especially women and young people.

44. The GEF component, amounting to 14 percent of total project cost, has as its objective to increase the resilience of communities to cope with the adverse effects of climate change on water resources and agricultural production systems.

45. The GEF component consists of four subcomponents:

- (a) Minimize the risk of reduced productivity and agricultural production attributable to the impacts of climate change
- (b) Improve the resilience of livestock farming and animal production systems in oasis and semiarid areas
- (c) Increase the efficiency of the irrigation and water management systems
- (d) Strengthen the adaptation capacities of the production systems in the rural areas to the impacts of climate change

Current Project Achievements

46. It was reported (Ministère de l'Agriculture 2018) that by the end of 2018, the GEF component had achieved the following results:

- **Subcomponent 1.1.** Improving the resilience of production systems to climate change. This component includes two essential activities: support for establishment of Zais, and organic fertilization; nine sites (5 hectares each).
- **Subcomponent 1.2.** Promotion of the diversification of energy sources: (1) the financing of microprojects for the marketing of butane gas at the village level under the FAIE (Support Fund for Economic Initiatives), (2) the cofinancing of market gardening microprojects in the framework of the FAIE with regard to the energy part, (3) cofinancing of FIEC projects also with regard to energy aspects, and (4) support for the reconstitution of woody cover in village areas. In 2018, the project financed, in the framework of FAIE microprojects using GEF resources, the closure of 21 rock bunds sites.
- **Subcomponent 2.1.** Promoting rangeland management practices that are more resilient to climate variability, consisting of a program of manual establishment of 7-meter-wide fire belts; as of December 31, 2018, 484 kilometers of fire belts were established, amounting to 69 percent of the target; and establishment of six pastoral watering stations in Mbout and Kankossa.
- **Subcomponent 3.1.** Upstream and downstream development of surface water structures established by GEF ID 3893, involving soil and water conservation/restoration of soil fertility; three sites and 279 hectares of antierosion works, and drilling of wells for agropastoral development downstream of rehabilitated dams.
- **Subcomponent 3.2.** Improvement of irrigation systems in oasis and recession area, consisting of the establishment of a Californian irrigation systems on 12 hectares, and development of five market garden perimeters.
- **Subcomponent 4.1.** Sensitization and mobilization of decision-makers at national and regional level for the adaptation of agricultural production

systems to climate change; conduct of information, education, communication campaigns on the environment, and adaptation to climate change.

- **Component 5.** Management of the GEF subcomponent involving the monitoring of environmental effects by mapping of carbon footprints.

47. The SCCE mission was unable to visit the project sites and it is too early to pronounce on the sustainability of the investments. However, the mission was provided with an independent assessment of the impact of the GEF component (BETRA 2019), which was carried out in 42 localities, with 430 households and 57 groups. The assessment reports that the results obtained to date are well above expectations. The achievements of the project have been very satisfactory to the beneficiary populations in the localities visited. The impacts of the project are reportedly visible in terms of level of activities, as follows:

- The promotion of climate-resilient techniques for the management of pastoral areas (improvement of pastoral perimeters and establishment pastoral stations) have resulted in beneficiaries gaining very significant financial incomes through the creation of employment, in addition to the provision of at least a part of their annual need for pasture.
- The promotion of market gardening at local level by fencing gardens, providing motor pumps, seeds, and drip irrigation kits. The beneficiaries declared to have gained substantial revenues (2500 to more than 30,000 MRU per household). Auto consumption allowed households to have a sufficiently balanced diet, given the variety of market garden produce.
- The improvement of resilience through soil fertility improvement (water and soil conservation, soil defense and restoration, and use of manure) has on the one hand resulted in increased finance to beneficiaries through job creation (wages earned), which is highly appreciated by the whole beneficiary population (men, women, young people). On the other hand, it has resulted in the regeneration of arable lands, which has reached 140 hectares currently exploited by 381 people.
- The establishment of fire belts manually, in areas usually greatly affected by bush fires, has resulted in a 90 percent reduction of areas burned, in addition to the wages earned by beneficiaries during the execution of the work.

48. The jury is still out with regards to the sustainability of these outcomes. It will be worth seeing whether the structures are maintained postproject when the households will not be earning any incomes from wages paid by the project for construction works, etc.

PNISER Project GEF ID 5190

49. GEF ID 5190, Improving Climate Resilience of Water Sector Investments with Appropriate Climate Adaptive Activities for Pastoral and Forestry Resources in Southern Mauritania, is a project integrated with the baseline rural water supply project (Programme National Integre dans le Secteur de l'eau en Milieu Rural—PNISER), which uses an integrated approach to respond to the domestic and agroforestry water needs of the rural population

from the regions (Wilayas) of Gorgol, Brakna and Tagant, and is estimated at US\$ 14.58 million and will be implemented over five years from the beginning of 2013.⁵⁷

50. The three Wilayas represent 34 percent of the rural population of Mauritania, equivalent to 736,000.⁵⁸ The choice of these regions is justified by the high rate of poverty in these regions (63.9 percent in Brakna, 66.5 percent in Gorgol, and 67.8 percent in Tagant) that have “significant” water resources and are a crossroads of livestock transhumance from the west and north of the country in search of pastures and water points.

51. The GEF project is implemented in the PNISER areas but also in the five adjacent districts where the PNISER-Integrated Water and Resource Management approach can be extended and enhanced. This extension of the PNISER project area seeks to mitigate those linked effects of climate change, on the nomads and in the “disrupted” area, by extending the scope of activities of the baseline project to the surrounding Wilayas. This approach is expected to mitigate “up front” the problem and its impact. This will induce an additional investment: (1) on the nomad areas of influence in order to reduce the risk of climate change impact on the baseline project; those investments could be considered as “win-win climate change buffer investments” in the sense of supporting activities and infrastructures that will protect the baseline investments; (2) on reducing the vulnerability to climate change of the baseline basic infrastructures by promoting additional infrastructure (irrigation techniques) and more climate change adaptation practices; (3) but will also support and make more resilient the other population (in this case the nomads) and pastoral and forest resources of the PNISER surrounding the southern Wilayas.

Current Project Achievements

52. Discussions with project staff indicated that the project commenced operations in 2017 and has had major implementation problems, so that only approximately 2 percent of the funds have been disbursed to date. This means that two years in, virtually no output has been achieved.

53. The three reasons for lack of performance are given as follows:

- (a) Interministerial problems associated with management of the project being given to the Ministry of Water Resources, which is thus charged with responsibility for management of what is designed as an environmental (climate change) project. This is because it is attached to the African Development Bank baseline water resources project.
- (b) Problems of delays in establishment of national procurement procedures that are in line with the African Development Bank procurement procedures.
- (c) Most of the Works and the Service components are expected to be implemented by nongovernmental organizations recruited through a process of competitive

⁵⁷ GEF 2013, Mauritania GEF ID 5190, Request for CEO Endorsement.

⁵⁸ The population of these Wilayas is estimated at 2,302,916, or 66.5% of the total population (Général de la Population et de l'Habitat 2013, available at <http://www.ons.mr/index.php/publications/operations-statistiques/16-rgph-2013>).

bidding to which they are accustomed, but have failed to respond correctly to calls for bids.

3. Observed Sustainability and the Environmental/Socioeconomic Nexus

54. In project sites visited in Mauritania there were clear examples of a positive environmental/socioeconomic nexus, which improved the chances of sustainability of environmental benefits of project interventions in the short to medium term. However, because of the costs and technical complexity of most of the infrastructure investments, their long-term sustainability is compromised by the inability of the local populations and institutions to finance and carry out maintenance activities, without the support of follow-up projects or state interventions.

55. The Mauritania component of the Wings Over Wetlands project (GEF ID 1258) demonstrates that even when there is no positive environmental/socioeconomic nexus, in the sense that the beneficiary populations (the trained Imraguen fishermen/ecotourism guides) have derived no economic benefits from the project investment, and revenue from ecotourism has not been increased by the bird watching hideouts constructed, the sustainability of the investment is demonstrated by the continued existence and functioning of the physical structures that need very little or no maintenance.

56. In project PACBV (GEF ID 2459) beneficiaries have derived clear economic benefits in line with the environmental benefits:

- Rock bunds in fields have allowed for the lengthening of the growing season and cultivation of sorghum and millets with increased yields.
- Rock bunds across gulleys have resulted in filling in of the gulleys and recovery of crop areas for cultivations.
- Fencing-off of degraded lands have enabled recolonization by the native vegetation, and cropping where not possible earlier.
- Small rock dams across seasonal stream beds have allowed increased infiltration from rainfall events, regeneration of native vegetation, construction of shallow wells for domestic and livestock watering, and increased crop cultivations.

57. However, the long-term sustainability of all the above interventions is threatened by the fact that except for the rock bunds in fields, the beneficiary populations are unable to finance the maintenance of the structures, apparently because of their poverty, and no follow-up projects have been implemented, neither has government funding or technical support been available for such activities postproject.

58. In contrast, in the PDDO project (GEF ID 3379), it is reported that small-scale infrastructure investments (solar pumps) within the financial reach of households in the oases have been maintained by the households, with auto investment in new structures by the households' postproject. By contrast, small-scale ALS, although they produced economic benefits to households in the short run, are no longer functioning. They are not sustainable

because beneficiaries have not been able to generate operating funds and capital replacement funds; in other words, they are not cost effective from the point of view of the beneficiaries.

59. The ACCC project (GEF ID 2614) also demonstrated that infrastructure investments are sustainable in the short to medium term—coastal sand dunes have been successfully stabilized and have provided the required protection to coastal areas, and socioeconomic benefits to protected communities. However, such investment is threatened in the long run by private investors operating in the building sector, if government and local authorities are unable or unwilling to maintain the protective structures (boundary fences), or enforce laws protecting the integrity of the infrastructure, for instance, preventing removal of the vegetative cover on the stabilized dunes by private sector builders.

4. Relevance of GEF Support to the Environmental Challenges faced by the Country

Relevance in Relation to National Priorities and Strategies

60. Mauritania is part of the least developed countries group and submitted its National Adaptation Program of Action in 2004 when it became eligible to apply for resources in the Least Developed Countries Fund. It identifies the animal and plant production systems and the water resources as primary priority sectors for the adaptation, followed by silviculture and semiarid ecosystems.

61. Mauritania developed its third Strategic Framework for the Fight against Poverty for the period 2012–15 that defined its overall long-term objectives, one of which was addressing land degradation that affects the livelihoods of practically all rural dwellers in Mauritania (60 percent of the population, or approximately 240,000 households), as well as the food security of the whole country (which is already highly dependent on food imports). It is forcing farmers to extend production to marginal and fragile lands, thus seriously degrading the natural resource base. At the same time, rangeland quality is being depleted with increasing herd size and overgrazing of limited areas. Land use conflicts are becoming regular features, leading to continual and often aggressive degradation of the land. The results are a spiral of increasing rural poverty and continual degradation of natural resources, with increasing outward migration of poor people to urban areas and elsewhere.⁵⁹

62. Given the scope of environmental issues and increasing awareness of the magnitude of the stakes, Mauritania enacted an Environmental Code in 2000. The country has ratified almost all international conventions relating to the environment and again restated its commitment to achieve the relevant MDGs as part of its overall development strategy (AfDB 2010). In October 2006, a National Sustainable Development Strategy aimed at incorporating various principles of environmental sustainability into the country's public policies up to 2015 was adopted. This strategy allows for an approach that incorporates the social, economic, and environmental dimensions. At the same time, a National Environment Action Plan, combined with a Desertification Control Plan, was adopted in 2006. In 2007, a new Forestry Code was enacted and the 2004 decree that rendered mandatory the prior

⁵⁹ GEF ID 3379 Project Document, page 6.

conduct of environmental impact assessments was enforced. In addition, the Council of Ministers of the Senegal River Development Authority, of which Mauritania is a member, adopted in July 2008 a strategic action plan aimed at sustainably preserving the environment in the Senegal River Basin. It supplements a similar initiative already taken under the Permanent Interstate Committee for Drought Control (Comité permanent inter-État de lutte contre la sécheresse au Sahel) to address environmental challenges within a supranational framework that pools the efforts of the states involved.

63. As part of its Energy Action Plan (2011–15) to control global warming, the government gives priority to the implementation of a policy based on the dissemination of more effective energy choices that combine efficiency and viability for all forms of energy (lighting, electricity production, access to water, gas, and information and communication technology, etc.). The action plan envisages the establishment of a specific window for renewable energy sources, the development of which will be supported by the promotion of hybrid electrification systems (solar-wind-biofuel) and appropriate alternative technologies for rural areas with a population between 500 and 1500 inhabitants.

64. Tackling the threat to the ecological integrity of the PNBA is an issue of both global and national importance (UNEP/UNOPS n.d.). PNBA, a national park 1,173,000 hectares in size, situated on the West African seaboard; circa 20° 00'N/16° 30'W, is a Ramsar Site (since 1982) and a UNESCO (United Nations Educational, Scientific, and Cultural Organization) World Heritage Site. It is also a key site in the West African Coastal Management Network, and is a vast maritime wetland comprising shallow coastal waters, mudflats, and islands meeting a shifting mostly sandy coastline of spits and bays. The waters support rich sea grass beds (e.g., *Zostera*). A permanent upwelling contributes to a high marine productivity. Coastal wetland vegetation includes *Spartina* grass and relict mangroves. The mudflats are highly productive, supporting many aquatic invertebrates, which in turn attract large numbers of wading birds. The shallow waters are internationally important fish breeding nurseries.

65. Bird species in the PNBA are of principal importance under the Agreement on the Conservation of African – Eurasian Migratory Waterbirds agreement and Ramsar Convention. Many of these breeding and nonbreeding waterbirds surpass the 1 percent criteria for international importance, some of them by a very high margin. These include:

- **Breeding**—approximately 15,000 birds of over 15 species: for instance, great cormorant, long-tailed cormorant, white pelican, grey heron (*monicae*), Eurasian spoonbill (*balsaci*), greater flamingo, slender-billed gull, gull-billed tern, Caspian tern, royal tern
- **Nonbreeding**—over 2,000,000 waders: for instance, turnstone, sanderling, dunlin, red knot, curlew sandpiper, little stint, Kentish plover, ringed plover, bar-tailed godwit, Eurasian curlew, whimbrel, grey plover, common greenshank, common redshank; and others such as lesser black-backed gull

66. Wetland uses in the PNBA are mainly fishing (especially traditional subsistence fishing by Imraguen), tourism, and protection of biodiversity. Major threats are over-fishing, destruction/modification of fragile habitats (mangroves, sea grass beds), erosion, impacts of

cross-park route (vehicles driving along beach causing disturbance etc.), predation of breeding bird colonies, and destruction by tides.

67. All GEF-supported projects in Mauritania are in line with the country's national environmental priorities and policies described here. GEF projects were designed within the framework of the national priorities as highlighted:

- **GEF ID 1258** (regional). Enhancing Conservation of the Critical Network of Sites of Wetlands Required by Migratory Waterbirds on the African/Eurasian Flyways focused on waterbirds, which constitute the most visible biological indicator of the PNBA's ecology and present a high tourist attraction.
- **GEF ID 2459** (national). Community-Based Watershed Management Project's global objective was consistent with the Poverty Reduction Strategy Paper (2000–15) for the rural sector and the Third Action Plan (2011–15).
- **GEF ID 2614** (regional). Adaptation to Climate and Coastal Change - Responding to Shoreline Change and Its Human Dimensions in West Africa through Integrated Coastal Area Management addressed one of the major problems in Mauritania's coastal dune sustainability, by piloting a method of reconstitution of the ecosystem and the biodiversity of a part of the coastal dune, to make it possible to secure Nouakchott against ocean incursions.
- **GEF ID 3379** (national). SIP: Participatory Environmental Protection and Poverty Reduction in the Oases of Mauritania, consistent with national priorities, was fully aligned with the Mauritanian government's antipoverty strategy, targeting the country's rural poor to respond to their needs. The project also brought concrete contributions to the implementation of the Mauritanian National Action Plan–Convention to Combat Desertification by creating an institutional delivery mechanism that promoted the integrated management of oasis land and water resources, mobilized actions from the national to the local levels, and provided tools, information, and processes for integrated control of desertification and reduction of rural poverty in oasis territory.
- **GEF ID 3893** (national). Support to the Adaptation of Vulnerable Agricultural Production Systems responds to pressing and urgent needs to adapt to climate change, identified by the government of Mauritania in its National Adaptation Program of Action, and the New Declaration on the Water Sector Development Policy, all of which follow parallel objectives toward the resilience of the ecosystem services for agriculture and food production to climate change.
- **GEF ID 5190** (national). Improving Climate Resilience of Water Sector Investments with Appropriate Climate Adaptive Activities for Pastoral and Forestry Resources in Southern Mauritania is closely aligned with the Mauritania National Adaptation Program of Action. It responds to the highest priorities of the National Adaptation Program of Action and requests the additional cost for adaptation to climate change from a development water and sanitation project. The project also has direct links with national priorities to

combat poverty in its Poverty Reduction Strategy Paper and is also aligned with the National Sustainable Development Strategy by placing the poorest people, rural agropastoralists and nomads, in the center of decision making and as main project beneficiaries.

Relevance in Relation to GEF Focal Areas

Biodiversity

68. The GEF projects have significant components that contribute to generating global environmental benefits in the focal area of biodiversity—Global Environmental Benefit 1: Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society.

69. For **GEF ID 1258**, the mission observed that predominant benefit to global biodiversity is the maintenance of the ecosystem for migratory waterbirds, and the various communications and exchange mechanisms implemented to disseminate information.

70. For **GEF ID 2459**, which contributed to the Global Environmental Benefit 1 as well as to Global Environmental Benefit 2: Sustainable land management in production systems (agriculture, rangelands, and forest landscapes), the global benefits derived mainly from the enhanced ecosystem integrity of the four watersheds and sustainable land management as result of adoption of improved land management and restoration practices, both in productive landscapes and in riparian areas that resulted in decreased soil erosion, increased carbon sequestration, and improved conservation and sustainable use of biodiversity.

71. **GEF ID 2614** also contributed to the Global Environmental Benefit 1, because its sites are identified as vulnerable to climate change and variability as well as to the ensuing coastal erosion, so that by protecting the coastal dunes, global environmental benefits (in the biodiversity focal area) were generated.

Land Degradation

72. **GEF ID 3379** contributions to the Global Environmental Benefit 2: Sustainable land management in production, systems (agriculture, rangelands, and forest landscapes) included (1) maintenance of ecosystem integrity and service provision capacities; (2) control of land degradation and conservation of soil and water resources leading to higher net primary productivity; (3) increased carbon and biomass carbon sequestration and carbon stocks; (4) mitigation of drought and climate change through improved ecosystem resilience (water harvesting, improved soil moisture storage, adaptation to climate change); (5) improved biodiversity and reduced habitat fragmentation in its sites and ecosystems of global importance (including some wetlands in arid areas such as the Tammourt); and (6) diversified and increased funding for SLM.

Climate Change Adaptation and Mitigation

73. **GEF ID 3893** targeted the adaptation to climate change of the agricultural production systems and water resources in the arid and semiarid areas, as well as poverty reduction. It integrated the approach to increase the resilience of agricultural production systems to climate change and to ensure, in the short and medium term, the benefits of adaptation to climate change for the local population, and in the long term, an improvement in productivity and a sustainable reduction of land degradation and desertification.⁶⁰

74. **GEF ID 5190** contributed achievements to the global environmental benefits by focusing on reducing vulnerability to climate change by increasing adaptive capacity through the introduction of community managed investment and activities such as water harvesting, natural regeneration of forest areas, land and water management etc.

5. Cross-Cutting Issues

General Findings on Cross-Cutting Issues

75. All the selected projects in Mauritania, except for the most recent and ongoing project, were not designed explicitly with gender mainstreaming considerations in mind. This is surprising because the country has had a gender strategy in place since 2006. However, all the projects were implemented in a gender-sensitive manner, with clear evidence of women's inclusion and women's empowerment at the project level.

76. Rather surprising for Mauritania, there is no evidence of resilience thinking in some of the GEF project documents. Only in three of the selected projects is there evidence of resilience thinking with resilience considerations being integrated as an incremental change in the Multiple Benefits Framework, and only in the most recent project are there clear linkages in project documents with country priorities on resilience

77. Because Mauritania is not classified as fragile state, none of the projects incorporated fragility considerations in their design.

Gender

78. Mauritania has a National Gender Strategy that was approved in July 2006 and aims at building women's social and economic capacities in order to achieve a more equitable development. Recently, there has been an important achievement by the coordination of the development community in implementing this strategy. This consisted of a significant political campaign to promote women, which led to the election of over 20 percent of women in seats in the local administrations and parliament.⁶¹

79. In the **regional GEF ID 1258**, there was no gender analysis completed, nor did it include a gender mainstreaming strategy or plan at CEO endorsement. However, a gender-responsive results framework was developed after the start of implementation—activity 3.2

⁶⁰ GEF ID 3893 Project Document, page 55.

⁶¹ GEF ID 3893 Project Document, page 33.

of outcome 3: develop procedures for improved management/use of resources, especially fish breeding sites, oysters, and shellfish. This will involve a program of participative rural community meetings, especially with fishing cooperatives and women's groups, who are involved in oyster collection.⁶² Stakeholders included women's groups.⁶³ Training and awareness program was conducted in four subregions with a focus on women's groups. The main thrust of the PNBA project was the training of 18 ecoguides, including five women selected from the full complement of Imraguen (fishing) villages within the park.⁶⁴

80. The **national GEF ID 2459** did not have a gender analysis completed at CEO Endorsement. However, its development was implied, and a gender-responsive results framework, including gender-disaggregated indicators, was included. Under component A, one of the activities relates to the establishment and strengthening of watershed associations and decision-making institutions related to watershed/landscape management; and training and assistance to watershed associations and other village associations in the targeted watershed areas, to disadvantaged groups (women, youth, transhumant), and rural communes.⁶⁵ Under component B, activities selected by women were to be encouraged.⁶⁶ Under component C, It was envisaged that the communications plan would eventually establish a group of SLM "champions," made up of representatives of various stakeholders involved or impacted by the project, for instance, local government, community association members, extension service agents, women, and youth.⁶⁷ The terminal evaluation notes positive impact of the project on gender and "the results reinforce the value of a gender-sensitive approach to local development."⁶⁸

81. In the **regional GEF ID 2164**, there is no evidence that a gender analysis, gender mainstreaming strategy or plan, or gender-responsive results framework, was developed or took place. However, there is evidence of women's inclusion and empowerment during project implementation. Practical and theoretical training sessions on income-generating activities (beekeeping and oyster farming) were organized for the population. Subsequently, a horse and cart were purchased to be used for surveillance of areas where fishing is prohibited, and a millet thresher was also purchased that helped to alleviate the burden of chores for village women.⁶⁹ Other training activities designed for specific categories of the population (women, youth, teachers, fishermen, beekeepers, rabbit breeders, construction of the ecotourism camp) contributed to diversifying local sources of revenue and thus reduced the strong pressure on climate change vulnerable resources and biodiversity.⁷⁰

82. Rather surprising, **the national GEF ID 3379** had no gender analysis, and did not include a gender mainstreaming strategy or plan at CEO Endorsement. However, a gender-responsive results framework, including gender-disaggregated indicators, was included. There was also evidence of gender empowerment during project implementation—62

⁶² GEF ID 1258 Project Document, page 257.

⁶³ GEF ID 1258 Project Document, page 136.

⁶⁴ GEF ID 1258 Terminal Evaluation, page 43.

⁶⁵ GEF ID 2459 Project Document, page 46.

⁶⁶ GEF ID 2459 Project Document, page 10.

⁶⁷ GEF ID 2459 Project Document, page 12.

⁶⁸ GEF ID 2459 Terminal Evaluation, page 25.

⁶⁹ GEF ID 2164 Terminal Evaluation, page 22.

⁷⁰ GEF ID 2164 Terminal Evaluation, page 27.

percent of women and young people confirm that they had improved their incomes. There were benefits and income generated from sheep fattening, small-scale trade, and craft activities.⁷¹ Some women claim to have "moved from the status of a housewife totally dependent on the husband, father, brother or uncle to that of a woman engaged in an economic activity, able to contribute financially to household expenses and pay for her own clothing, hairdressing, hygiene, etc."⁷²

83. Even more surprising is that the **national GEF ID 3893** also did not have a gender analysis completed at CEO Endorsement and was rated as gender blind. There is only one mention of gender in the Request for CEO Endorsement.⁷³ However, its development was implied because as stated in the Request for CEO Endorsement, the project is integrated in a wider rural development initiative that is trying to target the poorest of the poor and the most vulnerable segments of the rural society, in which IFAD- and GEF-targeting policies have been carefully used and assessed through the project design phase. The SCCC mission observed that during execution the project was paying attention to gender issues—for instance, reports show the activities from which women have derived the most benefit (market gardening) and indicated the effect of activities on workloads and income of women (BETRA 2019).

84. The most recent and ongoing project evaluated, **GEF ID 5190**, did not have a gender analysis completed at CEO Endorsement, but it does include a gender mainstreaming strategy or plan. The gender dimension was addressed at the inception of the project formulation through the assignment of a gender specialist. The methodological approach of the formulation has focused on the diagnosis and analysis of the socioeconomic situation and data disaggregated by gender. It also incorporated a gender-responsive results framework, including gender-disaggregated indicators. The share of women involved in project design was 25 percent; the share of women targeted as direct beneficiaries was 65 percent.

Resilience

85. Rather surprising for Mauritania is that there is no evidence of resilience thinking in some of the project documents. Only in GEF IDs 2614, 3379, and 3893 is there evidence of resilience thinking as a risk management cobenefit, resilience as incremental change Integrated into multiple benefits framework. For example, for GEF ID 3379 it was stated that the project will promote collective action for the rational use and management of rangelands, the conservation and wise management of water resources, as well as drought-proofing activities such as water harvesting, etc.⁷⁴ For GEF ID 3389, the overall objective is to minimize the risk of reduced productivity and agricultural production caused by the impact of climate change (subcomponent 1.1: improve the resilience of agricultural systems to climate change by promoting suitable methods and practices of SLM, and improve resilience of livestock production systems in oasis and semiarid zones; subcomponent 2.1:

⁷¹ GEF ID 3379 Terminal Evaluation, page 31.

⁷² GEF ID 3379 Terminal Evaluation, page 31.

⁷³ GEF ID 3893 Request for CEO Endorsement, page 12.

⁷⁴ GEF ID 3379 Project Document, page 14.

promotion of resilient pasture management practices; subcomponent 2.3: strengthen livestock resilience to climate change through a referenced animal feeding practices).⁷⁵

86. Only in the most recent project, GEF ID 5190, are there clear linkages in project documents toward country priorities on resilience, with links to the National Adaptation Program of Action and other country strategies in alignment with country priorities. Activities targeting resilience are detailed in the results framework under component 2: resilience of water sector investments and activities, and outcome 2: water sector investments and activities are resilient.⁷⁶ Outputs/activities are as follows:

- Improving mechanisms that monitor and restore water resources (provide and install 85 reference precipitation gauges; Install 165 limnimetric scales)
- Strengthen ecological services of target major wetlands (construct 20 pastoral wells, two borehole-based drinking water supply systems, and two drinking water supply systems from water intakes along the Senegal River; install 6 water harvesting ponds for pastoral needs)
- Protecting sustainably rural water infrastructures and activities (promote good practices deemed resilient and favorable for the replenishment of underground water tables around hydraulic structures; revitalization of the vegetation cover; construction of 600 meters of filtering dykes in the relevant watersheds sites, 200 meters of gabions, 20 hectares of bunds, and 500 meters of filtering dykes in the lowlands; and promote greening cover mechanisms protecting rural water infrastructure, surface area of 46 hectares)
- Supervision and close control of resilience activities and the development of water-harvesting ponds (control localization and execution of drilling water infrastructures, supervise works that involve beneficiary's participation)

Fragility

87. Mauritania is not currently classified as fragile, nor has it been in the past 10 years. It should be noted that earlier than that, during the implementation of the first selected project, the project objective of increasing equitable biodiversity-friendly tourism by an increase in park revenues from tourism, was negatively affected by unexpected security issues—a coup d'état in August 2008, and number of Al Qaeda terrorist attacks on European visitors in other parts of the country—all of which apparently brought about a major reduction in tourist numbers and revenues to the country as a whole, from which it had not recovered nine years later at the time of the SCCC mission. This is a risk factor to be considered in design of projects in the future.

⁷⁵ GEF ID 3389 Request for CEO Endorsement, page 15.

⁷⁶ GEF ID 5190 Request for CEO Endorsement, annex A.

6. Summary of Emerging Findings and Conclusions

88. The Annual Performance Report 2017 ratings for the four completed projects selected for the Mauritania Case Study were:

- GEF ID 1258—outcome: positive, and sustainability: positive
- GEF ID 2459—outcome: negative, and sustainability: negative
- GEF ID 2614—outcome: positive, and sustainability: negative
- GEF ID 3379—outcome: positive, and sustainability: positive

89. As indicated earlier, visits were made to project sites of GEF IDs 1258, 2614, and 2459. Based on results obtained during this case study field mission (stakeholder discussions in the capital and site visits), the assessment of the **mid-term sustainability** of environmental outcomes of projects that had ended at the time of the SCCE mission is as follows:

- GEF ID 1258—sustainability: positive
- GEF ID 2459—sustainability: positive
- GEF ID 2614—sustainability: positive
- GEF ID 3379—sustainability: negative

90. The key factors that affect the **long-term sustainability** of environmental outcomes in Mauritania appear to be the interlinked **postproject funding** and **country ownership**. In all the projects, except GEF ID 3379, the Oases project, the infrastructure investments were robust and are still yielding positive environmental and socioeconomic benefits five to eight years after project completion. This suggests good project design as far as infrastructure is concerned. But the long-term sustainability of the infrastructure projects is threatened by the absence of supporting government or donor activities to protect the investments or give technical and financial assistance to the beneficiaries for maintenance of the infrastructure.

91. Sustainability of **small-scale ALS depends on the existence of positive environmental/socioeconomic nexus** in the medium term. Virtually all the ALS investments in Mauritania have proved to be unsustainable, although they produced economic benefits to households in the short run because beneficiaries have not been able to generate operating funds and capital replacement funds; in other words, they are not cost effective from the point of view of the beneficiaries.

Evidence of Relevance in Relation to National Priorities

92. All GEF-supported projects in Mauritania are in line with the country's national environmental priorities and policies as described. GEF projects were designed within the framework of the national priorities.

93. There is also relevance in relation to GEF focal areas

- **Biodiversity.** The GEF projects have significant components that contribute to generating global environmental benefits in the focal area of biodiversity—Global Environmental Benefit 1: Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society.
- **Land degradation.** One project GEF ID 3379 contributions to Global Environmental Benefit 2: Sustainable land management in production systems (agriculture, rangelands, and forest landscapes).
- **Climate change adaptation and mitigation.** Two projects, GEF ID 3893 and GEF ID 5191, target the adaptation to climate change of the agricultural production systems and water resources in the arid and semiarid areas, as well as poverty reduction and focus on reducing vulnerability to climate change by increasing adaptive capacity.

General Findings on Cross-Cutting Issues

94. All the selected projects in Mauritania, except for the most recent and ongoing project, were not designed explicitly with gender mainstreaming considerations in mind. This is surprising because the country has had a gender strategy in place since 2006. However, all the projects were implemented in a gender-sensitive manner, with clear evidence of women’s inclusion and women’s empowerment at the project level.

95. Rather surprising for Mauritania, there is no evidence of resilience thinking in some of the GEF project documents. Only in three of the selected projects is there evidence of resilience thinking with resilience considerations being integrated as an incremental change in the Multiple Benefits Framework, and only in the most recent project are there clear linkages in project documents with country priorities on resilience.

96. Because Mauritania is not classified as fragile state, none of the project incorporated fragility considerations in their design. However, because of the nature of political systems in the region, fragility should be taken into considerations in all project design in the region.

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Annex A: List of Interviewees

Date	GEF ID	Title	Name	Organization	Title/Position
July 15, 2019			Mohamed Yayha Lafdal, Ph.D.	Ministry of Environment and Sustainable Development	Global Environment Facility (GEF) Operational Focal Point
			Mohamed Camara	Ministry of Environment and Sustainable Development	Admin Assistant, GEF Operational Focal Point
			Brahim Sall	World Bank	Snr Rural Development Specialist
July 16, 2019	5190	Improving Climate Resilience of Water Sector Investments with Appropriate Climate Adaptive Activities for Pastoral and Forestry Resources in Southern Mauritania	Mohamed Jiddoc	Ministry of Water Resources	Director, Water Department
	5190		Samba Malik Thiege	Ministry of Water Resources	Project Coordinator
July 17, 2019	3893	Support to the Adaptation of Vulnerable Agricultural Production Systems	Ahmed Ould Amar	Poverty Reduction Project in Aftout South and Karakoro—Phase II	Project Coordinator
	2459	Community-Based Watershed Management Project	Corera Alhassan	Ministry of Environment and Sustainable Development	Technical Director

Date	GEF ID	Title	Name	Organization	Title/Position
			Ethmane Ould Boubacar	Ministry of Environment and Sustainable Development	Director, Nature Protection, Focal Point UNCCD (United Nations Convention to Combat Desertification)
July 18, 2019	1258	Enhancing Conservation of the Critical Network of Sites of Wetlands Required by Migratory Waterbirds on the African/Eurasian Flyways	Ebaye Ould Mohamed Mahmoud	National Program of Banc d'Arguin	Deputy Director
			Cheibani Senhoury	National Program of Banc d'Arguin	Technical Adviser
			Ousmane Dia	Head of Environment Program, UNDP (United Nations Development Programme)	Head, Environment Program
July 19, 2019	3379	Participatory Environmental Protection and Poverty Reduction in the Oases of Mauritania	Mohamedou Ould Maohamed Laghdaf	PDDO	National Coordinator
	2614	Adaptation to Climate Change - Responding to Shoreline Change and Its Human Dimensions in West Africa through Integrated Coastal Area Management	Amadou Diam Ba	Nafore	President
July 20, 2019	1258		Douda Boukary		Ecotourism Guide, Mamghar

Date	GEF ID	Title	Name	Organization	Title/Position
July 23, 2019	2459		Ahmed Ghali	Watershed Management Association (Associations de Bassins Versant), Beilougue Litama	President
			Mouctar Sy	Ministry of Environment and Sustainable Development	Environment Inspector, Magama, Gorgol

Annex B: List of Field Sites Visited

Site visits were made to, and interviews conducted with stakeholders in the Banc d'Arguin National Park (GEF ID 1258), the Beilougue Litama Watershed in Gorgol Province (GEF ID 2459), and the Coastal littoral of the city of Nouakchott (GEF ID 2614). Geographic positioning system tracker coordinates were recorded for all site visits.

TECHNICAL DOCUMENT 9 - PROJECT REVIEW PROTOCOL



1 BASIC PROJECT INFORMATION (1/2)

* 1. Who is entering the project? Select your name.

* 2. GEF project ID

* 3. Please indicate project's GEF Agency. For multi-agency projects, select the lead GEF Agency.

* 4. Country

* 5. Select the applicable cohort(*select all that apply*)

- ☐ Africa Biomes
- ☐ Least Developed Countries
- ☐ Small Island Developing States

* 6. What is the project's name, according to the Excel overview?

* 7. Select the GEF replenishment period in which this project was approved

- ☐ Pilot Phase (1991-1994) ☐ GEF-4 (2006-2010)
- ☐ GEF -1 (1994-1998) ☐ GEF-5 (2010-2014)
- ☐ GEF-2 (1998-2002) ☐ GEF-6 (2014-2018)
- ☐ GEF-3 (2002-2006)

* 8. What project type applies?

- ☐ Full-sized project ☐ Enabling activity
- ☐ Medium-sized project

* 9. Please select the project status

* 10. Select the source(s) of project financing.
(*Select all that apply*)

- ☐ GEF Trust Fund ☐ LDCF
- ☐ NPIF ☐ CBIT
- ☐ SCCF

* 11. What kind of review will you be conducting for this project?

- ☐ Relevance
- ☐ Relevance and Sustainability (*projects closed between 2007 and 2014*)



2 BASIC PROJECT INFORMATION (2/2)

* 12. What are the documents available, to be used for review?

(Select all that apply)

- ☐ Project Preparation Grant request (PPG) / Project Identification Form (PIF)
- ☐ Project Document (PD/PAD) / Program Framework Document (PFD) / Request for CEO Endorsement
- ☐ Project Implementation Reports (PIRs)
- ☐ Mid-Term Review (MTR)
- ☐ Terminal Evaluation (TE) / Implementation Completion Report (ICR) / Terminal Evaluation Review (TER) / Implementation Completion Report Review (ICRR)
- ☐ Other (please specify)

FOR ALL ANSWERS FROM THIS POINT FORWARD, FOCUS ON THE ASPECTS OF THE PROJECT THAT ARE SUPPORTED BY GEF FUNDING, i.e. those components of the intervention that are meant to produce or (in)directly lead to Global Environmental Benefits.

* 13. **Project Objective(s)** from the latest document *-before implementation -* showing full list of objectives (e.g. PD, PAD, PFD, Request for CEO endorsement). *(Make sure to include the objective for the GEF-funded part of the project)*

* 14. **Project Components** from the latest document *-before implementation -* showing full list of components (e.g. PD, PAD, PFD, Request for CEO endorsement). *(Make sure to include the GEF-funded activities implemented under each component)*

* 15. For completed projects, does the TE / ICR (or TER / ICRR) indicate a change in objectives and/or components from the CEO approved/endorsed document?

☐ Yes

☐ No

If YES, please explain with references:

* 16. Based on the project focal area(s) designation, which focal area(s) does the project intend to provide benefits to?

(Select all that apply - if it is multi-focal and the focal areas are given, then select all focal areas given, if it is multi-focal without focal area designation, then select multi-focal)

☐ Biodiversity

☐ Mercury

☐ Climate Change (Mitigation)

☐ Ozone Depleting Substances (ODS)

☐ Climate Change Adaptation (LDCF/SCCF only)

☐ Persistent Organic Pollutants (POP)

☐ International Waters

☐ Multi-Focal *(for multi-focal area projects without focal area designation)*

☐ Land Degradation

For the next question:

If there are no focal areas beyond the intended focal area(s) as written in the previous question ->

Select the focal areas as they were selected in the previous question.

If the answer on the previous question was 'multi-focal project without focal area designation' ->

Select 'N/A'.

* 17. Based on project objective(s), components and activities, are there focal areas that are not officially mentioned but covered as co-benefits? Which focal areas does the project intend to provide direct benefits and co-benefits to?

(Check all that apply)

☐ Biodiversity

☐ Mercury

☐ Climate Change (Mitigation)

☐ Ozone Depleting Substances (ODS)

☐ Climate Change Adaptation (LDCF/SCCF only)

☐ Persistent Organic Pollutants (POP)

☐ International Waters

☐ N/A

☐ Land Degradation

* 18. Does the project documentation describe the GEF Agency's / Agencies' comparative advantage for being engaged in the project? *(Feel free to search all project documentation)*

☐ Yes

☐ No

If YES, do provide the text and reference. And do provide the comparative advantage for all GEF Agencies, in case of a multi-agency project:

3 RELEVANCE (1/2)

* 19. For the selected country, please indicate main environmental challenges.

(Check all that apply, based on the approach papers and country selection papers)

☐ Climate change; Sea level rise	☐ Threats to in-land water / freshwater fishery resources
☐ Natural disasters	☐ Threats to land-based biodiversity
☐ Deforestation and Land Degradation	☐ Waste management
☐ Desertification	☐ Air quality and air pollution
☐ Coastal and coral reef degradation	☐ Water quality and quantity
☐ Threats to marine resources	☐ Mining and other forms of resource extraction

* 20. For the selected project, please indicate the main environmental challenges the project aims to address.

(Check all that apply, based on the PD, PAD, PFD, Request for CEO endorsement)

☐ Climate change; Sea level rise	☐ Threats to land-based biodiversity
☐ Natural disasters	☐ Waste management
☐ Deforestation and Land Degradation	☐ Air quality and air pollution
☐ Desertification	☐ Water quality and quantity
☐ Coastal and coral reef degradation	☐ Mining and other forms of resource extraction
☐ Threats to marine resources	☐ N/A - Other challenge not mentioned above
☐ Threats to in-land water / freshwater fishery resources	

21. In case the project addresses environmental challenges not mentioned in the previous question, please describe them below:



4 RELEVANCE (2/2)

The following questions refer specifically to the individual SCCEs; Africa Biomes - Sahel and Savannah / Least Developed Countries / Small Island Developing States. In case the project covers multiple SCCEs, answer in the text box for each.

SCCE's covered: {{ Q5 }}

* 22. Does the project description talk about specific relevance of the project to country priorities, as they are for the specific SCCE(s) covered?

(Always explain your answer)

- ☐ Yes, clearly
- ☐ Yes, to some extent
- ☐ No

Please explain your answer:

* 23. Does the contextual description talk about specific environmental challenges for the country covered? Focus on specific Sahel or Savannah, LDC or small island environmental challenges.

(Always explain your answer)

- ☐ Yes, clearly
- ☐ Yes, to some extent
- ☐ No

Please explain your answer:

* 24. Do the objectives, components and/or activities take into account the specific environmental challenges identified in the previous question?

(Always explain your answer)

- ☐ Yes, clearly
- ☐ Yes, to some extent
- ☐ No

Please explain

* 25. In case of SIDS, is there evidence of using an integrated island management / ridge-to-reef / blue economy approach?

(Always explain your answer)

- ☐ Yes, clearly
- ☐ Yes, to some extent
- ☐ No

Please explain

* 26. In case of SIDS, are transaction costs (the cost of doing business on the islands) mentioned in the project design?

- ☐ Yes, clearly
- ☐ Yes, to some extent
- ☐ No

Please explain



5 TYPES OF INTERVENTIONS

Project Components:

{{ Q14 }}

* 27. Based on the Project Components above, what are the areas of contribution for this GEF project?

(Select all that apply)

☐ Knowledge and information – Knowledge generation	☐ Institutional capacity – Governance structures and arrangements
☐ Knowledge and information – Information sharing and access	☐ Institutional capacity – Informal processes for trust building and conflict resolution
☐ Knowledge and information – Awareness-raising	☐ Implementing strategies – Technologies and approaches
☐ Knowledge and information – Skills-building	☐ Implementing strategies – Implementing mechanisms and bodies
☐ Knowledge and information – Monitoring and evaluation	☐ Implementing strategies – Financial mechanisms for implementation and sustainability
☐ Institutional capacity – Policy, legal and regulatory frameworks	

6 ENVIRONMENTAL AND SOCIOECONOMIC INDICATORS

* 28. Which global environmental benefits (GEBs) are identified in the project documents? *(Select all that apply)*

- ☐ GEB 1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society.
- ☐ GEB 2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)
- ☐ GEB 3. Promotion of collective management of trans-boundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services.
- ☐ GEB 4. Support to transformational shifts towards a low-emission and resilient development path.
- ☐ GEB 5. Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global concern.
- ☐ GEB 6. Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and sub-national policy, planning financial and legal frameworks.
- ☐ Other GEB mentioned, different from the above (please copy-paste in comment field)
- ☐ No GEBs identified.

Please provide information if GEB targets have been set for the project:

Environmental change (refers to improved environmental status and stress reduction): Indicators should capture the changes in environmental stress and environmental status that occurred by the end of the project. Include both quantitative and qualitative changes documented, sources of information for these changes, and how project activities contributed to or hindered these changes. Also include how contextual factors have contributed to or hindered these changes.

* 29. Looking at the indicators in the project's logical framework / monitoring tool, which environmental domains do they measure? *(Select all that apply)*

☐ Climate change; sea level rise (Examples; Sea level rise measurement stations operational Increase in flooding in coastal areas Amount of land lost due to sea level rise Marine erosion due to sea level rise Development of sea level rise scenarios Intrusion of salt water into the freshwater lens due to sea level rise) ☐ Natural disasters (Examples; Contingency plan for flood events has been developed Flood control thematic committee has been developed Disaster management and contingency planning system built into EIMAS and used) ☐ Deforestation and land degradation, incl. SLM (Examples; % decrease in firewood collection in pilot oases Community forest reserves have been established in two-third of the targeted areas Rates of deforestation in the Albertine Rift have decreased by 50% of baseline levels Communities sign at least 10 forest management plans and start implementation 19,200 ha of degraded landscape under afforestation programs such as tree planting, agro-forestry wood lots and commercial fuel wood plantations Percentage increase in area under sustainable land management practices in the targeted watersheds Increase of vegetative cover by at least 25,000 ha by project end)	☐ Waste management (Examples; Environmentally friendly waste disposal in place Battery recycling system established and functioning Landfill gas potential surveyed) ☐ Water quality and quantity (Examples; Water conservation techniques applied on 10% of farmland Increased discharge capacity of key relief canal Number of water locations assessed and supply improvements implemented Comprehensive assessment of solid waste generation established) ☐ Mining and other forms of resource extraction (Examples; Reclaiming and rehabilitation of X abandoned mining sites Decrease in sand mining Decrease in coral mining for construction Improvements in more sustainable minerals processing Threats from production of non renewable resources - oil and gas, mining and quarrying) ☐ Climate change mitigation, emission reduction (Examples; The annual growth of GHG emissions from fossil fuel-based activities in the country are reduced by about 2.0% RE-based energy system project implementers are reporting bi-annually the energy and GHG reduction impacts of their respective projects Cumulative CO2 reductions exceeding triple the direct impacts over an additional 10- year period Percentage increase for carbon sequestered)

☐ **Desertification** (Examples; Precipitation deficit | Availability of water for agricultural practices | Development of national plans to fight desertification | Development of a desertification information system | Introduction of SLM practices to control and combat desertification | Reduction of desertification in priority ecosystems)

☐ **Coastal and coral reef degradation** (Examples; Illegal practices and over-exploitation of coastal resources decreased by 50% in average in CBCAs | Local communities in and around protected areas practice diverse community-driven, sustainable use of coastal natural resources | Biennial biological survey confirms that reef condition at demonstration MPA improves beyond established baseline)

☐ **Threats to marine resources** (Examples; Improved management of marine habitats of important species | Number of communal marine and coastal biodiversity sites, including wetlands areas demarcated and protected | Technical working groups on marine biodiversity management established | 50 % of marine project supported area brought under sustainable management practices)

☐ **Threats to freshwater fishery resources** (Examples; Health and function maintained or improved within fishing reserves | Management effectiveness of three fishing reserves improved | Joint planning of short term sustainable development activities among different actors in the watershed | Area of MPA watershed managed and legally recognized)

☐ **Threats to terrestrial biodiversity** (Examples; Populations of faunal indicator species increase, indicating improved ecosystem integrity | Reduction in illegal hunting of wildlife | Biodiversity conservation considerations fully integrated into agricultural sector activities | Number of agricultural biodiversity micro-projects implemented | Removal or control of alien species)

☐ **Renewable energy and energy efficiency** (Examples; Fossil fuels (diesel and fuel-oil) displaced by renewable energy technologies – biomass and wind turbines for power generation for grid and process heat | Increase in the number of biomass fuel service providers and industrial units to support biomass gasifier plants | # solar power generators and refrigerators installed and operative)

☐ Unable to assess (Documents not available)

☐ Other, namely:

☐ No environmental aspects; focus on general capacity building.

Provide source (the types of documents and their respective page numbers) where environmental indicators/ targets can be found, or explain why unable to assess:

Socioeconomic change. Describe any changes in human well-being (income, education, health, community relationships, etc.) that occurred by the end of the project. Include both quantitative and qualitative changes documented, sources of information for these changes, and how project activities contributed to or hindered these changes. Also include how contextual factors have contributed to or hindered these changes.

* 30. Looking at the indicators in the project's logical framework / monitoring tool, which socioeconomic aspects and cross cutting domains do they measure? (Select all that apply)

☐ (Alternative) income generation and income diversification (Examples; Tourism income increased New income streams (jobs) and employment opportunities developed % decrease in number of rural households below the poverty line in the targeted oasis Two-fold increase in income being generated for local communities from non-timber forest resources by EOP) ☐ Food security and access to food (Examples; Improved food security for rural households as a result of sustainable conservation of biological and agricultural diversity Increased crop yield Percentage increase in agricultural productivity (for dominant crops and livestock) ☐ Health and access to medicine / health services (Examples; Frequency of flooding causing disruption of hospital services reduced Increase in access to health services for targeted communities) ☐ Education and access to education (Examples; Environmental education introduced into village schools Education curriculum and demos/competitions for biodiversity conservation developed for elementary and high school Natural resource valuation curriculum integrated into course offerings of higher learning institutions) ☐ Other communal services and access to them (Examples; Percentage of targeted communes that increase the rate of coverage of social services by more than 2% Increase in access to communal water schemes Performance-based contracts with public services satisfactorily implemented at communal level) ☐ Market development (Examples; More retailers entering the solar PV market Reduced retail prices of Solar PV Incentive schemes and tax waivers for attracting renewable energy service providers Assessment completed of the viability of local manufacturing of RE system equipment and/or components) ☐ Civil society engagement and development (Examples; NGO capacity is strengthened to galvanize the impact of their efforts by improved cooperation Community associations, producers' organizations and marginalized groups are enabled to actively engage in ecosystem management schemes NGOs and CSOs actively promoting sustainable land management) ☐ Financial market development and access to finance (Examples; National micro-finance market reformed Banks willing to lend and over longer terms for the purchasing of solar PV systems RE-based projects are being considered for financing by private and government financial institutions and commercial banks)	☐ Gender equality and women's empowerment - cross cutting issue (Examples; Percentage of women beneficiaries Gender perspective taken into account in grant selection Women's producer organizations retain control of the money they earn Numbers of women participating in decision-making Increased participation of women in the micro-catchment management planning process) ☐ Resilience - cross cutting issue (Examples; % change in vulnerability to climate change of men, women and children living in pilot sites Consistent use of best practice in the application of risk management and environmental assessment, consistent with relevant defined strategic aims and policies to vulnerability reduction measures) ☐ Fragility - cross cutting issue (Examples; Disruption caused by risk events, eg. hurricanes, general elections, etc.) Number of days of delays because of risk events Increase in ecological fragility) ☐ Private sector engagement - cross cutting issue (Examples; Replicable model of conservation of globally threatened small island biodiversity based on a collaborative model between NGOs and private sector Local NGOs and private sector have created and are operating an "investment advice facility" 50% of the trained private sector personnel engaged in RE-based project development and implementation activities) ☐ Unable to assess (Documents not available) ☐ No socioeconomic aspects ☐ Other, namely:

Provide source (the types of documents and their respective page numbers) where socioeconomic indicators/ targets can be found, or explain why unable to assess, or explain other:

Capacity and governance changes (refers to the three GEF contribution areas: Implementing Strategies, Institutional Capacity, Knowledge and Information). Describe notable changes in capacities and governance that can lead to large-scale action (both mass and legislative) bringing about positive environmental change. “**Capacities**” include awareness, knowledge, skills, infrastructure, and environmental monitoring systems, among others. “**Governance**” refers to decision-making processes, structures and systems, including access to and use of information, and thus would include laws, administrative bodies, trust-building and conflict resolution processes, information-sharing systems, etc. Indicate how project activities contributed to/ hindered these changes, as well as how contextual factors have influenced these changes.

* 31. Looking at the indicators in the project's logical framework/ monitoring tool, which capacity, institutional and governance domains do they measure? (Select all that apply)

☐ Institutional and decision-making processes, structures and systems (Examples; Capacities and institutional mechanisms for local government enhanced FBG decision and execution structures established and meeting in accordance with TORs and timetable defined in the Statutes Institutional mechanisms for local government and communities enhanced, showing concrete instances of joint decision making in all PAs by end of year 6) ☐ Decision-makers' information and access to information (Examples; Extend of inclusion/use of traditional knowledge in environmental decision-making Adequacy of the environmental information available for decision-making Watershed management plan produced to guide decision-making with regards to management and conservation of the area Collected data is being fed into management decisions) ☐ Development of plans, policies, codes, covenants, laws and regulations (Examples; By Year 3 associated legislative and policy reforms are in place Building code includes freshwater collection and storage as an objective SLM integrated in National Policies, Laws, Development and Investment Plans Law on Protected Areas and Law on Protection of Fauna and Flora enacted) ☐ Trust-building and conflict resolution (Examples; Number of conflicts reduced by 10 % by the end of the first phase of the CPP 50 (of which 27 new) Conflict Resolution Frameworks effectively operational by mid-term review Land-use conflict litigation commissions are fully operational in at least 50 communes by the midterm review) ☐ Awareness raising (Examples; Key sectors show increased awareness relative to the need and desirability of SIRM Number of awareness campaigns on biodiversity, including wetlands conservation organized for the people in the three coastal communities Various media have disseminated information on new environmental laws within six months of legislation being enacted Increase in awareness of senior decision-makers on the importance of LD) ☐ Capacity and skills development (Examples; GSW farmers have been trained and are adopting biodiversity-friendly agricultural techniques At least 30 Natural parks managers and staff trained in PA management Continuous training and planning sessions provided to PAMO staff on an ongoing basis throughout project, based on skills gaps and needs assessment)	☐ Knowledge management; information-sharing and systems (Examples; Geographic information system data base on biodiversity conservation, including wetlands management for the three sites developed and in use Operational database on SLM techniques by the end of the first phase Lessons learned from pilot project are widely disseminated) ☐ Environmental monitoring systems (Examples; Joint protection patrol and monitoring systems established and in use Land information systems have been adapted to local and national needs, and are functional 3 key endangered and threatened species data management systems designed and in place Sustainable mechanism to update the environmental information through monitoring and reporting established Biodiversity monitoring system indicating improvement in ecosystem integrity and health) ☐ Unable to assess (Documents not available) ☐ No capacity, institutional and governance aspects ☐ Other, namely:

Provide source (the types of documents and their respective page numbers) where capacity, institutional and governance indicators/ targets can be found, or explain why unable to assess, or explain other:

7 TRADE-OFFS, SYNERGIES AND RISKS

Trade-off expresses the idea that “when some things are gained, others are lost”. It is the notion that it is not possible to maximize benefits in two or more sectors at the same time. Trade-offs can be between sector objectives, between environmental and socioeconomic outcomes, between geographic locations, and between global and local benefits, in addition to temporal trade-offs between short-term and long-term benefits.

Synergy refers to multiple benefits that are achieved either simultaneously through a single intervention, or through the interaction of outcomes of at least two interventions. Synergy is also used to refer to the benefits achieved by a project or program in more than one sector.

* 32. Do any of the project documents mention trade-offs and/or synergies between environmental and socioeconomic outcomes that might occur or have occurred as a result of this project?

(Keywords: trade-off, trade off, tradeoff, synergy, synergies, nexus)

☐ Yes

☐ No

Please copy-paste / type details here, including references:

* 33. Do any of the project documents mention mitigation actions / strategies towards trade-offs and/or synergies being mitigated or synergies created between environmental and socioeconomic outcomes as a result of this project?

(Keywords: trade-off, trade off, tradeoff, synergy, synergies, nexus)

☐ Yes, for all or most

☐ Yes, for some

☐ No.

Please copy-paste / type details here, including references:

* 34. Has the project indicated risks - including climatic as well as non-climatic risks - that might prevent the project objectives from being achieved?

- ☐ **Yes, sufficiently:** A sufficiently wide variety of risks, climatic as well as non-climatic, has been identified, including a description of their potential impact as well as the probability of each risk materializing within the project's lifetime.
- ☐ **Yes, but not sufficiently:** A selection of risks have been identified, but some risk factors one would expect in the country's context have not been mentioned, and risk impact and/or probability are missing in some instances.
- ☐ **Yes, but with serious omissions:** Some risks have been identified, but a number of major risk factors are missing. The risk impact is not described for all risks and the probability is missing for most.
- ☐ **No:** There is no clear risk appreciation.

Please copy-paste / type details here, including references:

* 35. Does the project provide risk mitigation strategies, or actions to be taken in the case that identified risks would materialize?

- ☐ Yes, for all or most
- ☐ Yes, for some
- ☐ No

Please copy-paste / type details here, including references:



8 CROSS CUTTING - GENDER

* 36. Did the project have a gender analysis completed at CEO Endorsement?

(Based on the PD, PAD, PFD, Request for CEO Endorsement)

☐ Yes

☐ No

☐ No, but its development is implied

Please provide further information if the answer is 'yes' or 'no, but its development is implied'.

* 37. Did the project include a gender mainstreaming strategy or plan at CEO endorsement?

(Based on the PD, PAD, PFD, Request for CEO Endorsement)

☐ Yes

☐ No

☐ No, but its development is implied

Please provide further information if the answer is 'yes' or 'no, but its development is implied'.

* 38. Did the project incorporate a gender-responsive results framework, including gender-disaggregated indicators, at CEO endorsement?

(Based on the PD, PAD, PFD, Request for CEO Endorsement)

☐ Yes

☐ No

☐ No, but its development is implied

Please provide further information if the answer is 'yes' or 'no, but its development is implied'.

* 39. If the answer was **NOT YES** on the previous three questions; is there evidence in the TE/TER (or ICR/ICRR) that a gender analysis, gender mainstreaming strategy or plan, or gender-responsive results framework, was developed or took place?

- ☐ Yes, a gender analysis was done after implementation start
- ☐ Yes, a gender mainstreaming strategy or plan was developed after implementation start
- ☐ Yes, a gender-responsive results framework was developed after implementation start
- ☐ No, no evidence on the above

Please provide further information:

* 40. Gender dis-aggregated data (as %)

Share of women involved in project design

Share of women targeted as direct beneficiaries

Share of women in lead project management roles

* 41. Is there evidence of women's inclusion and empowerment in the project TE/ICR (or TER/ICRR)?

- ☐ Yes
- ☐ No

Please explain (copy the section below)

Gender rating

Gender-blind: Project does not demonstrate awareness of the set of roles, rights, responsibilities, and power relations associated with being male or female.

Gender-aware: Project recognizes the economic / social / political roles, rights, entitlements, responsibilities, obligations and power relations socially assigned to men and women, but might work around existing gender differences and inequalities, or does not sufficiently show how it addresses gender differences and promotes gender equality.

Gender-sensitive: Project adopts gender sensitive methodologies (a gender analysis or social analysis with gender aspects is undertaken, gender disaggregated data are collected, gender sensitive indicators are integrated in monitoring and evaluation) to address gender differences and promote gender equality.

Gender-mainstreamed: Project ensures that gender perspectives and attention to the goal of gender equality are central to most, if not all, activities. It assesses the implications for women and men of any planned action, including legislation, policies or programs, in any area and at all levels.

Gender-transformative: Project goes beyond gender-mainstreaming and facilitates a 'critical examination' of gender norms, roles, and relationships; strengthens or creates systems that support gender equity; and/or questions and changes gender norms and dynamics.

Not gender-relevant: Gender plays no role in the planned intervention. (Note that in practice it is rare for projects to not have any gender relevance. If a project touches upon the lives of people, either directly or indirectly, it has gender relevance).

* 42. What is the project's gender rating at entry?

(Based on the PD, PAD, PFD, Request for CEO Endorsement)

* 43. What is the project's gender rating at completion?

(Based on the TE, TER, ICR, ICRR)



9 CROSS CUTTING - RESILIENCE (1/2)

* 44. Is there a mention of resilience or resilience thinking in the project documents?

(Look for resilient, resilience, vulnerability, adaptability, adaptive capacity)

- ☐ Yes
- ☐ No
- ☐ Unable to assess

10 CROSS CUTTING - RESILIENCE (2/2)

In the context of the GEF, climate resilience may be considered at three levels:

Resilience as risk management: A first level of response emerges from pure risk management considerations: sustained delivery of future GEB's is at risk from climate change; therefore, projects ought to be screened for climate risks, and suitable risk management measures should be developed and adopted in project design and implementation. This would increase the resilience of the GEF portfolio to climate change. Such a de-risking approach is now being widely adopted by most multilateral and bilateral funding organizations, starting with the development and adoption of screening tools.

Resilience as a co-benefit: GEF focal area interventions offer the opportunity of enhancing resilience of human socio-economic systems to climate change; it is therefore worth seeking resilience co-benefits of GEF focal area interventions, or in some cases, use approaches practiced in other focal areas, specifically for enhancing the climate resilience of human systems. This is the underlying logic of ecosystem-based adaptation, where ecosystem restoration serves as a means for reducing the vulnerability of human socio-economic systems.

Resilience integrated into a multiple benefits framework: It is increasingly important to develop frameworks and approaches that allow multiple objectives and multiple benefits to be achieved simultaneously across social and natural systems. In this framing, resilience is not seen as an add-on (additional risk to be managed) or a co-benefit, but rather as a system property that needs to be considered together with all of the other system properties, and thus linked to the idea of sustainable development.

Reference: *Delivering Global Environmental Benefits for Sustainable Development. STAP Report to the 5th GEF Assembly, México, May 2014.*

* 45. Is there evidence of resilience thinking in project documents as:

(Select all that apply)

- ☐ Risk management
- ☐ Co-benefit
- ☐ Integrated into multiple benefits framework
- ☐ Yes, but not in line with above three answer options

The type of resilience system thinking

Resilience from a systems or engineering perspective (absorptive): This was the original, relatively narrow focus of resilience; the ability of a system to bounce back or return to equilibrium following disturbance, referred to by Holling (1973) as 'engineering resilience'. This comes down to absorptive (coping) capacity, which Cutter et al. (2008, p.663) define as 'the ability of the community to absorb event impacts using predetermined coping responses'.

Resilience as incremental change (adaptive): adaptive resilience refers to the various adjustments (incremental changes) that people undergo in order to continue functioning without major qualitative changes in function or structural identity. These incremental adjustments and changes can take many forms (e.g. adopting new farming techniques, change in farming practices, diversifying livelihood bases, engaging in new social networks, etc). These adaptations can be individual or collective, and they can take place at multi-level (intra-household, groups of individuals/households, community, etc).

Resilience as transformational change (transformative): transformational changes often involve shifts in the nature of the system, the introduction of new state variables and possibly the loss of others, such as when a household adopts a new direction in making a living or when a region moves from an agrarian to a resource extraction economy. It can be a deliberate process, initiated by the people involved, or it can be forced on them by changing environmental or socioeconomic conditions.

What the growing body of literature that discusses transformational changes highlights is that the main challenges associated with transformation are not of a technical or technological nature only. Instead, as pointed out by O'Brien (2011), these shifts may include a combination of technological innovations, institutional reforms, behavioral shifts and cultural changes.

Reference: Béné, C., Godfrey-Wood, R., Newsham, A., and Davies, M., 2012. *Resilience: New utopia or new tyranny? Reflection about the potentials and limits of the concept of resilience in relation to vulnerability reduction programmes*. IDS working Paper 405. Brighton: Institute of Development Studies (IDS). ISBN 978 1 78118 091 4.

* 46. For the resilience thinking mentioned above, what kind of resilience thinking?

	type of resilience system thinking
Risk management	
Co-benefit	
Integrated into multiple benefits framework	

47. Feel free to add information on your scoring of the previous question.(Only a short recap if you feel it is interesting how they approached resilience, with references)

* 48. Are there clear linkages in project documents towards country priorities on resilience?

- ☐ Yes
- ☐ No

Please explain



11 CROSS CUTTING - FRAGILITY

* 49. Is the project country currently classified as fragile?

(Note that if the fragility is only marked as 'other' for 2006 - 2008, select 'NO')

- ☐ Yes, currently classified fragile
- ☐ No, but it was classified as fragile in the last 10 years
- ☐ No, not currently fragile or fragile in the past 10 years

50. Does the contextual description in the project documents talk about the country's / countries (in case of regional projects) fragility status? *(From the PD, PAD, PFD, Request for CEO Endorsement)*

- ☐ Yes, clearly
- ☐ Yes, to some extent
- ☐ No, and it should have
- ☐ No, because the country was not fragile during the time of project implementation.
- ☐ No, because the country was not fragile when the project was designed.
- ☐ No, and it is unclear if the country was fragile at the time of design or implementation; the project was implemented before 2006 - the first year of the fragility index.

Please explain

* 51. Did GEF interventions stop or got put on hold due to fragility status?*(This can be reported in the PIR's, MTR or TE and TER (ICR and ICRR))*

- ☐ Yes, GEF activities are currently on hold or stopped
- ☐ Yes, GEF activities were on hold but have continued later
- ☐ No

Please explain

* 52. Does the TE/ICR (or TER/ICRR) discuss the impact of country / countries (in case of regional projects) fragility on project outcomes or sustainability?

☐ Yes

☐ No

Please explain



12 CROSS CUTTING - PRIVATE SECTOR

* 53. Is there evidence in project documents of consultation / engagement with the private sector during design or project start?

- ☐ Yes, to use private sector stakeholders' input in project design ☐ Yes, to enthuse them to fund beyond project timeframe
☐ Yes, to enthuse them during design to co-finance the project ☐ Yes, with a different aim (explained in the comment field)
☐ Yes, to inform private sector stakeholders of the project ☐ No, there is no evidence of private sector engagement
☐ Yes, to get them on board from inception

Please specify if there is a different aim for private sector engagement, and provide background information for all answers:

* 54. Is there evidence in project documents of country / countries (in case of regional projects) regulatory frameworks enabling private sector to address environmental issues?

- ☐ Yes ☐ No

If there is, please provide further information:

* 55. Is there evidence in project documents of public private partnerships for the implementation of the project?

- ☐ Yes ☐ No

If there is, please provide further information:

* 56. Is there evidence in project documents of private sector co-financing of the project?

☐ Yes

☐ No

If there is, please provide the amount and type (loan, grant, in-kind, etc.) of private sector co-financing, if that information is available.

* 57. Is there evidence in the TE/ICR (or TER/ICRR) of private sector financing beyond the project's timeframe?

☐ Yes

☐ No

If there is, please provide the amount and type (loan, grant, in-kind, etc.) of anticipated private sector financing beyond the project's timeframe, if that information is available.



13 SUSTAINABILITY COHORT - PROJECT OUTCOMES

* 58. Please provide the APR project outcome rating

* 59. Is there a section in the TE/TER or ICR/ICRR or APR Review on project outcomes?

☐ Yes

☐ No

☐ Unable to assess / documents missing

60. If yes, copy explanation on ratings from one of the following sources of information: 1) APR Review Document, 2) TER or ICRR, 3) TE or ICR.

(Provide the reference for each explanation)

14 SUSTAINABILITY COHORT - PROJECT SUSTAINABILITY

* 61. Please provide project sustainability ratings

	Overall	Financial	Political	Institutional	Environmental
Sustainability Rating					

* 62. Is there is section in the TE/TER or ICR/ICRR or APR Review on project sustainability?

- ☐ Yes
- ☐ No
- ☐ Unable to assess

63. If yes, copy explanation on ratings from one of the following sources of information: 1) APR Review Document, 2) TER or ICRR, 3) TE or ICR.

(Provide the reference for each explanation)

15 SUSTAINABILITY COHORT - BROADER ADOPTION

Broader adoption is said to have taken place when governments and other stakeholders adopt, expand, and build on the initiatives that the GEF funds, during program/project implementation or afterwards, as a result of initial successes.

Broader adoption occurs through five mechanisms: sustaining, mainstreaming, replication, scaling-up, and market change.

Sustaining. A GEF-supported intervention or outcome is continued to be implemented by the original beneficiaries without GEF support through clear budget allocations, implementing structures, and institutional frameworks so they can keep reaping the benefits and provide incentives for adoption by other stakeholders.

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

Replication. A GEF-supported intervention is reproduced at a similar administrative or ecological scale, often in other geographical areas or regions.

Higher level mechanisms:

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

Market change. A GEF-supported intervention influences economic demand for and supply shifts to more environment-friendly products and services. Market change may encompass technological changes, policy and regulatory reforms, and financial instruments.

* 64. Based on documents (i.e. TE, TER, ICR, ICRR, APR rating document), did ANY broader adoption take place, **during the project's implementation**?

(Fill out for each mechanism, only one answer per row)

	Yes (implemented and/ or showing results)	Some concrete action taken but not (yet) fully implemented	Planned / discussed in detail but not (yet) implemented	Mentioned / intended but no detailed plans or discussions (yet)	Nothing has taken place
Sustaining	☐	☐	☐	☐	☐
Mainstreaming	☐	☐	☐	☐	☐
Replication	☐	☐	☐	☐	☐
Scaling-up	☐	☐	☐	☐	☐
Market change	☐	☐	☐	☐	☐

Copy-paste/ type any details reported on broader adoption of outcomes, including extent of adoption , scales and locations at which adoption took place, and how it took place.

* 65. Based on documents (i.e. TE, TER, ICR, ICRR, APR rating document), is there ANY evidence of likely broader adoption **after the project's implementation**?

(Fill out for each mechanism, only one answer per row)

	Yes, follow-on interventions designed	Yes, governance structures in place	Yes, financing in place	No, but detailed discussion / planning taking place	Only mentions and intentions, but no detailed discussions or plans	Nothing planned or taking place
Sustaining	☐	☐	☐	☐	☐	☐
Mainstreaming	☐	☐	☐	☐	☐	☐
Replication	☐	☐	☐	☐	☐	☐
Scaling-up	☐	☐	☐	☐	☐	☐
Market change	☐	☐	☐	☐	☐	☐

Copy-paste/ type any details reported on broader adoption of outcomes, including extent of adoption , scales and locations at which adoption took place, and how it took place.

As a reminder for the next question, GEF's areas of contribution are:

Knowledge and information: Knowledge generation, information sharing and access, awareness-raising, skills-building and monitoring and evaluation.

Institutional capacity: Policy, legal and regulatory frameworks, governance structures and arrangements, informal processes for trust building and conflict resolution.

Implementing strategies: Technologies and approaches, implementing mechanisms and bodies, financial mechanisms for implementation and sustainability.

And.. **Production of a public service or good:** The project developed or introduced new knowledge, policies, financial or institutional arrangements, technologies and/or approaches, but no significant actions were taken to build on this achievement.

Piloting and demonstration: The project developed or introduced new knowledge, policies, financial or institutional arrangements, technologies and/or approaches, but no significant actions were taken to build on this achievement.

You previously selected the following areas of contribution for this project:

{{ Q27 }}

* 66. Based on documents (i.e. TE, TER, ICR, ICRR, APR rating document), what are the areas of contribution for initiated, implemented and planned broader adoption, or activities in support of broader adoption?

(Fill out for each mechanism, multiple options possible)

	Knowledge and information	Institutional capacity	Implementing strategies	None
Production of a public good or service	☐	☐	☐	☐
Piloting and demonstration	☐	☐	☐	☐
Sustaining	☐	☐	☐	☐
Mainstreaming	☐	☐	☐	☐
Replication	☐	☐	☐	☐
Scaling-up	☐	☐	☐	☐
Market change	☐	☐	☐	☐

Copy-paste/ type any details reported on broader adoption of outcomes, including extent of adoption , scales and locations at which adoption took place, and how it took place.



16 SUSTAINABILITY COHORT - ENVIRONMENTAL OUTCOMES (1/2)

* 67. Does the project TE/ICR (or TER/ICRR) report any POSITIVE environmental outcomes / changes / trends?

☐ Yes

☐ No

Copy-paste/ type the details of any reported positive environmental outcomes.

As much as possible, provide quantitative before-after measures, and the scale/ locations at which these occurred.

* 68. Does the project's TE/ICR (or TER/ICRR) report any NEGATIVE environmental outcomes, lack of achievement of environmental outcomes, or are environmental outcomes at risk of being reversed?

☐ Yes

☐ No

Copy-paste/ type the details of any reported negative environmental outcomes.

As much as possible, provide quantitative before-after measures, and the scale/ locations at which these occurred.

17 SUSTAINABILITY COHORT - ENVIRONMENTAL OUTCOMES (2/2)

Positive changes / trends:

{{Q67}}

* 69. For which environmental aspects are the above positive changes / trends reported in the TE/ICR (or TER/ICRR)?

☐ Climate change; sea level rise	☐ Threats to terrestrial biodiversity
☐ Natural disasters	☐ Waste management
☐ Deforestation and land degradation, incl. SLM	☐ Water quality and quantity
☐ Desertification	☐ Mining and other forms of resource extraction
☐ Coastal and coral reef degradation	☐ Climate change mitigation, emission reduction
☐ Threats to marine resources	☐ Renewable energy and energy efficiency
☐ Threats to freshwater fishery resources	☐ Unable to assess (Documents not available)
☐ Other, namely:	

Negative changes / trends:

{{Q68}}

* 70. For which environmental aspects are the above negative changes / trends reported in the TE/ICR (or TER/ICRR)?

☐ Climate change; sea level rise	☐ Threats to terrestrial biodiversity
☐ Natural disasters	☐ Waste management
☐ Deforestation and land degradation, incl. SLM	☐ Water quality and quantity
☐ Desertification	☐ Mining and other forms of resource extraction
☐ Coastal and coral reef degradation	☐ Climate change mitigation, emission reduction
☐ Threats to marine resources	☐ Renewable energy and energy efficiency
☐ Threats to freshwater fishery resources	☐ Unable to assess (Documents not available)
☐ Other, namely:	



18 SUSTAINABILITY COHORT - SOCIOECONOMIC OUTCOMES (1/2)

* 71. Does the project TE/ICR (or TER/ICRR) report any POSITIVE socioeconomic outcomes / changes / trends?

☐ Yes

☐ No

Copy-paste/ type the details of any reported positive socioeconomic outcomes.

As much as possible, provide quantitative before-after measures, and the scale/ locations at which these occurred.

* 72. Does the project's TE/ICR (or TER/ICRR) report any NEGATIVE socioeconomic outcomes, lack of achievement of socioeconomic outcomes, or are socioeconomic outcomes at risk of being reversed?

☐ Yes

☐ No

Copy-paste/ type the details of any reported negative socioeconomic outcomes.

As much as possible, provide quantitative before-after measures, and the scale/ locations at which these occurred.



19 SUSTAINABILITY COHORT - SOCIOECONOMIC OUTCOMES (2/2)

Positive changes / trends:

{{Q71}}

* 73. For which socioeconomic aspects are the above positive changes / trends reported in the TE/ICR (or TER/ICRR)?

☐ (Alternative) income generation and income diversification	☐ Financial market development and access to finance
☐ Food security and access to food	☐ Gender equality and women's empowerment - cross cutting issue
☐ Health and access to medicine / health services	☐ Resilience - cross cutting issue
☐ Education and access to education	☐ Fragility - cross cutting issue
☐ Other communal services and access to them	☐ Private sector engagement - cross cutting issue
☐ Market development	☐ Unable to assess (Documents not available)
☐ Civil society engagement and development	☐ No socioeconomic aspects
☐ Other, namely:	

Negative changes / trends:

{{Q72}}

* 74. For which socioeconomic aspects are the above negative changes / trends reported in the TE/ICR (or TER/ICRR)?

☐ (Alternative) income generation and income diversification	☐ Financial market development and access to finance
☐ Food security and access to food	☐ Gender equality and women's empowerment - cross cutting issue
☐ Health and access to medicine / health services	☐ Resilience - cross cutting issue
☐ Education and access to education	☐ Fragility - cross cutting issue
☐ Other communal services and access to them	☐ Private sector engagement - cross cutting issue
☐ Market development	☐ Unable to assess (Documents not available)
☐ Civil society engagement and development	☐ No socioeconomic aspects
☐ Other, namely:	



20 SUSTAINABILITY COHORT - CAPACITY, INSTITUTIONAL AND GOVERNANCE
OUTCOMES (1/2)

* 75. Does the project TE/ICR (or TER/ICRR) report any POSITIVE capacity, institutional and governance outcomes / changes / trends?

☐ Yes

☐ No

Copy-paste/ type the details of any reported positive capacity, institutional and governance outcomes.

As much as possible, provide quantitative before-after measures, and the scale/ locations at which these occurred.

* 76. Does the project's TE/ICR (or TER/ICRR) report any NEGATIVE outcomes, lack of achievement of outcomes, or are outcomes at risk of being reversed in relation to capacity, institutional and governance development?

☐ Yes

☐ No

Copy-paste/ type the details of any reported negative capacity, institutional and governance outcomes.

As much as possible, provide quantitative before-after measures, and the scale/ locations at which these occurred.



21 SUSTAINABILITY COHORT - CAPACITY, INSTITUTIONAL AND GOVERNANCE OUTCOMES (2/2)

Positive changes / trends:

{{Q75}}

* 77. For which capacity, institutional and governance aspects are the above positive changes / trends reported in the TE/ICR (or TER/ICRR)?

☐ Institutional and decision-making processes, structures and systems	☐ Capacity and skills development
☐ Decision-makers' information and access to information	☐ Knowledge management; information-sharing and systems
☐ Development of plans, policies, codes, covenants, laws and regulations	☐ Environmental monitoring systems
☐ Trust-building and conflict resolution	☐ Unable to assess (Documents not available)
☐ Awareness raising	☐ No capacity, institutional and governance aspects.
☐ Other, namely:	

Negative changes / trends:

{{Q76}}

* 78. For which capacity, institutional and governance aspects are the above negative changes / trends reported in the TE/ICR (or TER/ICRR)?

☐ Institutional and decision-making processes, structures and systems	☐ Capacity and skills development
☐ Decision-makers' information and access to information	☐ Knowledge management; information-sharing and systems
☐ Development of plans, policies, codes, covenants, laws and regulations	☐ Environmental monitoring systems
☐ Trust-building and conflict resolution	☐ Unable to assess (Documents not available)
☐ Awareness raising	☐ No capacity, institutional and governance aspects.
☐ Other, namely:	



22 SUSTAINABILITY COHORT - FACTORS AFFECTING SUSTAINABILITY OF OUTCOMES (1/3)

Summary of Factors

Contributing factors = Positively influenced, facilitated or led to sustainability, and/or broader adoption and/or environmental, socioeconomic or capacity, institutional and governance outcomes

Hindering factors = Negatively influenced, slowed down, prevented or reversed sustainability, and/or the effects of broader adoption, and/or environmental, socioeconomic or capacity, institutional and governance outcomes

* 79. Does the TE/ICR (or TER/ICRR) make mention of contributing or hindering factors affecting sustainability of outcomes?

☐ Yes

☐ Unable to assess

☐ No

80. If YES, provide an overview below of contributing factors mentioned:
(add page reference)

81. If YES, provide an overview below of hindering factors mentioned:
(add page reference)

23 SUSTAINABILITY COHORT - CONTRIBUTING FACTORS (2/3)

Contributing factors

{{ Q80 }}

* 82. Which PROJECT-RELATED FACTORS contributed to project sustainability of outcomes?

(Select all that apply)

☐ Highly relevant technology / approach (e.g. micro-credit facility that benefits local beneficiaries)	☐ Good project design (other factors than those mentioned above)
☐ Broader adoption processes initiated using project resources	☐ Timely adaptation of project to changing contexts / Evidence-based adaptive management
☐ Good engagement of key stakeholders / Stakeholders involved at design and decision-making	☐ Extended implementation period (e.g. mid-term review led to project extension)
☐ Strong buy-in and a strong sense of project ownership among key stakeholders	☐ Institutions Strategic partnerships functioning at project completion
☐ Good coordination with / continuity of previous or current initiatives (e.g. lessons learned used)	☐ Project builds on previous GEF support (add GEF ID in comments if available)
☐ Good project management or co-management (e.g. strong project team with an engaged steering committee)	☐ Follow-up initiatives planned / implemented using GEF resources (e.g. enabling activity led to full sized project)
☐ Clear understanding of project management and financial rules and regulations	☐ No project related contributing factors mentioned
☐ Well-developed timing of different activities (e.g. taking into account that the development of legislations, and government policies and plans will take longer than other activities)	
☐ Other - please explain:	

* 83. Please explain your answer on project-related contributing factors:

* 84. Which CONTEXTUAL FACTORS contributed to project sustainability of outcomes.

(Select all that apply)

☐ Links to previous / current related initiatives (by government, donors, global events, etc.)	☐ Other stakeholder support (e.g. donors, CSOs)
☐ "Champions" (individuals who pushed strongly for outcomes to be achieved)	☐ Other favorable political conditions/events (e.g. election of supportive politicians)
☐ National government support (e.g. budget allocated, supporting policies adopted)	☐ Favorable economic conditions/drivers/events (e.g. shift in consumer preferences due to income increase)
☐ Strong institutional capacities to implement activities	☐ Favorable social conditions/drivers/events (e.g. change in lifestyles, change in education system)
☐ Private sector involvement and support	☐ Favorable environmental conditions/drivers/events (e.g. good climate, lack of natural disasters)
☐ Regulatory framework for Private Sector involvement in environmental projects	☐ No contextual contributing factors mentioned
☐ Other - please explain/ Comments	

* 85. Please explain your answer on contextual contributing factors:

* 86. Which factors were MOST CRITICAL to achieving sustainability of outcomes.

☐ Project-related	☐ Neither
☐ Contextual	☐ Unable to Assess
☐ Both	

Notes / Comments



24 SUSTAINABILITY COHORT - HINDERING FACTORS (3/3)

Hindering factors

{{ Q81 }}

* 87. Which PROJECT-RELATED FACTORS hindered project sustainability of outcomes?

(Select all that apply)

☐ Inappropriate / insufficient technology / approach (e.g. local users did not have the expertise to use the new equipment provided)	☐ Poor project design (other factors than those mentioned above)
☐ No sign of broader adoption processes being initiated	☐ Inability to adapt project to changing context / Poor adaptive management
☐ Lack of engagement with key stakeholders / Limited to no involvement of key stakeholders at design and decision-making	☐ Insufficient time for implementation (e.g. project had unrealistic objectives for timeframe)
☐ Poor buy-in and a limited sense of project ownership among key stakeholders	☐ Planned institutional development / strategic partnerships not achieved at project's end
☐ Poor coordination with / continuity of previous or current initiatives (e.g. limited use of lessons learned)	☐ Project was a stand-alone initiative and did not build on previous or other current GEF support
☐ Poor project (co-)management (e.g. a project manager did not have expertise, poor engagement of steering committee, different project partners poorly communicate management decisions)	☐ No activities to sustain momentum (e.g. No follow-on funding from government)
☐ Poor understanding of project management and financial rules and regulations	☐ No project related hindering factors mentioned
☐ Poor timing of the various project activities	
☐ Other - please explain:	

* 88. Please explain your answer on project-related hindering factors:

* 89. Which CONTEXTUAL FACTORS hindered the realization of project sustainability of outcomes.

(Select all that apply)

☐ Does not link to previous / current related initiatives (by government, donors, global events, etc.)	☐ Lack of other stakeholder support (e.g. donors, CSOs)
☐ Lack of "Champions" (no individuals pushing strongly for outcomes to be achieved)	☐ Unfavorable political conditions/events (e.g. change in leadership, civil war)
☐ Lack of national government support (e.g. no budget allocated, critical policies not adopted)	☐ Unfavorable economic conditions/drivers/events (e.g. recession, change in market prices)
☐ Low institutional capacities to implement activities	☐ Unfavorable social conditions/drivers/events (e.g. change in lifestyles, change in education system)
☐ Lack of private sector involvement and support	☐ Unfavorable environmental conditions/drivers/events (e.g. storms, droughts, etc.)
☐ No regulatory framework for Private Sector involvement in environmental projects	☐ No contextual hindering factors mentioned
☐ Other - please explain/ Comments	

* 90. Please explain your answer on contextual hindering factors:

* 91. Which factors were MOST CRITICAL to hindering the achievement of sustainability of outcomes.

☐ Project-related	☐ Neither
☐ Contextual	☐ Unable to Assess
☐ Both	

Notes / Comments



25 Thank You!

92. Any other comments on this project? This is also your LAST CHANCE to go back and review/ change your answers.

Good job! :D Now on to the next!