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Strategic Country Cluster Evaluation of Sahel and Sudan-Guinea Savanna Biomes



Strategic Country Cluster Evaluation of Sahel and Sudan-Guinea Savanna Biomes

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Foreword

Strategic country cluster evaluations (SCCEs) are one of the most recent approaches the Independent Evaluation Office (IEO) of the Global Environment Facility (GEF) has designed to evaluate the performance and sustainability of GEF programming at the country level. The SCCE approach reflects the interconnectedness—in terms of both synergies and trade-offs—between socioeconomic development priorities and environment conservation imperatives that is typical of all the country settings in which GEF projects and programs are implemented, and especially the least developed countries (LDCs) and small island developing states (SIDS). The three SCCEs conducted thus far—in two African biomes, in LDCs, and in SIDS—address this complexity by applying a purposive evaluative inquiry approach that starts from aggregate analyses designed to provide trends and identify cases of positive, neutral, or negative change; and proceeds to in-depth data gathering aimed at identifying the specific factors underlying the observed change in those specific cases.

The African biomes SCCE covers GEF activities in 23 countries situated in two Sub-Saharan African biomes: the Sahel and the Sudan-Guinea Savanna.

Selection of these two biomes is based on the countries' comparable land-based environmental challenges, at the nexus of the global environmental concerns of desertification, land degradation, biodiversity loss, and climate change, and national socioeconomic challenges related to governance, demographics, migration, conflict, and fragility, working as drivers for the environmental issues at hand.

The analyses for this evaluation contributed to the findings of the GEF IEO's Seventh Comprehensive Evaluation (OPS7). It is the IEO's hope that the evaluation findings and recommendations will help enhance the design and implementation of GEF support in Africa as part of GEF-8 programming.



Juha I. Uitto
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The evaluation was led by Carlo Carugi, Senior Evaluation Officer of the Global Environment Facility Independent Evaluation Office (GEF IEO), with oversight from the Chief Evaluation Officer, Geeta Batra, and the Director, Juha Uitto. Core evaluation team members were Dunstan Spencer and Sara el Choufi. Dunstan also conducted three country case studies in Mali, Mauritania, and Nigeria. Ibrahima Doumbia served as national consultant for the case study conducted by Dunstan in Mali. Julian K. Bagyendera conducted the Uganda case study, and Alpha Kaloga served as national consultant for the case study conducted by Carlo in Guinea Conakry.

Anupam Anand conducted geospatial analyses and provided both country and project site interpretation of findings in country case studies. Nathaniel Robinson served as data analyst for the geospatial analyses. Dennis Peter Bours and Anna Viggh contributed to the design and conduct of the portfolio and document review that was done in synergy with this and the least developed countries and small island developing states strategic country cluster evaluations. Peixuan Zhou provided research inputs for the development of the approach paper. Phuong Ngo and Elke-Esmeralda Dikoume served as research assistants for the portfolio analyses

and document reviews. Michael Spilsbury provided quality assurance for the approach paper and for the draft report. Administrative support was provided by Evelyn Chihuguyu, Malac Kabir, Marie-Constance Manuella Koukoui, and Juan Jose Portillo. Melina Hoggard and Kia Penso edited the report, and Nita Congress designed the publication.

The GEF Secretariat, as well as all the GEF Agencies involved in the projects that were part of this evaluation, provided information, data, and insights during interviews and meetings. Country stakeholders responded to a global online survey and provided additional information and insights in open-ended form. Critical logistical support and information were provided during the case study missions by the GEF focal points; national and local government staff; GEF Agencies; civil society organizations; communities; and other stakeholders in Guinea Conakry, Mali, Mauritania, Nigeria, Senegal, and Uganda.

The GEF IEO is deeply grateful to all these individuals and institutions for their contributions, which were critical to the success of the evaluation. Final responsibility for this report remains firmly with the Office.

Abbreviations

APR	Annual Performance Report	SCCF	Special Climate Change Fund
CEO	Chief Executive Officer	SIDS	small island developing states
GEF	Global Environment Facility	SIP	strategic investment program
IEO	Independent Evaluation Office	STAR	System for Transparent Allocation of Resources
LDCF	Least Developed Countries Fund	UNDP	United Nations Development Programme
OPS6	Sixth Comprehensive Evaluation of the GEF	UNEP	United Nations Environment Programme
PMIS	Project Management Information System		
POP	persistent organic pollutant		
SCCE	strategic country cluster evaluation		

The GEF replenishment periods are as follows:

Pilot phase: 1991–94	GEF-1: 1995–98	GEF-2: 1999–2002	GEF-3: 2003–06
GEF-4: 2006–10	GEF-5: 2010–14	GEF-6: 2014–18	GEF-7: 2018–22

Executive summary

BACKGROUND, PURPOSE, OBJECTIVES, SCOPE, AND METHODS

The Sahel and Sudan-Guinea savanna biomes in Sub-Saharan Africa experience severe environmental challenges, driven largely by climate change. Common challenges in the area are deforestation, land degradation, and desertification; biodiversity loss; water quality/quantity threats and threats to inland as well as coastal marine water resources; mining; and natural disasters. The pressing socioeconomic needs of a rapidly growing population compound the challenges at hand. Degradation of agricultural lands coupled with the high variability of rainfall poses obstacles to the food security and poverty reduction efforts in the region. While these concerns also apply to Sub-Saharan Africa overall, they are particularly important in the Sahel and Sudan-Guinea savanna biomes, where livelihoods are under pressure from environmental challenges, and socioeconomic needs often take priority over environmental considerations in government development agendas. Differences do exist between countries in terms of their reliance on natural resources, susceptibility to natural disasters, population's dependence on the environment, and government socioeconomic development and other priorities.

Over the past two and a half decades, the Global Environment Facility (GEF) has provided support to address Sub-Saharan Africa's main environmental challenges through national and regional programs and projects focusing on land, water, forests, energy, and biodiversity. To date, GEF investments in Sub-Saharan Africa amount to \$4.78 billion for national, regional, and global interventions. Since its pilot phase, the GEF has invested \$2.48 billion in grants, accompanied by \$16.37 billion in cofinancing through 794 national and regional projects in the countries in the two biomes.

In light of the many common environmental and economic challenges shared by the countries in the two biomes, this evaluation was conducted as a country cluster evaluation. It had the following strategic objectives: (1) to provide a deeper understanding of the determinants of the sustainability of outcomes of GEF support in the two biomes, and (2) to assess the relevance and performance of the GEF with regard to the their main environmental challenges from the countries' perspective. The evaluation examined the relevance, performance, and sustainability of GEF interventions based on a desk review of the GEF project portfolio in the 23 biome countries from GEF-4 to GEF-6, and on five in-depth country case studies selected based on the aggregate and geospatial analyses of

the portfolio under review. A specific focus of this evaluation was on the determinants of sustainability; this entailed in-depth assessment of a cohort of projects completed between 2007 and 2014, which allowed for sufficient time after completion to begin to evaluate the sustainability of GEF outcomes. A mixed-methods approach was followed, and systematic triangulation of the evidence collected was applied to evaluate performance and sustainability and to capture lessons.

MAIN FINDINGS AND CONCLUSIONS

GEF support addresses the main environmental challenges faced by countries in the two biomes, with no major gaps of coverage. Most of the GEF support to these countries has focused on climate change, an important underlying cause of most environmental challenges in the biomes. Seventy-eight percent of the climate change focal area support in the two biomes is invested in support to adaptation. Land degradation began to be addressed in GEF-4 through focal area-specific support and continued afterwards mainly through multifocal area interventions.

The relevance of GEF support to country needs has not been affected by the GEF's move toward integrated programming, including through multifocal projects and programmatic approaches. Investment in programs initially increased in GEF-4 and substantially decreased in GEF-5 and GEF-6. Programs and their respective child projects are becoming larger in size, and a move from projects addressing a single focal area toward multifocal interventions is observed in the two biomes. The increase in size of child projects is viewed favorably by country stakeholders, who tend to view projects in terms of the direct benefits they generate within the national boundaries.

The expansion of GEF Agencies has been a positive development in the biome countries, offering them more choice, more diversity of expertise,

and better focal area coverage. Most Agencies active in the Sahel and Sudan-Guinea savanna biomes have a rather diversified portfolio that covers all GEF focal areas. Importantly, countries select GEF Agencies based on a larger set of comparative advantages than just their technical area of specialization, including, among other factors, the history of engagement between the Agency and the country in which the project is to be implemented.

In general, fewer projects in the two biomes—and in Africa as a whole—receive satisfactory outcome ratings and their likely sustainability than the overall GEF portfolio, confirming findings from previous analyses. Whereas projects in Africa tend to have lower ratings, more recent terminal evaluations of GEF-4 to GEF-6 projects in the biomes rated higher than terminal evaluations of earlier projects completed between 2007 and 2014, which is promising.

While a larger percentage of multifocal projects than those with a single focus undertaken in the biomes were rated as having satisfactory outcomes (85 percent compared to an average of 68 percent of single focal area projects), only 38 percent were rated as having outcomes that were likely to be sustained. Clearly, there is room for improvement on how to foster broader adoption and increase the likelihood of sustainability of project outcomes through consideration of sustainability measures at project design, especially in multifocal interventions. This is particularly important, given the GEF's move toward integrated programming and multifocal support.

Demonstrating sustainability takes time. Projects tend to show higher observed sustainability of outcomes at postcompletion than at the terminal evaluation stage. Although it is plausible that, as time goes by, context-related factors increasingly come into play as compared to project-related ones, field observations in this evaluation

underscored the importance of designing projects with due consideration to measures that increase the likely sustainability of outcomes.

Financial sustainability is an issue in Sub-Saharan Africa overall and is particularly challenging in the biomes. These findings reiterate the importance of planning at the design stage in order to set up viable financial mechanisms and measures that can continue to deliver benefits after project completion.

Context-sensitive, technologically appropriate project design positively affects the sustainability of outcomes in the biomes. Design that promotes sustainability takes into due consideration a country's socioeconomic and political context as well as local conditions and knowledge, and includes measures and activities designed to support—from both financial and institutional standpoints—the continuation of outcomes postcompletion.

Designing profitable beneficiary-relevant alternative livelihood activities and working with existing institutions to include environmental considerations in local development plans emerged as important project-related sustainability factors in the biomes. This evaluation confirmed the importance of designing profitable alternative livelihood activities that correspond as much as possible to real needs in the everyday lives of beneficiaries. Continued operation and maintenance of small-scale infrastructure depends on the costs being within the financial reach of households. Local authorities in Guinea, Guinea-Bissau, and Mali have included environmental conservation activities in their commune and/or municipality sustainable development plans and budgets.

Not much consideration is given at project design to the influence of synergies and trade-offs between socioeconomic and environmental objectives on the prospects for sustainability in the biomes. This underscores the importance of

nexus thinking between environmental and socioeconomic objectives and between short-term and long-term planning in enhancing sustainability. This evaluation found several examples demonstrating that when alternate livelihood systems with a clear, positive environmental-socioeconomic nexus were in place, the chances of the environmental benefits generated by GEF interventions being sustained were greater.

Gender considerations are increasingly incorporated in GEF interventions in the two biomes. In line with similar findings of previous analyses by the GEF's Independent Evaluation Office, gender is considered during implementation, even if it is not addressed at the design stage in projects developed by the biome countries.

Resilience to climate risks is addressed in climate change adaptation projects mostly in the form of risk management and as a co-benefit. Newer GEF projects, whether funded through the main GEF Trust Fund, the Least Developed Countries Fund, or the Special Climate Change Fund, integrated resilience within the respective project's multiple benefits framework.

Fragility has affected the timely delivery of GEF support, but the outcomes and sustainability of GEF support in the two biomes has been largely unaffected. This evaluation found several examples in which the negative effects of newly emerged fragile situations have tended to be felt less in rural areas; or in relation to activities with clear and tangible financial viability and a high correspondence with beneficiary needs.

RECOMMENDATIONS

Project and program design in the biomes must include a discussion on how sustainability, including financial sustainability, is going to be addressed and managed. A well-designed intervention should include measures and activities that

will support the continued delivery of outcomes beyond the life of the project. Sustainability factors identified at the design stage should be tracked by GEF Agencies during implementation and terminal evaluations should report on these. The GEF Secretariat and GEF Agencies should elaborate financial arrangements at the project-design stage that can continue after project completion to deliver benefits over time.

A clear discussion on how to foster synergies between environment and development must be included in design and managed through implementation. When proposals in the two biomes are being designed and appraised, attention should be

paid to the influence that synergies between socio-economic and environmental objectives have on the prospects for sustainability. Fostering synergies between the environmental and development objectives should be more systematically pursued as the GEF already increasingly considers socio-economic co-benefits in its recent portfolio.

Introduction

1.1 Evaluation background, purpose, objectives, scope, and methods

Since its inception, the Global Environment Facility (GEF) has invested heavily in Africa—and especially in Sub-Saharan Africa, providing almost 30 percent of its total funding to this area struggling to meet the dual challenges of climate change and extreme poverty. GEF grants totaling \$4.78 billion, complemented by cofinancing of \$16.37 billion,¹ have been allocated to Sub-Saharan Africa since 1992 in an effort to support a set of countries in which socioeconomic needs are frequently prioritized over environmental considerations in government development agendas. Although differences exist among the Sub-Saharan countries in their reliance on natural resources, their susceptibility to natural disasters, the dependence of their poor on the environment for subsistence, and their socioeconomic development priorities, they all face challenges of environmental resource loss and competition as they strive to improve their peoples' standard of

¹ Funding figures are as of December 30, 2019, and exclude unallocated parent program financing, funding for dropped and canceled projects, and Agency fees. They do include project preparation grants.

living. The GEF has thus provided support to help the region meet its main environmental challenges through national and regional programs and projects focused largely on land, water, forests, energy, and biodiversity.

Despite the GEF's long and intensive engagement in the region, evaluations conducted by the GEF's Independent Evaluation Office (IEO) have revealed pervasive and long-standing weaknesses. Notably, the Sixth Comprehensive Evaluation of the GEF (OPS6) found that fewer GEF-funded projects in Sub-Saharan Africa were rated as having satisfactory levels of outcomes achievement or as having outcomes that were likely to be sustained than in other world regions (GEF IEO 2017). One shortcoming that may be related to these lower ratings is limited institutional capacity, which has been identified as an important issue to be addressed. Also, mechanisms for projects' future financial sustainability—through the market, government budgets, or both—are lacking. Establishing such mechanisms is a key condition for transformational change to occur in Sub-Saharan Africa.

To explore the factors enabling or hindering the achievement of results and the sustainability of the effects from GEF-funded interventions

in Sub-Saharan Africa—and at the request of the GEF-7 Replenishment Group—the GEF IEO undertook a biome-based evaluation of regional support.² Specifically, the IEO structured a strategic country cluster evaluation (SCCE) focusing on two ecologically homogeneous zones of the Sub-Saharan Africa region: the Sahel and the Sudan-Guinea savanna biomes. These two biomes include 23 countries particularly and similarly confronted by land-based environmental issues such as deforestation and land degradation, biodiversity loss, and desertification; as well as challenges related to governance, demographics, migration, and conflict and fragility. It should be noted that 13 of these 23 countries are considered fragile. These latter challenges drive the environmental issues the countries face. Since GEF-4, the GEF has invested a total of \$1.737 billion through 511 interventions; this evaluation focuses on 453 of those, accounting for \$1.63 billion in GEF funding. Most of this funding was provided from the GEF Trust Fund, with the Least Developed Countries Fund (LDCF) accounting for almost a third of total GEF funding; the Special Climate Change Fund (SCCF) accounts for a negligible percentage of funding to the two biomes.

The African Biomes SCCE looked at the relevance of GEF interventions to national priorities and took a “deep dive” into the sustainability of outcomes in the biomes. It looked at the 453 interventions comprising the GEF-4 to GEF-6 cohort to assess the relevance of GEF support to the countries’ respective national environmental and sustainable development priorities. It also assessed their environmental outcomes and the sustainability

²A 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 ecoregion covers a realm of land/water having geographically distinctive communities and sharing the same environmental conditions and ecological dynamics ([Data Basin 2010](#)).

of those outcomes. Specifically, the evaluation included an in-depth analysis of the project- and context-related factors contributing to and/or hindering outcome sustainability. A focus of the evaluation was on the nexus (whether explicitly recognized or not) between national environment and socioeconomic development priorities as determinants of the observed sustainability in the countries five years after completion. The African Biomes SCCE also looked at gender, resilience, and fragility as cross-cutting issues affecting the GEF interventions.

As described in the evaluation approach paper included in volume 2 of this report, the overarching objectives of the evaluation were to (1) provide a deeper understanding of the determinants of GEF-funded outcome sustainability in the two biomes and (2) assess the relevance and performance of the GEF toward the two biomes’ main environmental challenges from the countries’ perspective. These objectives were translated into five key evaluation questions, two of which address the cross-cutting issues of gender, resilience, and fragility:

- What are the key factors influencing sustainability of outcomes in the two biomes?
- In what way, if any, does the environment and socioeconomic development/livelihoods nexus, in terms of promotion of synergies and mitigation of trade-offs, help explain the sustainability of outcomes in the two biomes?
- To what extent has GEF support been relevant to the main environmental challenges countries face in the two biomes, and are there any gaps?
- To what extent have gender and resilience been taken into consideration in GEF programming in the two biomes?
- 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

programs and projects been affected in those situations that have become fragile?

The evaluation was conducted through a mixed-methods approach encompassing both quantitative and qualitative sources of data, information, and analytical tools. The analysis involved an extensive desk study of project and program documents using a project review template and an aggregate portfolio review. The complete list of projects reviewed is provided in [annex A](#). Both components aimed to identify trends as well as cases of positive and absent or negative change.

In addition, the evaluation conducted five country case studies: in Guinea, Mali, Mauritania, Nigeria, and Uganda. These countries were purposively selected based on the results of the aggregate desk study and portfolio trend analyses, following a rigorously structured selection process (GEF IEO 2018g) and a standardized country study approach (GEF IEO 2019b). Both the selection process and the country study approach are described in volume 2. Five to 10 projects per country were reviewed in the country case studies for a total of 31 projects, 16 of which were field verified. [Annex B](#) lists the projects visited in the five case study countries. A geospatial analysis was conducted prior to the case study missions. Targeted field verifications were conducted in specific project sites that were selected based on the findings of the geospatial and aggregate portfolio analyses. The purpose of the field verifications was to identify and understand the determinants of the observed change or lack thereof. Detailed country case study reports are included in volume 2.

For most evaluation components, the African Biomes SCCE covered the period from GEF-4 (starting in 2006) to GEF-6. This relevance cohort comprises 453 national and regional interventions. The sustainability analysis focused on national and regional interventions completed between 2007 and 2014, which ensured sufficient time after

completion to observe the sustainability of project outcomes over the long term. This “sustainability cohort” is composed of 88 interventions, 67 of which were analyzed using a detailed project review template. Triangulation of the qualitative as well as quantitative data and information collected was conducted at completion of the data gathering and analysis phase to determine trends and identify the main findings, conclusions, and lessons.

The Sahel and Sudan-Guinea savanna biomes delineated the geographic scope of the evaluation. The African Biomes SCCE portfolio included enabling activities, full- and medium-size projects, as well as programs in the 23 countries that are part of the two biomes. Global initiatives and those regional interventions established as umbrella arrangements for administrative convenience, such as the GEF Biosafety Program (GEF ID 3654), were excluded from the evaluation’s scope.³

The analysis focused on the biodiversity and climate change (both adaptation and mitigation) focal areas, the latter specifically focusing on carbon sequestration from forestry and other land management practices. Land degradation; international waters; and chemicals and waste (particularly initiatives involving chemical stockpiles and the elimination of pesticides). Multifocal interventions composed of biodiversity, climate change adaptation, and land degradation were also part of the scope.

In line with IEO practice, stakeholder engagement and quality assurance measures were established for the evaluation. A reference group, consisting of representatives from the GEF Secretariat, the GEF Agencies, and the GEF Scientific and Technical Advisory Panel provided feedback and comments on the approach paper, the preliminary findings, and the draft evaluation report (GEF IEO 2018f).

³Exclusions account for 18.6 percent of the total grants in the biomes between GEF-4 and GEF-6.

The Director of the Evaluation Office of the United Nations Environment Programme (UNEP) served as an external peer reviewer.

Two limitations were encountered in the course of this evaluation: (1) the limited reliability of the GEF Project Management Information System (PMIS) data on programs and projects, especially on implementation status; and (2) the limited number of field visits that could be conducted. The first limitation, noted in many GEF IEO evaluations, was addressed by cross-checking the PMIS data and information with data from the management information systems of GEF Agencies before undertaking any analysis. The PMIS data were additionally cross-referenced and updated with the newly created GEF portal data management system to ensure that the most recent project information and financing were captured. The second limitation was addressed by conducting field missions to countries jointly with those in parallel SCCEs as well as other evaluations conducted by the IEO, to increase field coverage. The Guinea-Bissau country case study conducted as part of the small island developing states (SIDS) SCCE is an example of such increased coverage.

1.2 The Sahel and Sudan-Guinea savanna biomes

The Sahel and Sudan-Guinea savanna biomes face severe environmental challenges, driven largely by climate change. Their most significant challenges are deforestation and land degradation, biodiversity loss, and desertification. Additionally, their inland and coastal marine water resources are threatened by issues of water quality and quantity. Mining and an accelerating pace of natural disasters in the context of climate change also threaten the biomes' natural resources. Exacerbating these issues are the pressing socioeconomic needs of a rapidly growing population. Notably, degradation of agricultural lands, coupled with highly variable rainfall,

jeopardizes food security and poverty reduction efforts in the region (UN 2013).

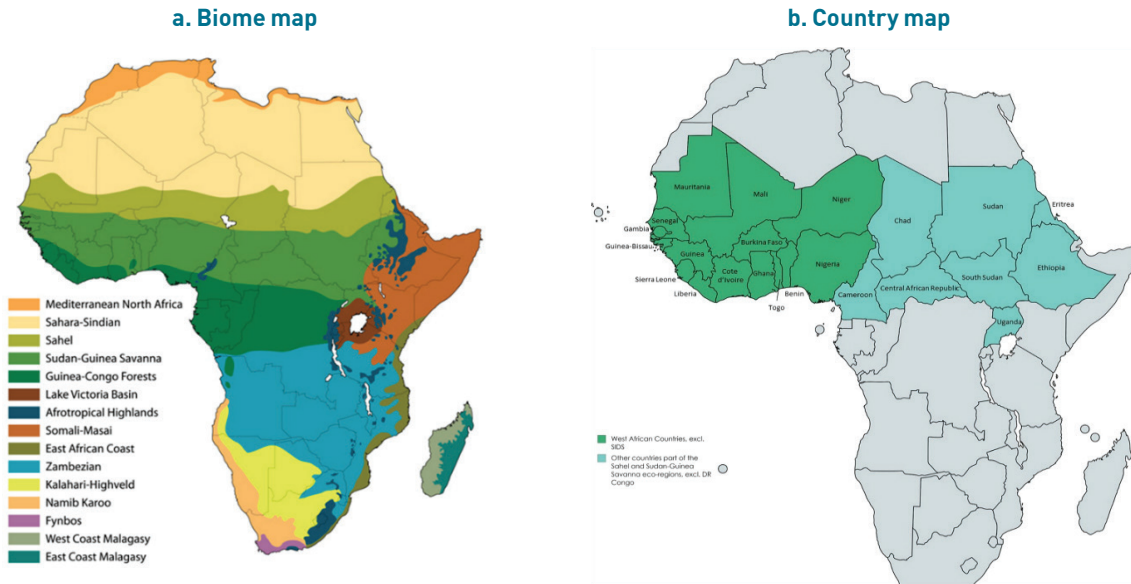
The Sahel and Sudan-Guinea Savanna biomes cover 12.2 million square kilometers, stretching from the east coast to west coast of Africa. The Sahel includes parts of 10 countries. The Sudan-Guinea Savanna covers large parts of 16 countries. Eight countries are part of both biomes ([figure 1.1](#)).

Despite experiencing strong economic growth in recent years, most countries in the Sahel and the Sudan-Guinea savanna remain low-income countries, with an average gross domestic product per capita of \$1,396.⁴ The United Nations projects that population growth in these areas—a combined 604 million as of 2014—will be in line with population growth of least developed countries worldwide; namely, doubling between 2010 and 2050. Over 60 percent of the biomes' population lives in rural areas; overall population density in the two biomes is relatively low at 49 people per square kilometer (UN DESA 2014). At the same time, the average urban growth rate is close to 4 percent per year. Many governments in the biomes, as in similar areas, 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.

A large portion of the two biomes is characterized by arid and semiarid climates with strong climatic variation and irregular rainfall. Forty-one percent of the land area is dedicated to agriculture, of which approximately 12 percent is designated arable land. Approximately 12 percent is classified as forest area, and approximately 13 percent is designated terrestrial protected area. Rain-fed subsistence agriculture is the main source of

⁴2014–16 average at constant 2010 dollars.

Figure 1.1 Sahel and Sudan-Guinea Savanna biomes



Source: Riley 2012.

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). Balancing needs between the environment and development is central to sustainability, sustainable development, and livelihoods (Biggs et al. 2015). The main environmental challenges faced by countries in the two biomes are categorized in [table 1.1](#). Climate change is a major driver for most of these challenges.

DEFORESTATION, LAND DEGRADATION, AND DESERTIFICATION










A significant part of the Sahel is classified as desert, while the remainder is highly vulnerable to desertification. This vulnerability is prone to increase with prolonged droughts and increasing human pressure on water and land resources. Biomass burning, a common practice throughout 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 croplands (Trollope and Trollope 2004). Poor agricultural practices are the primary human cause for desertification in the two biomes because of their role in deforestation, soil erosion, and pollution.

THREATS TO BIODIVERSITY

The Sahel and Sudan-Guinea savanna face critical 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 their biodiversity and wildlife. Species are also threatened by logging, mining, and hunting. Growing household demand for fuelwood and charcoal puts further pressure on forest resources, threatening biodiversity. Marine and coastal

Table 1.1 Main environmental challenges for the 23 countries covered

Environmental challenge		Exclusively or predominantly Sahel biome countries	Exclusively or predominantly Sudan-Guinea Savanna biome countries
Deforestation and land degradation		Eritrea, Mauritania, Chad, Mali, Niger, Sudan, Burkina Faso, Senegal	Benin, Cameroon, Central African Republic, Ethiopia, Gambia, Ghana, Guinea, Guinea-Bissau, Ivory Coast, Liberia, Nigeria, Sierra Leone, South Sudan, Togo, Uganda
Threats to biodiversity		Eritrea, Mali, Niger, Sudan	Benin, Cameroon, Central African Republic, Ethiopia, Ivory Coast, Liberia, Nigeria, South Sudan, Togo, Uganda
Desertification		Mauritania, Chad, Mali, Niger, Burkina Faso	Benin, Nigeria
Water quality and quantity		Chad, Eritrea, Mali, Burkina Faso	Ethiopia, Liberia, Uganda
Coastal and coral reef degradation		Mauritania, Senegal	Cameroon, Gambia, Guinea, Guinea-Bissau, Ivory Coast
Threats to marine resources		Mauritania, Senegal	Gambia, Guinea, Guinea-Bissau, Sierra Leone
Threats to in-land water resources		Sudan	Ghana, Guinea, South Sudan
Mining		Mauritania, Niger	Central African Republic, Nigeria
Natural disasters		Chad, Mali	Gambia

Source: UNEP 2008.

biodiversity is under stress because of overharvesting and unsustainable fishing in the coastal areas of West Africa (USAID 2013). Balancing needs between the environment and development is central to sustainability, sustainable development, and livelihoods (Biggs et al. 2015).

WATER-RELATED ENVIRONMENTAL CHALLENGES

The two biomes face pressure with regard to water availability, accessibility, and demand. In these predominantly arid and semiarid lands, water consumption for agriculture highly exploits both surface and groundwater resources. Combined with climate variability and drought, this

puts further pressure on the already limited water resources available to the two biomes. Because of decreased rainfall and increased water usage, the extent of Lake Chad decreased by 95 percent over approximately 35 years (UNEP 2007). Lake Chad and the Nile River basin provide most of the available freshwater from transboundary watercourses. Groundwater in West Africa is difficult to access, and it accounts for only about 1 percent of the water used in the biomes.

1.3 International environmental conventions

Faced with several environmental challenges, most countries in the two biomes have become signatories to the main international and regional environmental conventions (table 1.2). By complying with convention obligations, these countries can access and benefit from financial support from the GEF. The United Nations Convention to Combat Desertification and the Convention for Biological Diversity have been ratified by all 23 countries in the biomes, and all these countries, except South

Table 1.2 Countries' ratification of international environmental agreements

Country	UNFCCC	UNCCD	CBD	Stockholm	Rotterdam	Basel	Minamata
Benin	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Burkina Faso	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cameroon	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Central African Republic	Yes	Yes	Yes	Yes	No	Yes	Yes
Chad	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Côte d'Ivoire	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Eritrea	Yes	Yes	Yes	Yes	Yes	Yes	No
Ethiopia	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Gambia	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ghana	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Guinea	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Guinea-Bissau	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Liberia	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mali	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mauritania	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Niger	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Nigeria	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Senegal	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sierra Leone	Yes	Yes	Yes	Yes	Yes	Yes	Yes
South Sudan	No	Yes	Yes	No	No	No	No
Sudan	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Togo	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Uganda	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Source: International environmental convention websites.

Note: CBD = Convention on Biological Diversity; UNCCD = United Nations Convention to Combat Desertification; UNFCCC = United Nations Framework Convention on Climate Change.

Sudan, have ratified the United Nations Framework Convention on Climate Change and the Stockholm Convention on Persistent Organic Pollutants (POPs). Most countries are also parties to the more recent Minamata Convention on Mercury. Additionally, some countries have joined other biome- or ecoregion-specific environmental agreements, such as the Permanent Inter-State Committee for Drought Control in the Sahel 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.

To comply with convention obligations, several countries in the two biomes have developed sound national environmental policy and legal frameworks. Unfortunately, these frameworks are often not enforced because of a lack of funding, limited technical capacity, or lack of political will because

of different government priorities. According to the UNEP, “Although some [African] countries have incorporated the Multilateral Environmental Agreements into national policies and framework laws, few have succeeded in achieving the enforcement of policies and laws” (UNEP 2006, p. 501).⁵ On the positive side, Africa has a more advanced framework for environmental laws and constitutional rights than any other region, because of its long history of abuse by extraction industries. African countries are more likely to have transparency laws, such as requiring all or some contracts related to oil, gas, or mining to be made public.

⁵ African countries are not the only ones with weak enforcement. A recent UN report finds that while most countries in the world have environmental regulations, very few actually abide by them (UNEP 2019).

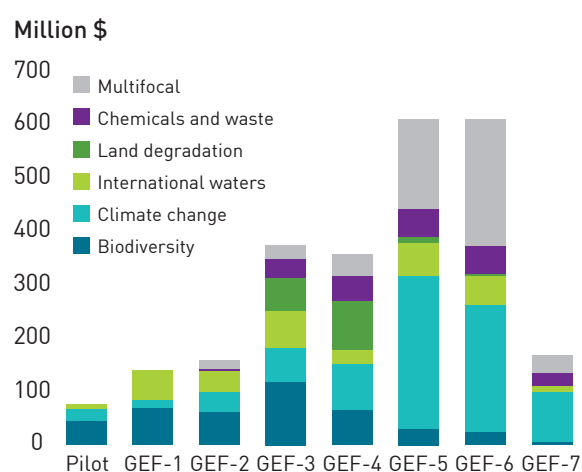
The GEF's engagement in the two biomes

2.1 Portfolio

FUNDING

GEF support to the Sahel and Sudan-Guinea savanna biomes increased substantially since the pilot phase, reaching over \$600 million in both GEF-5 and GEF-6. Approximately one-third of this amount came from allocations programmed under the System for Transparent Allocation of Resources (STAR). Support provided in the GEF-7 replenishment cycle to date continues to be strong, with maximum programming funds of \$220 million from STAR allocations, to which additional non-STAR resources, including set-aside incentives for participating in integrated programs, can be accessed. Since its pilot phase, the GEF has invested a total of \$2.48 billion in grants, with an accompanying \$16.37 billion in cofinancing, through 794 national and regional projects in the countries in the two biomes (figure 2.1). The 23 countries also participate in 80 global projects and 14 global programs totaling \$1.04 billion. One of these global programs is the Small Grants Programme, for which a total of \$209 million in funding has been provided in each replenishment period from GEF-4 to GEF-6.

Figure 2.1 Focal area grants invested in the two biomes by GEF replenishment period



Source: GEF Portal.

Note: Excludes funding for global interventions and unallocated parent program financing. Chemicals and waste includes POPs.

Most of the GEF support to the two biomes has focused on climate change. Climate change interventions accounted for the largest share of the GEF portfolio in the two biomes in GEF-5, followed by multifocal area projects. Just over two-thirds of these climate change interventions were for adaptation, which accounted for 23 percent of total

project financing across all focal areas in the two biomes.

Land degradation started to be addressed in GEF-4 through focal area-specific support and continued afterwards mainly through multifocal area interventions. OPS6 reports that while GEF focal area objectives are in most cases strongly aligned with country priorities, there are some exceptions. Previous evaluations identified a disconnect between GEF support and countries' demands for land degradation support (GEF IEO 2009a). The Fifth Overall Performance Study of the GEF concluded that support for land degradation was available through the focal area allocation and was later partially fulfilled through multifocal support. A similar evolution is observed in the two biomes, where land degradation projects began in GEF-3 with the establishment of the land degradation focal area. These projects increased from 16 percent in GEF-3 to 22 percent of the total in GEF-4 and decreased in GEF-5. As is the case for the GEF overall, multifocal area projects in this portfolio began to increase during GEF-4, a trend that continues to date. The most common focal area combination of multifocal interventions in the two biomes is land degradation, biodiversity, and climate change adaptation; this combination accounts for 36 percent of the total multifocal area support provided from GEF-4 to GEF-6.

Excluding global interventions, which are outside the scope of this evaluation, between GEF-4

and GEF-6 the GEF invested \$1.63 billion in grants, accompanied by \$14.68 billion in cofinancing, through 453 national and regional interventions—including enabling activities and medium- and full-size projects. Thirty percent of these interventions are part of 11 programmatic approaches (table 2.1).

MODALITY

GEF support for countries in the biomes was delivered predominantly through full-size projects, either as stand-alone initiatives or as part of a program.¹ Full-size projects have been by far the most used support modality in the 23 countries over the past three GEF replenishment periods. Child projects under programmatic approaches account for 33 percent of GEF financing in the biomes (table 2.2). Most child projects are full-size interventions, further bolstering the large number of full-size projects in the area.

Investment in programs increased in GEF-4, but decreased in GEF-5 and GEF-6. The programmatic approach modality was formally introduced in 2008 during GEF-4. At that time, programs constituted approximately 65 percent of total programming in the two biomes. Funding for programs decreased substantially afterwards, accounting for less than

¹ A program is a coherent set of interventions designed to attain specific global, regional, country, or sector objectives, consisting of a variable number of child projects.

Table 2.1 GEF support to the two biomes by geographic scope and support modality

Intervention scope	Enabling activity		Medium-size project		Full-size project		Total ^a	
	Million \$	No.	Million \$	No.	Million \$	No.	Million \$	No.
Country	21.4	80	82.9	74	1,093.3	225	1,197.5	379
Regional	9.3	7	24.4	21	401.1	46	434.8	74
Global	30.8	9	21.7	15	313.2	21	365.7	45
Total	61.5	96	129.0	110	1,807.5	292	1,998.0	498

Source: GEF Portal.

a. These totals include \$147.27 million of unallocated financing remaining in parent programs.

Table 2.2 GEF interventions in the two biomes by modality

Modality	Number of projects	GEF funding (million \$)
Parent program	11	60.71 ^a
Child project	135	476.91
Enabling activity	67	30.39
Full-size project	183	983.36
Medium-size project	68	80.92
Total	453 ^b	1,632.28

Source: GEF Portal.

a. Total unallocated financing.

b. Excludes the 11 parent programs.

a quarter of funding in both GEF-5 and GEF-6. The shift away from programmatic approaches in the biomes observed between GEF-4 and GEF-6 occurred while the GEF moved toward integrated programming (table 2.3). Completed programmatic interventions include TerrAfrica, a large World Bank–implemented program focusing on sustainable land management with a GEF grant of more than \$150 million and over \$1 billion in cofinancing. During its 10-year life span, TerrAfrica supported the implementation of two major investment programs: the 2008 Strategic Investment Program, which mobilized over \$1 billion to address land degradation in Africa through 36 programs and projects; and the 2011 [Great Green Wall Initiative](#), a \$1.1 billion program that promoted sustainable

land use practices in 12 countries to build the resilience of ecosystems and livelihoods.

Programs and their respective child projects are becoming larger, and a move from a single focal area toward multifocal interventions is occurring.

These trends signal an important change in the way GEF programs are designed and implemented in the region. Child project size went from an average of \$3.0 million in GEF-4 to \$6.3 million in GEF-6. The introduction in GEF-6 of the Integrated Approach Pilots, in which several countries in the two biomes participate, contributed to this development. The STAR allocation committed by countries for participating in the Integrated Approach Pilots is matched with a one-to-one dollar incentive from focal area set-aside funding.

Country stakeholders tend to view projects in terms of the direct benefits they generate within the national boundaries.

Less attention is paid to the shared knowledge that could be derived from their affiliation with a larger program that operates in multiple countries. This is consistent with the findings of the recent programmatic approaches evaluation (GEF IEO 2018b). National project managers and implementers consulted through dyadic interviews in Ghana and Mali did not see any difference between stand-alone and child projects. The Uganda case study revealed that the preferred GEF support modality was national, multifocal full-size projects. Interviewees explained that national

Table 2.3 Programmatic and nonprogrammatic support to the two biomes by GEF replenishment period

Period	Programmatic support			Nonprogrammatic support		Total	
	No. of programs	No. of child projects	Million \$	No. of stand-alone projects	Million \$	No. of projects	Million \$ ^a
GEF-4	5	76	233.74	49	124.89	125	358.63
GEF-5	4	40	142.70	144	482.21	184	624.91
GEF-6	2	19	161.18	125	487.57	144	648.75
Total	11	135	537.62	318	1,094.67	453	1,632.29

Source: GEF Portal.

a. Includes unallocated parent program financing.

projects are tailored to national needs and are managed in-country. They further maintain that the scale of investment for full-size projects has the potential for long-term impact; hence, the larger a project is, the better. Multifocal projects are seen as addressing the multidimensional nature and interconnectedness of environmental challenges through application of a multisectoral approach.

GEF interventions in the two biomes take time to be implemented. This is not surprising, considering the often-challenging conditions in which GEF support is delivered in these countries. Thirty-four percent of GEF support in the two biomes includes projects under implementation. The majority of these are projects approved in GEF-4 and GEF-5. Most of the projects completed in the last three replenishment periods were begun in GEF-4, while most GEF-6 interventions have yet to start implementation ([table 2.4](#)).

AGENCIES

The number of GEF Agencies providing support to the biomes increased from GEF-4 onwards. OPS6 notes that the expansion of the GEF partnership to 18 Agencies has increased GEF relevance in countries through greater choice and focal area

coverage. This finding also applies to the countries in the two biomes under consideration here. The United Nations Development Programme (UNDP), UNEP, and the World Bank—the three original GEF Agencies active since the pilot phase—have the largest share of GEF grants in the 23 countries, implementing 75 percent of projects by number and 77 percent of GEF funding ([table 2.5](#)).

The relative share of funding in the biomes for these three original Agencies diminished as newer Agencies joined the partnership from GEF-4 onwards, beginning with the first expansion of 7 additional Agencies and continuing with the second expansion of 10 in GEF-6. This trend, shown in [figure 2.2](#), holds true for the GEF portfolio worldwide. Although GEF-7 is not yet fully programmed, further diversification of the GEF Agencies is observed. For the first time in GEF history, the combined portfolio funding share for the three original GEF Agencies in the area is under 50 percent in GEF-7 to date. This finding is partly explained by a more specific and diversified demand for technical services by recipient countries, as well as by the GEF's strategic move from single focal area support toward multisectoral integrated programming through large impact programs.

Table 2.4 Funding to and number of projects in the two biomes by project status and GEF replenishment period

Status	GEF-4		GEF-5		GEF-6		Total	
	Million \$	No.	Million \$	No.	Million \$	No.	Million \$ ^a	No.
Pending approval	0	0	0.22	1	147.24	25	147.46	26
PIF/PPG approval or clearance	0	0	0	0	2.40	2	2.40	2
Council approved	0.43	1	12.75	14	88.98	18	102.17	33
CEO approved/endorsed	3.50	1	86.16	12	219.37	53	309.03	66
Under implementation	135.64	42	476.93	128	148.55	46	761.13	216
Completed/closed	215.36	81	34.02	29	0	0	249.39	110
Total	354.94	125	610.09	184	606.55	144	1,571.58	453

Source: GEF Portal.

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

a. Excluding unallocated parent program financing.

Table 2.5 Funding to and number of projects in the two biomes by GEF Agency and replenishment period

Agency	GEF-4		GEF-5		GEF-6		Total	
	Million \$	No.	Million \$	No.	Million \$	No.	Million \$	No.
AfDB	4.50	1	96.15	17	69.68	12	170.33	30
BOAD	0	0	0	0	18.90	2	18.90	2
CI	0	0	0.96	1	14.11	4	15.07	5
FAO	29.45	7	42.55	11	40.96	7	112.96	25
GEF Secretariat ^a	0	0	0.30	20	0	0	0.30	20
IFAD	27.28	7	28.69	5	22.27	3	78.24	15
IUCN	0	0	6.59	1	17.98	5	24.56	6
UNDP	106.91	44	215.60	56	230.20	55	552.71	155
UNEP	53.07	26	68.40	30	86.09	32	207.56	88
UNIDO	13.86	11	19.56	26	20.02	15	53.44	52
World Bank	119.86	29	131.29	17	86.35	9	337.50	55
Total	354.94	125	610.09	184	606.55	144	1,571.58	453

Source: GEF Portal.

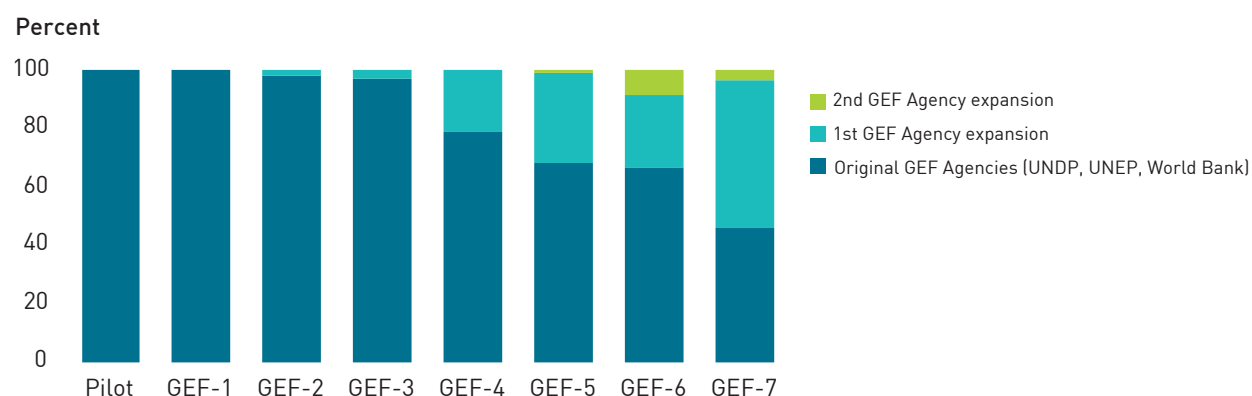
Note: AfDB = African Development Bank; BOAD = West African Development Bank; CI = Conservation International; FAO = Food and Agriculture Organization of the United Nations; IUCN = International Union for Conservation of Nature; UNIDO = United Nations Industrial Development Organization.

a. The GEF Secretariat directly implemented the national portfolio formulation exercises conducted in GEF-5.

GEF Agencies in the region are diversified across focal areas. Most GEF Agencies active in the Sahel and the Sudan-Guinea savanna have a rather diversified portfolio in terms of focal area composition, albeit with a large share of climate change projects implemented by each Agency. Very few GEF Agencies tend to focus on their areas of specialization in providing services to the countries in the

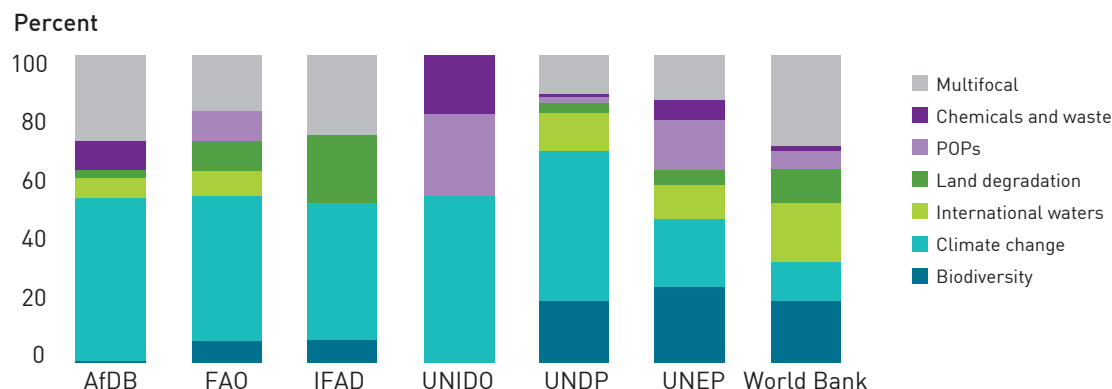
two biomes. One Agency that does have a rather specialized portfolio is the United Nations Industrial Development Organization, which implements almost equal shares of projects addressing climate change and chemicals and waste/POPs, and is the only Agency active in the biomes that does not implement any multifocal interventions (figure 2.3).

Figure 2.2 Share of GEF grants in the two biomes by GEF Agency grouping and replenishment period



Source: GEF Portal.

Figure 2.3 Funding in the two biomes as a share of Agencies' GEF portfolios by focal area



Source: GEF Portal.

Note: The West African Development Bank, the International Union for Conservation of Nature, and the Conservation International are omitted because of the low number of projects.

Countries select GEF Agencies based on a larger set of comparative advantages than just technical area of specialization. From a detailed review of project documents, it clearly emerged that the comparative advantage of a GEF Agency includes (1) the history of its engagement with the country in which the project is implemented; (2) its ability to bring in technical expertise, provide policy support, and strengthen national capacity; and (3) its thematic knowledge and familiarity with a given subject area through experience with similar projects implemented in the same country or region.

Interviews with national stakeholders conducted during country case studies confirmed this finding. Government officials in Guinea indicated that the expansion of GEF Agencies has increased the relevance of GEF support to Guinea's national environmental priorities and enabled the country to work with a range of partners based on their comparative and competitive advantage. For example, Guinea opted to work with the Food and Agriculture Organization of the United Nations on a project related to land management around forest areas—a technical domain in which the Agency has much to offer in terms of both expertise and regional experience. Similarly, based on its familiarity with the subject matter, the International

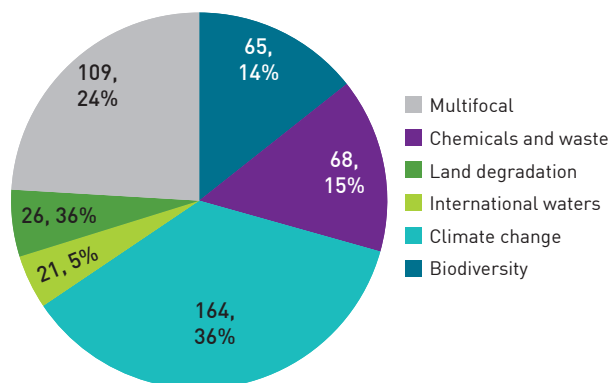
Union for Conservation of Nature was asked to accompany a group representing four neighboring countries—Guinea, Sierra Leone, Liberia, and Côte d'Ivoire—on a regional project to fight against wildlife crime. This project was initially sponsored by the African Development Bank. Once the International Union for Conservation of Nature officially became an accredited GEF Agency, it was asked by the participating countries to take the lead implementing role. This change was made in agreement with the African Development Bank.

FOCAL AREAS

Seventy-eight percent of climate change focal area funding for the two biomes is invested in support to adaptation. The remaining 22 percent is dedicated to mitigation. Climate change and multifocal support accounted for most of the portfolio in the GEF-4 to GEF-6 period in both number of projects and funding (figures 2.4 and 2.5). Funding for climate change adaptation comes exclusively from the LDCF and the SCCF, while most of the funding for mitigation interventions originates from the GEF Trust Fund.

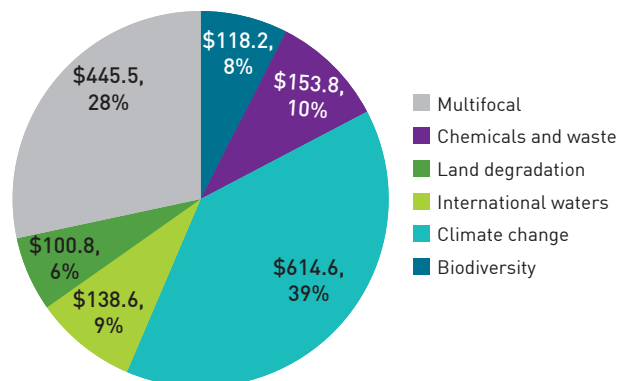
In line with the GEF's move toward integrated programming, the share of multifocal projects in the

Figure 2.4 Number and percentage of GEF projects in the two biomes by focal area



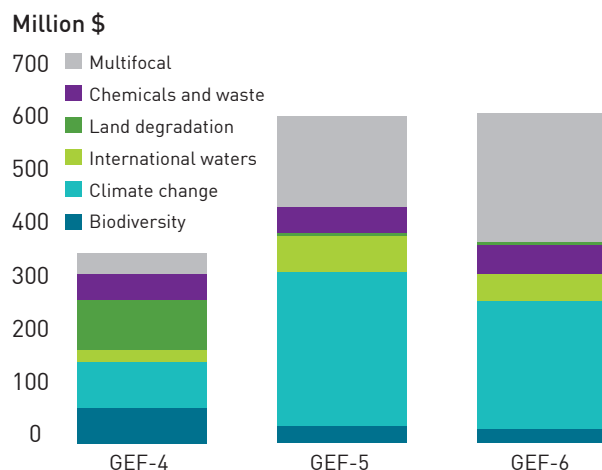
Source: GEF Portal.

Figure 2.5 GEF funding in the two biomes by focal area (million \$)



Source: GEF Portal.

Figure 2.6 GEF funding in the two biomes by focal area and GEF replenishment period



Source: GEF Portal.

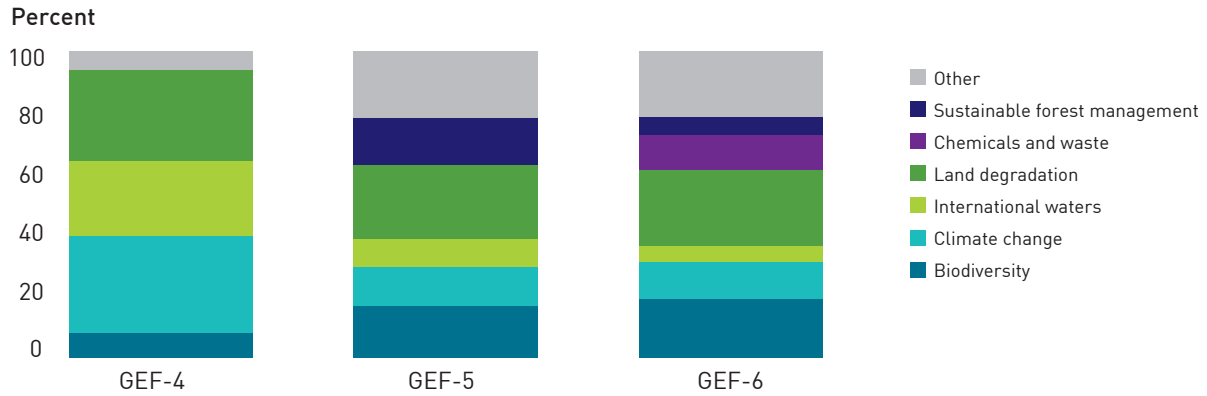
two biomes is increasing. A substantial increase is also observed for the climate change focal area. Investment in biodiversity has decreased over time ([figure 2.6](#)).

Despite the increase in the number of multifocal area projects with land degradation components in the overall GEF portfolio (GEF IEO 2018e), the share of land degradation financing in those projects ranged between 16 percent and 19 percent during the GEF-4 to GEF-6 period, peaking in GEF-5. However, the share for land degradation in multifocal funding in the biomes was much higher, ranging from 24 percent to 30 percent, with its peak in GEF-4. This large relative share indicates the importance of funding for land degradation in the region.

In both GEF-5 and GEF-6, more than 20 percent of the funding for multifocal interventions in the biomes originated from sources other than single focal area allocations. Sources include funding for Integrated Approach Pilots, the LDCF, the SCCF, and funding for multifocal projects not specifically earmarked to any GEF focal area ([figure 2.7](#)).

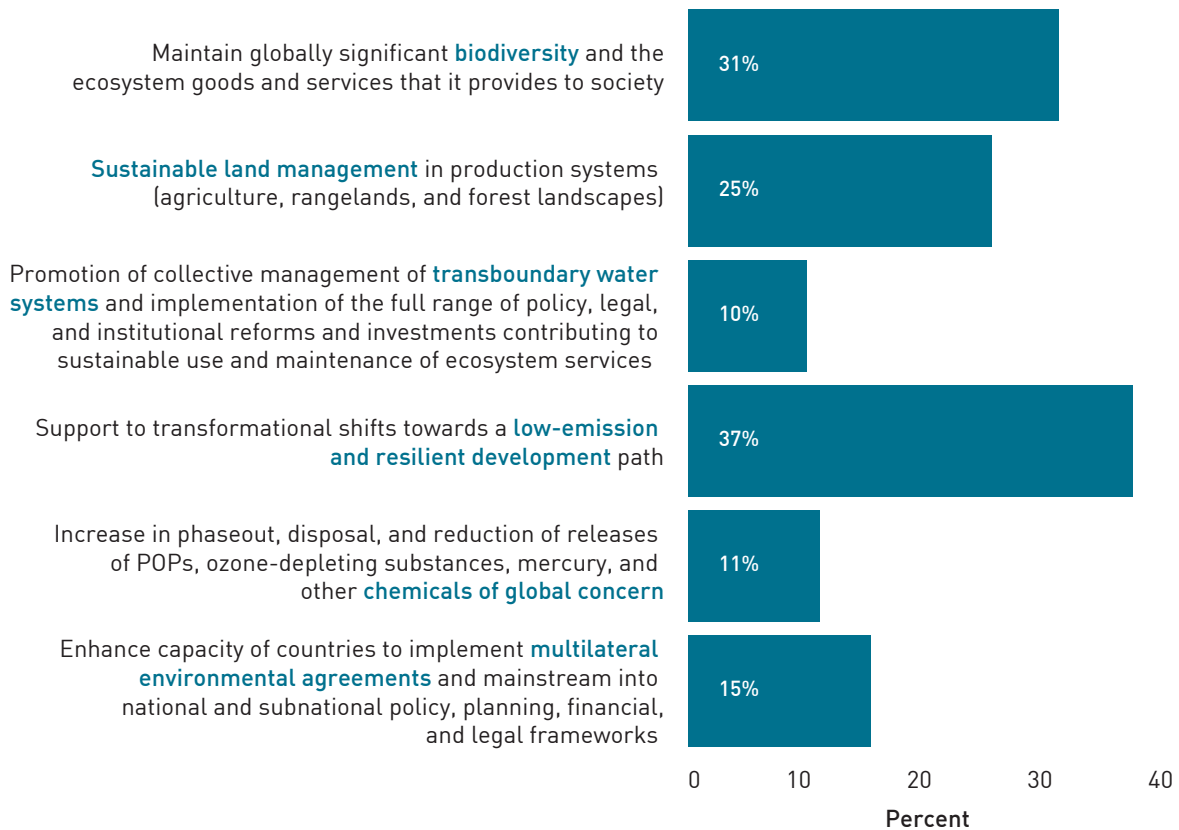
Within each focal area it is important for the GEF to ensure support to achieve global environmental benefits. A desk review of the global environmental benefits sought through GEF support in the two biomes found that the main intervention domains included support to transformation shifts toward low-emissions and resilient development paths (37 percent), followed by maintaining globally significant biodiversity (31 percent) and sustainable land management (25 percent) ([figure 2.8](#)). A review of the environmental domains in the project logical frameworks, results frameworks, and related monitoring tools shows that the most measured domains are deforestation, land degradation and sustainable land management (30 percent), and threats to terrestrial biodiversity (23 percent).

Figure 2.7 GEF multifocal support to the two biomes by funding component



Source: GEF Portal; data provided by the GEF Secretariat.

Figure 2.8 Global environmental benefits addressed by GEF interventions in the two biomes (% of projects)



Source: GEF Portal.

Note: n = 358. Several projects address multiple areas of intervention.

2.2 Relevance to national environmental challenges

GEF interventions are aligned with the respective governments' environmental priorities in the Sahel and Sudan-Guinea Savanna countries. Ninety-three percent of the GEF projects reviewed in the relevance cohort described the project's relevance to the country's specific priorities and considered these priorities in their design. In addition, 85 percent of projects included detailed reference to the specific environmental challenges in the country. These challenges are addressed in the project objectives and components. Relevance was confirmed in country case studies. Government officials interviewed in the countries visited noted that the GEF is an important source of funding that fits well into their planning. For example, GEF support is aligned to Uganda's Vision 2040 and national development plans that call for conservation of natural resources and protection of the environment. Both government representatives and nongovernmental stakeholders interviewed in Conakry, Guinea, reported that GEF projects are usually in line with national strategies and address priority needs. In particular, GEF support has been critical in addressing, advancing, and raising awareness of the country's main environmental issues, including deforestation, land degradation, destruction of mangroves, and sea level rise.

GEF support addresses the main environmental challenges faced by countries in the two biomes. Although not a specific national environmental challenge for countries in the Sahel or the Sudan-Guinea savanna, climate change is addressed by 44 percent of the projects reviewed. In addition to being a major financing window in the GEF as well as in the environmental donor community, climate change acts as a major driver for land degradation, desertification, and water scarcity. Seventy-seven projects (22 percent) addressed deforestation, land degradation and

desertification, which were the main challenges for 21 of the 23 countries; 69 projects addressed biodiversity, the main challenge for 16 countries ([table 2.6](#)). Thirty percent of projects in the Sahel addressed land degradation, as did 25 percent of projects in the Sudan-Guinea savanna, where a larger share of projects addressed threats to biodiversity (28 percent compared to 21 percent in the Sahel). Furthermore, for 30 percent of the projects reviewed, the results framework contains indicators on deforestation and land degradation, including sustainable land management. Indicators on threats to terrestrial biodiversity are included in 23 percent of the projects reviewed. These findings confirm the strong alignment of GEF support to the main environmental challenges in the biomes.

GEF interventions consider countries' socio-economic priorities. In addition to sharing many common environmental challenges, the 23 countries in the two biomes face pressing socioeconomic challenges, affecting the severity of the environmental issues at hand. Most are least developed countries, and 13 have gone or are going through situations of sociopolitical instability. Not surprisingly in this context, national infrastructure and socioeconomic development investments are often given priority over environmental conservation initiatives. In Guinea, government-sponsored bauxite mining attracts a growing number of workers, increasing pressure on the scarce natural resources of the northern part of the country. In Uganda, economic development is often favored over biodiversity conservation: where infrastructure such as oil fields and related investments such as roads and airstrips are developed, forests are heavily encroached upon. A similar dynamic is observed in Guinea-Bissau with a push from the central, district, and community levels toward oil and mining explorations in protected areas. Cognizant of beneficiaries' livelihood needs, project documents are beginning to capture the socioeconomic dimension of GEF interventions.

Table 2.6 National projects addressing the main environmental challenges in the biomes

Country	Climate change	Deforestation, land degradation, desertification	Threats to biodiversity	Waste management	Threats to in-land water resources	Water quality and quantity	Threats to marine resources	Coastal and coral reef degradation	Mining	Air quality and air pollution	Natural disasters
Benin	6	3	2	1			1				
Burkina Faso	9	4	5	2	1				1		
Cameroon	4	5	9	3	3		2	1			
Central African Republic	2	1	1	1	1	1					
Chad	4	4	2	1	1	1	1		1		
Côte d'Ivoire	5	1	2	1						3	
Eritrea	1	2	1	2					1		
Ethiopia	7	6	6	1							
Gambia	7	3	2				1	1			
Ghana	4	7	8	1	5		1		1		
Guinea	6	2	1				1	2			
Guinea-Bissau	2	3	4			1					
Liberia	6	1	4					2			
Mali	7	4	5								
Mauritania	3	8	2		1	2	1				
Niger	5	5	3		1						1
Nigeria	10	5	3	3	1						
Senegal	10	5	2	1			1	1			
Sierra Leone	5		1			2					
Sudan	8	1	1								
Togo	2		1								
Uganda	7	7	4	1	1	1					
Total	120	77	69	18	15	8	9	7	4	3	1

Source: Adapted from UNEP 2008; GEF Portal data.

Note: ■ = projects address the common underlying challenge of climate change; ■ = projects address one main challenge in the country; ■ = projects address a challenge that is not among the main ones for the country; ■ = no projects address any of the main challenges for the country. Several projects address multiple challenges.

Thirty percent of the project result frameworks reviewed ($n=358$) have indicators on alternative livelihoods and income generation/diversification. Sixteen percent of projects measured resilience in their logical framework, and an additional 12 percent measured food security.

In the much-needed areas of institutional development and governance, more than half the projects reviewed focus on policy frameworks and skills building. GEF support can be classified into three main categories: knowledge and information, institutional capacity, and implementing strategies. These areas of GEF support interact, complement,

and reinforce each other, collectively contributing toward addressing environmental stress reduction and improved environmental status (GEF IEO 2013). GEF institutional support in the biomes mostly focused on helping countries develop their respective environmental policy, legal, and regulatory frameworks; on building skills and capacities; and on introducing innovative technologies and approaches (table 2.7). All of these are domains in which the GEF has traditionally invested most of its financing and technical expertise,

demonstrating its comparative advantage and additionality. The majority of GEF interventions in the biomes included indicators in their results frameworks on capacity, institutions, and governance. Sixty-nine percent of projects had indicators measuring capacity and skills development; 68 percent had indicators for the development of plans, policies, laws, and regulations; and 45 percent included indicators on knowledge management and awareness raising.

Table 2.7 Intervention typologies in the two biomes

Intervention area	Typology	Number	Percent
Knowledge and information	Knowledge generation	135	38
	Information sharing and access	120	34
	Awareness raising	89	25
	Skills building	208	58
	Monitoring and evaluation	95	27
Institutional capacity	Policy, legal, and regulatory frameworks	220	61
	Governance structures and arrangements	69	19
	Informal processes for trust building and conflict resolution	3	1
Implementing strategies	Technologies and approaches	185	52
	Implementing mechanisms and bodies	112	31
	Financial mechanisms for implementation and sustainability	52	15

Note: $n = 358$. Several projects address multiple areas of intervention.

Results and sustainability

3.1 Performance

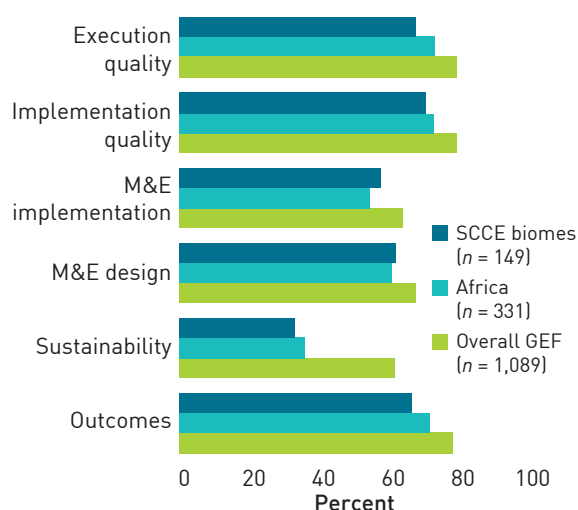
Projects in the two biomes and in Africa overall received lower performance ratings than the overall GEF portfolio. Analysis of terminal evaluation ratings from the most recent IEO Annual Performance Report (APR) 2019 database shows that projects in the biomes significantly underperformed when compared with the overall GEF portfolio on most dimensions (figure 3.1).

Focusing on the two dimensions of interest to this evaluation—project outcomes and likelihood of their sustainability—68 percent of projects were rated as having outcomes in the satisfactory range;¹ this is a significantly lower percentage than for the overall GEF portfolio (80 percent of projects) and for the Africa region (73 percent of projects). Ratings for the likelihood of sustainability of outcomes at project closure followed a similar pattern: only 46 percent of projects in the biomes were rated in the likely range for sustainability,² compared to 63 percent of the overall GEF portfolio and

¹ This range includes three ratings: moderately satisfactory, satisfactory, and highly satisfactory.

² This range includes two ratings: moderately likely to be sustained and likely to be sustained.

Figure 3.1 Percentage of projects with performance ratings in the satisfactory/likely range



Source: GEF IEO APR 2019 database.

50 percent of the Africa project portfolio. It is useful to note that outcomes and their likely sustainability have been found to be statistically correlated (GEF IEO 2019a). The statistical test for proportionality for this evaluation indicates that the outcome and sustainability ratings for the three comparators—the overall GEF, Africa, and the two biomes—differ in their proportions. This difference between the cohorts is statistically significant: the p-value for

the outcome and sustainability differ, but in both cases, $p < 0.0005$.

These findings reaffirm the evaluative evidence collected by the IEO from 2008 to 2014 through country portfolio evaluations in the two biomes. 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 country portfolio evaluation recommended that the GEF further support trust funds as an approach to improving the financial sustainability of protected areas (GEF IEO 2009c). More recent reporting on the GEF portfolios in Eritrea, Sierra Leone, and Tanzania, consolidated in the seventh Annual Country Portfolio Evaluation Report, concluded that the likelihood of sustainability has been highest when it is pursued through fostering institutional and individual capacity development and the promotion of livelihood activities through community-based approaches, such as those financed by the Small Grants Programme (GEF IEO 2014a). The report also found that the most successful efforts for promoting the sustainability of outcomes have been those aimed at developing local capacities and those aimed at linking local community benefits to improved environmental management.

Though projects in Africa tend to have lower ratings, more recent terminal evaluations of GEF-4 to GEF-6 completed projects in the biomes have accorded better ratings than terminal evaluations for earlier projects completed between 2007 and 2014. These findings are consistent with recent IEO analyses, according to which projects in Africa are less likely to be rated in the likely range for outcome sustainability than projects elsewhere but have improved significantly from GEF-3 onward (GEF IEO 2019a).

Multifocal projects perform better on outcomes but lower on sustainability. A larger percentage of multifocal (85 percent) than single focal area

projects (ranging from 45 percent to 75 percent by focal area) were rated as having satisfactory outcomes. However, only 38 percent were rated as having outcomes likely to be sustained, compared to a range of 43 percent (biodiversity) to 52 percent (land degradation) of single focal area projects. Land degradation, biodiversity, and climate change had a higher percentage of projects with satisfactory outcomes and a lower percentage of projects with likely sustainability ratings (table 3.1).

A larger percentage of international waters projects are rated as likely to be sustainable compared to the percentage of projects rated in the satisfactory range for achievement of outcomes. Information collected in Guinea on the International Waters Regional Project Reversing Land and Water Degradation Trends in the Niger River Basin (GEF ID 1093) supports this finding. This 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 drylands environment and associated biodiversity. Interviewees at the Direction Nationale de l'Hydraulique in Conakry reported that although only a small project component focusing on small-scale

Table 3.1 Projects with outcome and sustainability ratings in the satisfactory/likely range, by focal area

Focal area	% of projects		Total
	Satisfactory outcomes	Likely sustainability	
Biodiversity	65	43	46
Climate change	72	47	41
Int'l waters	45	50	12
Land degradation	75	52	25
Multifocal area	85	38	14
POPs	50	45	11
Total	68	46	149

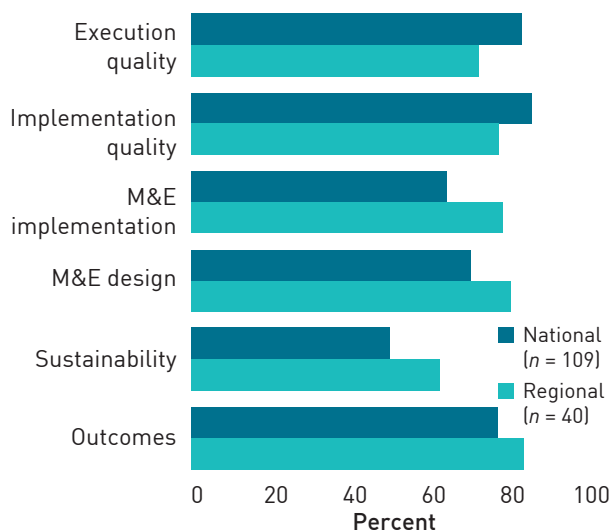
Source: GEF IEO APR 2019 database.

interventions and capacity-building activities was implemented in Guinea, the project has succeeded in introducing an environmental and social management framework for screening all pilot projects and microgrant activities in the country. A microgrant operational manual with environmental screening criteria, notification and procedural rules for implementation, and institutional responsibilities for the parties involved is being used at the community level for screening and implementation of investments to be funded through the recently established national agency for financing community development plans (Agence Nationale de Financement des Collectivités Locales).

From an analysis of terminal evaluations of completed projects, the SIDS SCCE found that a larger percentage of regional projects were rated in the satisfactory range for outcomes and likely range for sustainability as compared with national projects (GEF IEO 2022). A similar analysis in this evaluation found that although more regional projects in the two biomes are rated in the satisfactory/likely range for outcomes, sustainability, and monitoring and evaluation design and implementation, a larger percentage of national projects are rated in the satisfactory range for implementation and execution quality (figure 3.2).

Observed postcompletion sustainability of four out of the five field-verified regional projects was positive. In two cases, the sustainability ratings changed from negative (outcomes were rated unlikely or moderately unlikely to be sustained) at completion to positive (sustainability of outcomes rated in the likely range) at postcompletion. These rating improvements seem more attributable to the relevance of the technologies introduced than to the fact that they were introduced by a regional project. Integrated pest and pollution management training in Mali provided by the regional project Reducing Dependence on POPs and other Agro-Chemicals in the Senegal and Niger River Basins through Integrated Production, Pest and

Figure 3.2 Percentage of national and regional biome projects with performance ratings in the satisfactory/likely range



Source: GEF IEO APR 2019 database.

Pollution Management (GEF ID 1420) introduced a number of biological control agents (*Azadiractha Indica* flour and crushed seeds, root powder of *Securidaca longepedunculata*, chopped fresh organs from *Physalis*, broth of fresh organs of *Hyptis suaveolens*, and chopped fresh organs of *Cassia nigricans*). These agents provide economic and health benefits: reduced cost of pest control and reduced poisoning among human populations, as well as environmental benefits in increased biodiversity. The regional project Adaptation to Climate and Coastal Change in West Africa—Responding to Shoreline Change and Its Human Dimensions in West Africa through Integrated Coastal Area Management (GEF ID 2614) addresses coastal dune sustainability, which is one of the major environmental problems in Mauritania. The project piloted a method of reconstituting the ecosystem and biodiversity of a part of the coastal dune, making it possible to secure the city of Nouakchott against ocean incursion.

3.2 Outcomes and sustainability

The GEF supports activities that directly or indirectly contribute to the improvement of environmental status or address drivers of environmental degradation, or both. The impact of GEF support may occur immediately as a result of project activities, but often change takes years (or even decades) after a project is completed. By analyzing how GEF support contributes to progress toward impact, the IEO can assess the extent to which this support is likely to lead to impact and, ultimately, sustainability in the long term. Progress toward impact is assessed through the extent to which the broader adoption of GEF interventions and outcomes by governments and other stakeholders takes place during implementation or at project end. Broader adoption pertains to the transformational processes by which the widespread implementation of interventions aids the achievement of global environmental benefits. These may take place in different ways, specifically, mainstreaming, replication, scaling-up, sustaining, and market change (box 3.1). This approach has been used by the IEO since 2013 to assess broader adoption of outcomes and progress toward impact of GEF interventions (GEF IEO 2013).

In APR 2017, the IEO conducted a desk review of postcompletion verification reports ($n = 53$). According to the analysis, outcomes of most GEF projects are sustained during the postcompletion period. In addition, a large percentage of projects achieve environmental stress reduction and broader adoption at postcompletion. The review concluded that the key factors that contribute to higher outcomes and broader adoption at postcompletion are strong levels of stakeholder buy-in, political support, availability of financial support for follow-up, and sustained efforts on the part of the national executing agency. A few projects regressed to a lower outcome sustainability

Box 3.1 Mechanisms of broader adoption

Sustaining. When a GEF-supported intervention or outcome is continued by the original beneficiaries without GEF support so they can continue to reap the benefits.

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

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

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

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

level postcompletion because of a lack of financial support for follow-up, low political support, low institutional capacities, low stakeholder buy-in, and flaws in the projects' theories of change. Importantly, catalytic processes of broader adoption, such as mainstreaming, replication, and scaling-up, and/or sustaining project outcomes were observed in a larger percentage of projects at postcompletion than at implementation completion (GEF IEO 2019a).

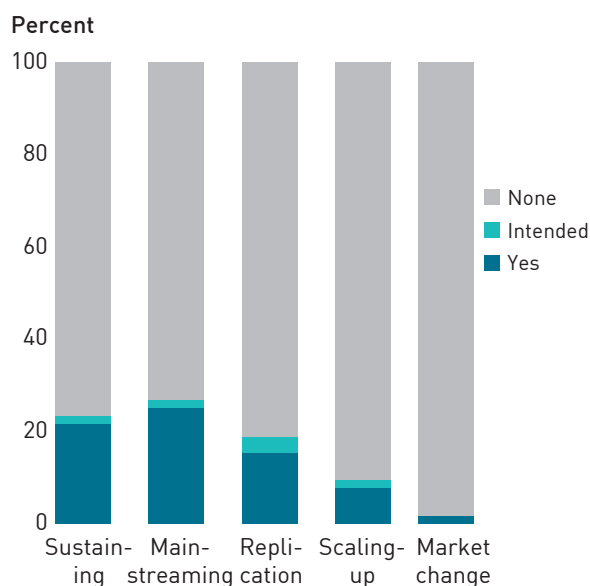
Overall, completed projects in the biomes showed lower rates of broader adoption than those of the overall GEF portfolio analyzed as part of APR 2017. For 49 of the 67 projects for which terminal

evaluations were reviewed for sustainability in the biomes, no actions were taken during implementation to stimulate broader adoption of project outcomes postcompletion (figure 3.3). When present, the most prevalent processes implemented for broader adoption were mainstreaming (25 percent) and sustaining (22 percent) in projects indicating that measures for broader adoption to occur had been fully or partially implemented while the projects were ongoing. This trend is comparable to the APR 2017 finding mentioned, according to which broader adoption of project outcomes occurred through sustaining and mainstreaming processes, at 49 percent and 40 percent, respectively.

The likelihood of broader adoption taking place postcompletion increases when concrete actions are undertaken to this end during implementation—such as the detailed design of follow-up activities, or the establishment of governance structures or financing windows. In the biomes, these actions translated into concrete sustaining, mainstreaming, replication, and scaling-up initiatives implemented in 18 percent to 24 percent of the projects reviewed (figure 3.4).

Demonstrating sustainability takes time, as evidenced by higher observed sustainability of outcomes at postcompletion than at the terminal evaluation stage. This finding supports the APR 2017 conclusion as well as a similar conclusion from the SIDS SCCE (GEF IEO 2020). Field visits to 16 completed projects during the country case studies—including one regional project visited both in Guinea and Mali—showed that 14 projects demonstrated maintained or improved sustainability postcompletion (table 3.2). These improvements, documented in the country case studies presented in volume 2 of this report, are attributable to the quality of project design as well as to positive changes in the context occurring postcompletion.

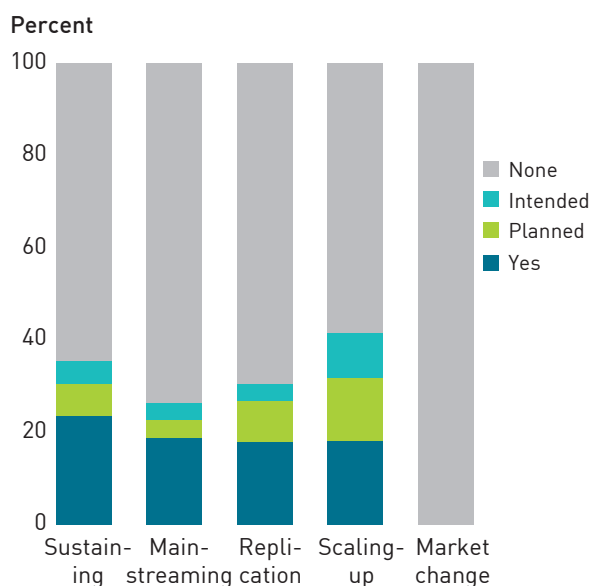
Figure 3.3 Evidence of broader adoption having taken place in completed biome projects during implementation



Source: GEF IEO APR 2019 database.

Note: $n = 67$. Yes = actions have been implemented and/or are showing results, or some concrete actions have been taken but not (yet) fully implemented. Intended = actions have been mentioned or intended but no detailed plans or discussions (yet).

Figure 3.4 Likelihood of broader adoption taking place in completed biome projects postcompletion



Source: GEF IEO APR 2019 database.

Note: $n = 67$. Yes = follow-on interventions designed and/or governance structures/financing in place. Planned = detailed discussions/planning occurring. Intended = actions have been mentioned or intended but no detailed plans or discussions.

Table 3.2 Postcompletion sustainability ratings for field-verified projects in country studies

	Project title	Sustainability rating	
		Terminal evaluation	Observed postcompletion
Guinea	Community-based Land Management	Negative	Positive
	Reversing Land and Water Degradation Trends in the Niger River Basin (regional)	Positive	Positive
	Coastal Marine and Biodiversity Management	Positive	Positive
Mali	Gourma Biodiversity Conservation Project	Negative	Negative on infrastructure but positive for livelihoods
	Reducing Dependence on POPs and other Agro-Chemicals in the Senegal and Niger River Basins through Integrated Production, Pest and Pollution Management (regional)	Negative	Positive
	Biodiversity Conservation and Participatory Sustainable Management of Natural Resources in the Inner Niger Delta and Its Transition Areas, Mopti Region	—	Positive
	SPWA-BD: Expansion and Strengthening of Mali's PA System	—	Negative
Mauritania	Enhancing Conservation of the Critical Network of Sites of Wetlands Required by Migratory Waterbirds on the African/Eurasian Flyways (regional)	Positive	Positive
	Community-based Watershed Management Project	Negative	Positive
	Adaptation to Climate Change—Responding to Shoreline Change and Its Human Dimensions in West Africa through Integrated Coastal Area Management (regional)	Negative	Positive
	SIP: Participatory Environmental Protection and Poverty Reduction in the Oases of Mauritania	Positive	Negative
Nigeria	Local Empowerment and Environmental Management Project—Micro Watershed and Environmental Management Project	Negative	Positive
	National Fadama Development Program II: Critical Ecosystem Management	Positive	Positive
Uganda	Protected Areas Management and Sustainable Use	Positive	Negative
	Conservation of Biodiversity in the Albertine Rift Forest Areas of Uganda	Negative	Negative
	Removing Barriers to Invasive Plant Management in Africa (regional)	Negative	Negative

Note: Positive ratings of sustainability are likely and moderately likely; negative ratings are unlikely and moderately unlikely. **Green** text indicates improved rating postcompletion, **bold** means the rating has worsened.

Both context- and project-related factors were at play in the two cases where sustainability worsened. The field-verified Protected Areas Management and Sustainable Use (GED ID 1830) project in Uganda had a lower sustainability rating at post-completion; this was attributable to a series of contextual factors, including the government prioritizing infrastructure and economic development over conservation of protected areas, political interference, and the limited allocation of funds

to the environment sector at both the national and district levels. The Strategic Investment Program (SIP) Participatory Environmental Protection and Poverty Reduction in the Oases of Mauritania (GEF ID 3379) project showed lower sustainability attributable to the high costs and inappropriateness of the approaches and technologies introduced. The project aimed at improving 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, and (2) promoting environmentally friendly income-generating activities and energy-saving options. The water-lifting and irrigation systems introduced by the projects, including drip irrigation and motorized pumping systems, have not survived because they were either too complex, too costly to operate, or both.

3.3 Factors influencing outcome sustainability

This section looks at the factors that contribute or hinder outcome sustainability. The discussion starts from an analysis of available terminal evaluations with ratings on four dimensions—financial, institutional, sociopolitical, and environmental—affecting the likelihood of project outcome sustainability. It then explores in depth a wider array of factors, using evidence from previous IEO analyses, from the 67 terminal evaluations in the sustainability cohort, and from the country case studies.

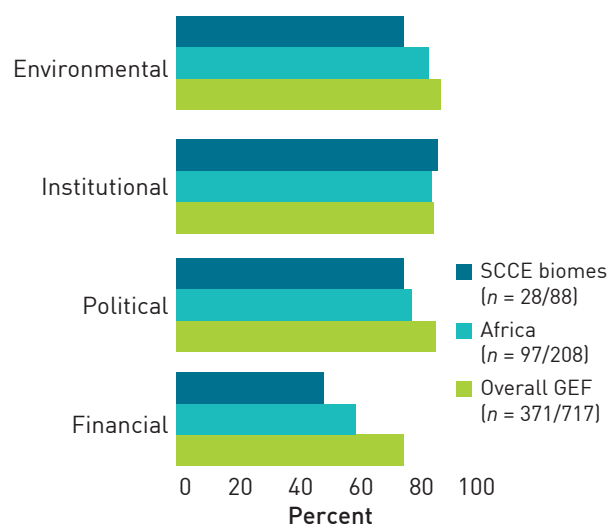
Fifty-two percent of the terminal evaluations from the APR 2019 cohort of projects completed between 2007 and 2014 ($n=371$) have ratings. A subset of 29 percent of these is of projects completed in Africa, 12 percent of which is of projects in the biomes. These three cohorts can be compared to identify whether any of the four dimensions are more prominent in influencing outcome sustainability.

Financial sustainability is an issue in Sub-Saharan Africa overall and is particularly acute in the biomes. Across the GEF portfolio, for those projects for which these ratings are available, more than 80 percent of projects were rated as having outcomes that were likely to be sustained in terms of their sociopolitical, institutional, and environmental dimensions; however, only 72 percent were so rated with regard to financial sustainability. The

same trend is observed in the Africa and biomes subsets of this cohort; in fact, their financial sustainability ratings are even lower (figure 3.5). In fact, financial sustainability differs most across all three cohorts. Statistical testing for proportionality conducted on these results indicates that these four dimensions differ in proportionality across the cohorts by varying degrees: financial ($p=0.001027$), political ($p=0.1451$), environmental ($p=0.2274$), and institutional ($p=0.9791$). Limited or lack of postproject financing has also emerged as a context-related hindering factor in five out of the six country case studies, the exception being Nigeria (annex C).

On the positive side, likelihood of institutional sustainability emerged as the most prominent dimension, rated above 80 percent both for Africa and the biomes, and comparable to the overall GEF cohort. These positive ratings suggest that the investments made by the GEF in building new and/or supporting existing institutional structures and capacities in the biomes are paying off.

Figure 3.5 Percentage of projects attributing outcome sustainability to different dimensions



Source: GEF IEO APR 2019 database.

A more in-depth analysis needs to go beyond the four sustainability dimensions. The APR 2017 review of postcompletion verifications identified six main hindering factors, observed in those cases where outcomes were not sustained: (1) lack of financial support for the maintenance of infrastructure or follow-up; (2) lack of sustained efforts from the executing agency; (3) inadequate political support, including limited progress on the adoption of legal and regulatory measures; (4) low institutional capacities of key agencies; (5) low levels of stakeholder buy-in; and (6) flaws in the projects' theories of change of projects. These factors were observed in the biomes as well, as the analysis of the 67 terminal evaluations of projects in the sustainability cohort indicates.

On the positive side, data from the sustainability cohort analysis point at “a strong buy-in and a strong sense of project ownership among key stakeholders” (30 percent) and “good coordination with/continuity of previous or current initiatives” (27 percent) as the most prominent project-related factors positively affecting the likelihood of sustainability of outcomes. These factors are especially important for projects implemented in the Sahel (44 percent and 56 percent, respectively). Other project-related contributing factors that emerged from the sustainability cohort analysis include “good project management or co-management” (26 percent); “good engagement of key stakeholders/stakeholders involved at design and decision-making” (24 percent); and “timely adaptive management” (23 percent). Though not as pronounced in the Sudan-Guinea Savanna, “highly relevant technology/ approach” was identified as an important factor in 25 percent of the Sahel projects. On the negative, “poor project design” greatly hinders the prospects for sustainability (33 percent overall, 18 percent in the Sahel and 45 percent in the Sudan-Guinea Savanna projects), “insufficient time for implementation” (30 percent), and “poor project management” (21 percent).

The predominant context-related contributing factor in the biomes is “national government support” (41 overall, 50 percent for Sahel and 38 percent for Sudan-Guinea Savanna projects). “Unfavorable political conditions/events” and “low institutional capacities” come next as context-related factors hindering the likelihood of sustainability (33 percent and 29 percent, respectively). “Unfavorable political conditions/events” is particularly important for projects implemented in the Sahel (56 percent) and “low institutional capacities to implement activities” for projects implemented in the Sudan-Guinea Savanna biome (41 percent). Of all these factors, “lack of financial support” and “poor project design” were the most frequently observed factors in the countries and projects visited by this evaluation ([table 3.3](#)). A detailed summary of case study findings on the observed factors is presented in [annex C](#).

Project design matters for sustainability. As discussed in the preceding paragraph, project design is among the most prominent factors that could influence positive or negative sustainability, depending on its quality. Design that promotes sustainability takes into due consideration the country socioeconomic and political context as well as the local conditions and knowledge, and includes measures and activities designed to support, from both the financial and institutional standpoint, the continued delivery of outcomes postcompletion. Field observations in Mauritania, Nigeria and Uganda indicate that project designs that included 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 learned due to lack of funds postcompletion. In Uganda, protected area district officials from the Ministry of Water and Environment stated that they could not apply the skills they learned because of limited local funding to regularly monitor forest degradation and to provide technical support to

Table 3.3 Factors hindering sustainability observed in country case studies

Factor identified in APR 2017	Mauritania	Mali	Nigeria	Guinea	Guinea-Bissau	Uganda
Flaws in the projects' theory of change/poor design						
Lack of financial support						
Inadequate political support						
No continuation from executing agency						
Low institutional capacities						
Low stakeholder buy-in						

scale up afforestation efforts. Lack of funding could have been mitigated at design by including post-project revenue generation activities and/or measures such as taxes or other financial incentive mechanisms.

An example of inadequate project design was observed in Tolo, Guinea. There, the sustainability of the positive environmental outcomes achieved in the area around the source of the Bafing River, reforested with support from the Community-based Land Management project (GEF ID 1877) after the farming communities were relocated to a nearby watershed, is threatened by insufficient groundwater. In this case, no technical feasibility study to assess water availability and its seasonal variation during the year; nor were other groundwater stock analyses conducted as part of project design.

The Bafing River is the source of half the water going to the Senegal River. Deforestation around the river source is caused by land clearing for agriculture. After intense participatory consultations, farmers agreed to relocate to a watershed at 2 kilometers from the river source, where communities can practice horticulture. This relocation was informed by a socioeconomic study followed by negotiations that provided an agreement for the distribution of land in the watershed and included compensation measures. Years after the relocation, the ecosystem has been slowly rehabilitated through intense reforestation measures. This

positive outcome is evidenced by satellite images taken in 2012 and 2018 showing increased vegetation directly adjacent to the perimeter of the river source and decreased agricultural activity on the hill slopes ([figure 3.6a](#)).

A 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 ([figure 3.6b](#)). 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. Continuation of these positive environmental outcomes is threatened by the limited access to water in the relocation site. Water scarcity remains the key impediment to agriculture in the watershed where the farmers have relocated. The mission found this area underused. Farmers reported that despite the investments made, they only have enough irrigation water for six months per year.

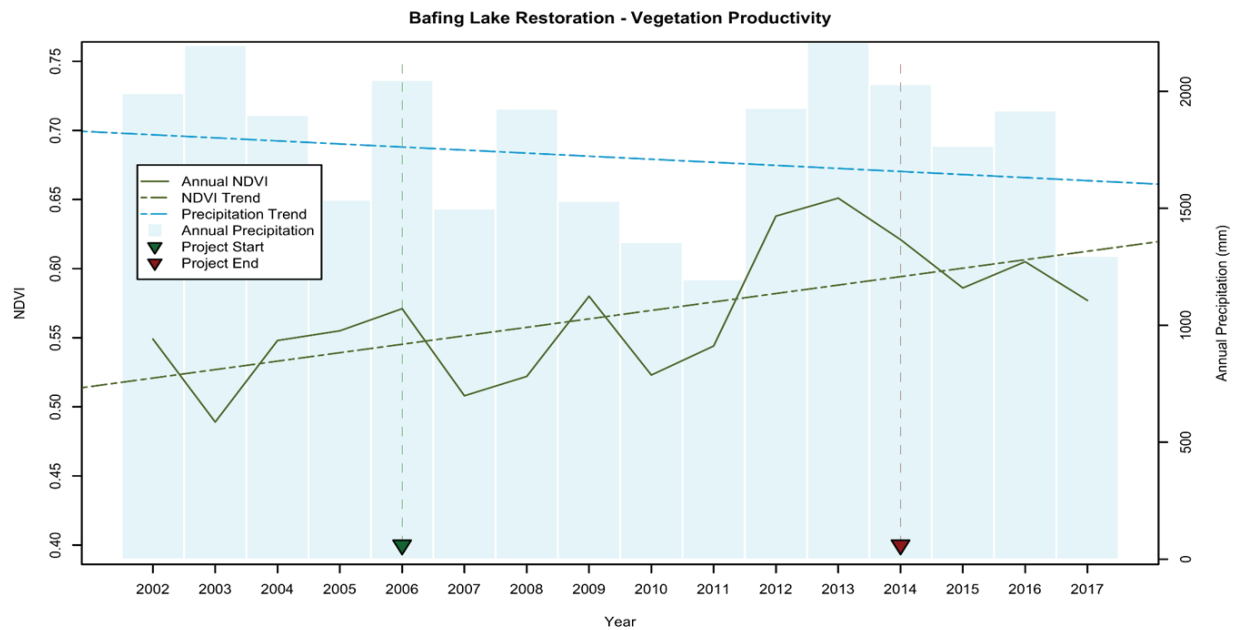
Designing profitable beneficiary-relevant alternative livelihood activities and working with existing decentralized institutions to include environmental considerations in local development plans emerged as important sustainability factors in the biomes. Both the terminal evaluation review of sustainability cohort projects and the postcompletion verifications conducted in country case studies added a new set of both project- and

Figure 3.6 Vegetation increase around Bafing Lake

a. Satellite images, Bafing River source—2012, 2018



b. Time series of vegetation productivity and rainfall in the project period—Bafing River source



context-related factors that affect sustainability of outcomes to the factors identified in previous IEO analyses ([annex C](#)). Of these, the most frequently observed project-related contributing factor was “designing alternative livelihood activities that are profitable for and corresponding to beneficiary concrete needs,” observed through several examples of both successes and failures in all the countries visited except for Guinea-Bissau. In Mali, alternative livelihood activities provided income-generating support for mills, but

equipment for the processing of nontimber forest products introduced by the SPWA-BD: Expansion and Strengthening of Mali’s Protected Area System (GEF ID 3763) project failed two years after completion because the equipment was no longer operational. Lack of savings for repairs, lack of working capital, and lack of raw materials and markets in nonwood forest products processing explain the failure of this activity. As a contrast, in Mauritania, the SIP: Participatory Environmental Protection and Poverty Reduction in the

Oases of Mauritania (GEF ID 3379) project introduced small-scale infrastructure investments (solar pumps) within the financial reach of households in the oases. These have been maintained by the households, with investment in new structures postproject by the households themselves.

Field verifications in country studies shed light on a few more important factors affecting the observed sustainability in the biomes. The most interesting was “working with existing decentralized institutions through their local development plans,” observed in Mali, Guinea, and Guinea-Bissau. Setting up intercommunal institutions, as was done in Guinea with the sustainable land management of a transboundary watershed, or as in Mauritania with the monitoring and management association of the Gourma elephant protected area, were important factors in sustainability. Another factor was the involvement of women in the alternative livelihood activities as well as in small infrastructure management groups. Women’s direct engagement in the management of these activities contributed to their continuation in Guinea, Mauritania, and Guinea-Bissau. This important factor is discussed in greater detail in the section on gender in this report.

The most interesting context-related factor for sustainability that emerged in this evaluation is related to country insecurity, emergence of fragile political or socioeconomic situations, observed in Guinea, Mali, and Mauritania. While fragility negatively affects outcomes and sustainability in various ways when it suddenly emerges, these negative effects tend to occur in the capital and other urban areas, where most of the population resides. This evaluation found that in rural areas these negative effects tend not to be felt. Even in countries like Mali that have been fragile for many years, financially viable and beneficiary-relevant alternative livelihood activities tend to continue. This aspect is further discussed in the section dedicated to fragility in this report.

Consideration of risks and mitigation measures are important drivers and were well documented in a majority of projects. A comprehensive discussion about context-related factors of sustainability needs to consider that if risks are not accounted for at design, their eventual occurrence during implementation is likely hindering both outcomes and sustainability postcompletion. Risks include socioeconomic and political as well as climate-related ones. The review of design documents of both the relevance and sustainability cohorts indicates that 85 percent of projects included risk considerations and related mitigation measures, in compliance with GEF requirements. Of these, 71 percent indicated in detail both climatic and nonclimatic risks in project documents. A picture of improvement emerges when the analysis is narrowed to the sustainability cohort projects. A large majority of the projects reviewed (86 percent) included risk considerations at design. Sixty-six percent of projects indicated climatic as well as nonclimatic risks in the project preparation document. An additional 30 percent included some mention of risks albeit incomplete or with some serious omissions.

Risks mentioned in project documents focused on institutional or governance risk (73 percent), specifically pertaining to institutional arrangements as well as lack of or limited capacity. Project design documents also referred to implementation risks in 28 cases in terms of stakeholder engagement at all government levels (local, municipal, ministerial, national). Several projects mentioned as a major risk to project success the inability of stakeholders to work effectively or collaborate. Twenty-five projects cited climatic and environmental risks to project implementation. Most of these projects discussed extended drought periods, advancing desertification in the Sahel biome, and natural disasters as attributable to climate change. Financial or fiduciary risk, or both, were also identified in 24 projects, mainly in the form of limited availability

of funds for cofinancing from either the government or the private sector.

Risk mitigation measures discussed at project design focused on enhancing community engagement and stakeholder participation, increasing technical and institutional capacity, and focusing on cost-effectiveness. The Institutional Strengthening and Resource Mobilization for Mainstreaming Integrated Land and Water Management Approaches into Development Programs in Africa (GEF ID 1325) indicated that the project would be implemented in a decentralized community-driven development process so that it would not take on the aspect of a top-down, government-led program, and it addressed community concern and skepticism that the project would deliver its intended outcomes. The Biodiversity Conservation and Participatory Sustainable Management of Natural Resources in the Inner Niger Delta and Its Transition Areas, Mopti Region (GEF ID 1152) project in Mali aimed at mitigating risks linked to (1) land tenure issues, and to the difficulty of preparing and implementing common programs involving one or several village communities (collective sites); (2) the inadequate mobilization of the people to undertake work to restore and protect the natural resources on the village lands, which could cause their planning, implementation, and monitoring/sustainability efforts to fail; and (3) the inadequate account taken of transhumant or semi-sedentary herders, who do not always share the same objectives as the sedentary populations in a typically pastoral zone with a strong agropastoral character. Mitigation measures to address the above-mentioned risks include socioeconomic forecasts so that contextual constraints, such as land use dynamics and the various interests at stake in natural resources management, can be better understood. In that project, measures were to be put in place in advance and in conjunction with the various users to prevent conflicts, mainly relating to water, land, or grazing land access.

3.4 Influence of environment and development on sustainability

Little consideration is given at the project design stage to socioeconomic and environmental synergies and trade-offs that could influence sustainability. The review of design documents in the relevance cohort indicates that only 15 percent of projects ($n=52$) had some mention of trade-offs and/or synergies at the design stage. Twenty-nine of these projects fully discussed synergies and trade-offs. Eight also addressed trade-off-related mitigation measures. Twenty-two projects focused on synergies with similar initiatives from previous and current projects/programs. Most of these mention either addressed trade-offs or fostered synergies through coordination between different sectors, with other ongoing initiatives, or between long- and short-term impacts. For example, the LCB-NREE Chad Child Project: Integrated Management of Natural Resources in the Chadian Part of the Lake Chad Basin (GEF ID 9476) sought to enhance synergies between environmental, agricultural, and livelihood outcomes and to provide synergies with the regional water project in the area. The Biodiversity Conservation and Participatory Sustainable Management of Natural Resources in the Inner Niger Delta and Its Transition Areas, Mopti Region in Mali (GEF ID 1152) aimed at 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 sought to ensure synergy with other biodiversity conservation and land restoration projects implemented by the GEF, the World Bank, and UNDP in the Niger River Delta.

Examples of promoting synergies or addressing trade-offs between long- and short-term impacts include the Local Empowerment and Environmental Management Project—Micro Watershed and Environmental Management Project in Nigeria

(GEF ID 942) and the Coastal and Biodiversity Management Project in Guinea-Bissau (GEF ID 1221). Both projects recognized the need for short- and long-term technical assistance to enhance project sustainability and build local capacity, as well as the need for an intensive participatory planning process to ensure greater community inclusiveness and ownership of decision making. Only 12 projects discussed synergies and/or trade-offs between development and environment, focusing on socioeconomic impacts and livelihoods. Projects targeted synergies between sustainable natural resource management of land, watersheds, protected areas, wildlife, and local benefits. Two of those projects mentioned mitigation measures toward the environment and identified development trade-offs.

Findings from case studies and interviews consistently indicated the importance of a nexus approach to environmental and socioeconomic objectives and between short- and long-term planning in enhancing sustainability. Case studies indicate that when systemic provisions and measures for alternative livelihood activities are put in place and there is a positive environment-socioeconomic nexus, the chances of sustaining the environmental benefits of project interventions were much improved ([box 3.2](#)).

3.5 Cross-cutting issues

GENDER

Gender is increasingly incorporated in GEF interventions in the biomes. To determine the extent to which gender has been taken into consideration in GEF programming in the two biomes, the evaluation completed a quality at entry review of design documents of both the relevance and sustainability cohorts ($n = 358$). The assessment verified whether projects had completed, before Chief Executive Officer (CEO) endorsement,

- A gender analysis;
- A gender mainstreaming plan; and
- A gender-responsive results framework.

As shown in [figure 3.7](#), a progressively increasing number of projects are undertaking a gender analysis before CEO endorsement; this number more than doubled between GEF-4 and GEF-6. The same trend can be observed for the existence of a gender mainstreaming plan and of a gender-responsive results framework. Interestingly, a larger percentage of projects (40 percent) have a gender mainstreaming plan in place than have conducted a gender analysis (25 percent).

Consideration of gender improved over the GEF replenishment periods. Projects in the biomes were reviewed at entry and at completion (for completed projects with terminal evaluations) using a classification followed in recent IEO analyses (GEF IEO 2018a). Over 60 percent of GEF-1 to GEF-3 projects were classified as gender blind; this percentage decreased to 11 percent in GEF-5 and to 6 percent in GEF-6, subsequent to the GEF Gender Mainstreaming Policy coming into effect in May 2011 (GEF 2012). Gender-sensitive projects increased substantially in GEF-5 and GEF-6 ([figure 3.8](#)).

Gender is being increasingly considered during project implementation even when it is not explicitly addressed at the design stage. The GEF IEO's gender evaluation (GEF IEO 2018a) found that consideration of gender at the point of project completion had improved for GEF-1 to GEF-4 projects. The evaluation reported a decrease in the number of gender-blind projects and an increase in the number of gender-aware projects, with some increase in gender-sensitive projects. Similarly, projects implemented in the biomes are taking gender into account during project implementation even when it had not been considered at design; this is evidenced by a comparison of gender

Box 3.2 Examples of positive influence of environment/development synergies on sustainability

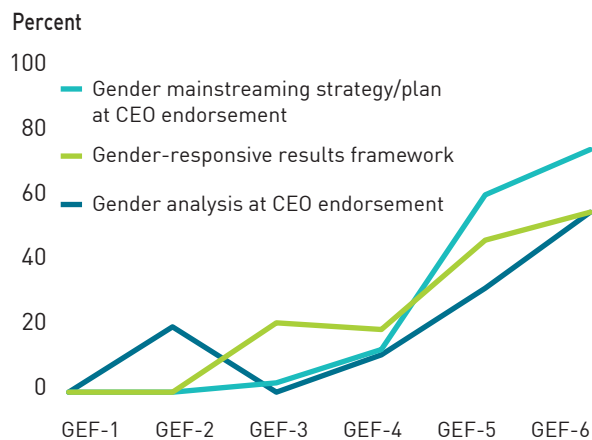
Mali. The regional project Reducing Dependence on POPs and other Agro-Chemicals in the Senegal and Niger River Basins through Integrated Production, Pest and Pollution Management (GEF ID 1420) resulted in economic, health, and environmental benefits by reducing the cost of pest control in market gardening, leading to reduced poisoning among the populace and increased biodiversity. In the project entitled Biodiversity Conservation and Participatory Sustainable Management of Natural Resources in the Inner Niger Delta and its Transition Areas, Mopti Region (GEF ID 1152), the regeneration of bourgou, an aquatic grass, through nurseries and replanting had a major impact on the economy and on community livelihoods. The system of regeneration exploits the synergy between the environment (increased biodiversity, including a return of migrating birds and increased fish stocks) and increased income generation (livestock feed, increased fishing, etc.). Where the nexus does not exist, however, or where projects introduced alternative livelihood activities that are not economically viable from a beneficiary standpoint, the sustainability of any related environmental benefits is compromised. Thus, the same biodiversity conservation project provided an example of a lack of nexus thinking where sustainability was compromised. Mechanizing bourgou hay making for livestock feed failed, because farmers could not afford the costs of operating the equipment. Similarly, efforts to replant forests with doum palm (*Hyphaene Thebaica*) were unsuccessful, because of the long time these palms take to grow. Field observations in Mali also indicated that once a positive socioeconomic-environment nexus is ensured, activities and benefits controlled by individuals, households, and/or families are more likely to lead to sustainable outcomes compared with community-managed schemes.

Guinea-Bissau. The Coastal and Biodiversity Management Project (GEF ID 1221) and a series of replication projects (including Small Grants Programme projects) focused on the water-energy-food nexus through water drilling and installation of wells and water pumps. The water is mainly used for drinking, but there is some community-based

horticulture as well. The improved drinking water has positive effects on human health and reduced the number of cases of diarrhea among children. The two regional projects reviewed—Combating Living Resource Depletion and Coastal Area Degradation in the Guinea Current LME through Ecosystem-based Regional Actions and Adaptation to Climate Change—Responding to Shoreline Change and its Human Dimensions in West Africa through Integrated Coastal Area Management (GEF IDs 1188 and 2614, respectively)—have used a watershed management approach for land use planning, natural disaster mitigation, and erosion control.

Mauritania. In the Community-based Watershed Management Project (GEF ID 2459), residents have derived clear economic, as well as environmental, benefits from infrastructure investments made by the project. However, the long-term sustainability of these benefits 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. In the SIP: Participatory Environmental Protection and Poverty Reduction in the Oases of Mauritania (GEF ID 3379) project, it is reported that small-scale infrastructure investments in solar pumps that are well within the financial reach of oasis households have been maintained with automatic investment in new structures postproject by the households themselves. In contrast, small-scale alternative livelihood activities are no longer functioning, even though these produced economic benefits to households over the short term. These activities were not sustainable because beneficiaries have not been able to generate the requisite operating funds and capital replacement funds to keep the activities running; the beneficiaries did not view this investment as cost-effective. Sustainability of small-scale alternative livelihoods depends on the existence of a positive environment-socioeconomic nexus in the medium term. Virtually all alternative livelihood investments in Mauritania have proved to be unsustainable, even though they produced economic benefits to households in the short term.

Figure 3.7 Gender consideration in biome projects by GEF replenishment period



Source: Project documents.

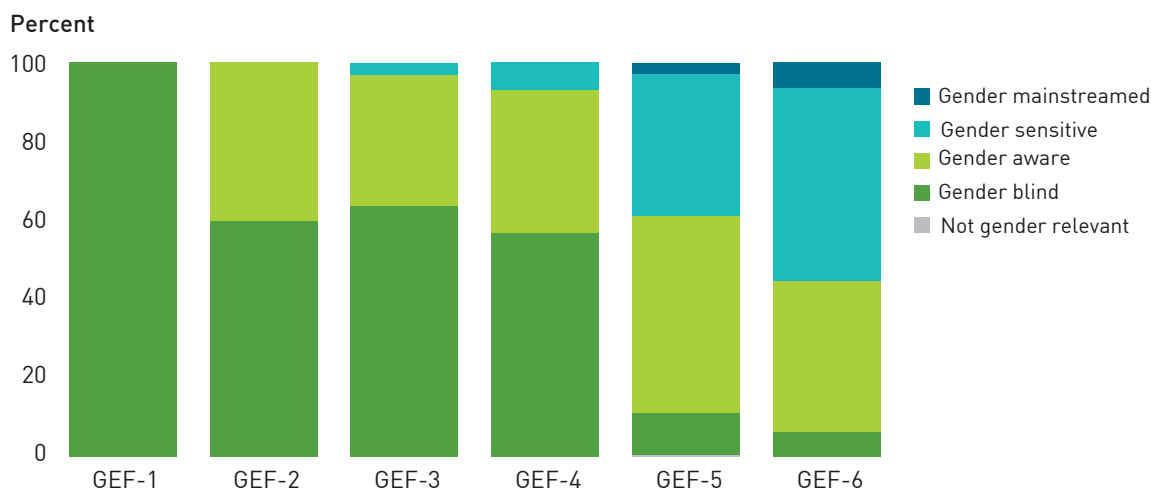
consideration at project entry and completion. [Figures 3.9](#) and [3.10](#) show consideration of gender at entry and completion, respectively, for projects with terminal evaluations ($n = 134$). This comparison shows a shift toward projects being gender aware or gender sensitive at completion.

Seventy percent of completed projects had evidence of women’s inclusion and empowerment emerging during implementation. Gender-disaggregated data

in project documents tend to focus on the share of men and women as beneficiaries. No evidence of women being considered or consulted at the design stage emerged from the project documents reviewed.

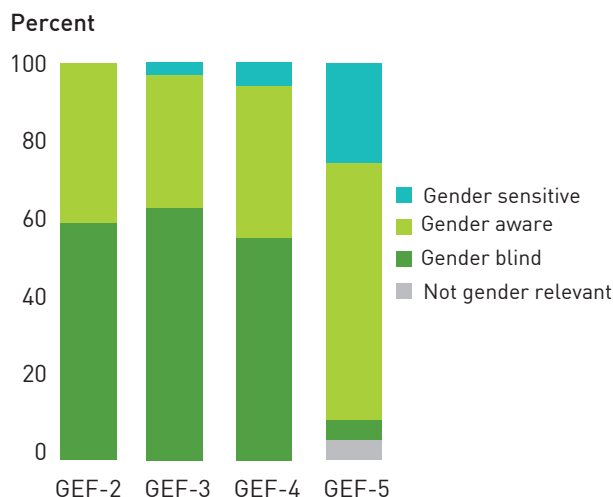
Case studies confirmed that, even when not designed explicitly with gender mainstreaming in mind, all the projects were implemented in a gender-sensitive manner. Specifically, projects demonstrated clear evidence of women’s inclusion and empowerment. Most frequently, women were involved in alternative livelihood activities. Although countries are at different stages in their development of a gender policy, in general there is no hindrance to stronger gender considerations in GEF projects. Evidence from the Mali and Guinea case studies indicated that women-led alternative livelihood activities have been likely to be sustained. From discussions with stakeholders during site visits in Mali, socially positive effects were evident. Women felt empowered, because their personal income increased through proceeds from livelihood activities introduced by the GEF projects. Most of these activities visited in Guinea project sites are run by women’s groups, notably the gardening sites supported by the GEF. Continuation of

Figure 3.8 Gender consideration in biome projects at entry by GEF replenishment period



Source: Project documents.

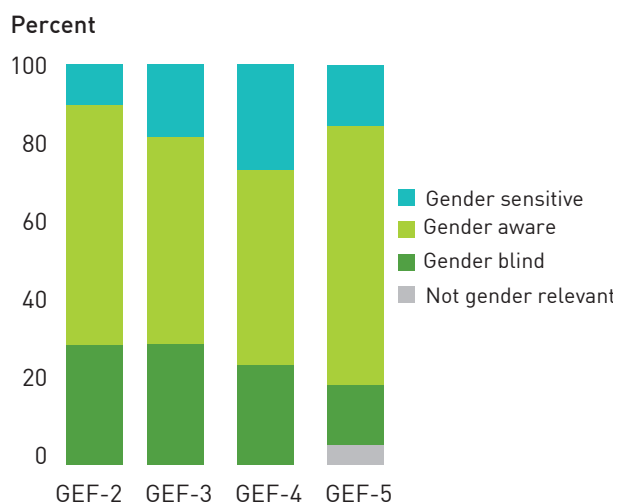
Figure 3.9 Gender consideration in biome projects with a terminal evaluation at entry



Source: Project design documents.

Note: $n = 134$.

Figure 3.10 Gender consideration in biome projects with a terminal evaluation at completion



Source: Terminal evaluation reports.

Note: $n = 134$.

these activities is partly supported by the government. The women's group in Tougnifily is a member of the government forum for gardening farmers and pays annual membership fees regularly. In return, the group receives technical assistance on horticulture as well as farming tools. Continuation of women-led gardening activities is also due to a

strong interest and commitment on the part of the women themselves (box 3.3).

RESILIENCE

Promoting resilience to climate shocks is critical to the geographic region covered by this evaluation, as demonstrated by the large and growing number of adaptation interventions, and by the considerable amount of LDCF and SCCF funding in the two biomes. In the absence of an official GEF definition of resilience, this evaluation takes resilience to mean the capacity of social, economic, and environmental systems to cope with a hazardous event, responding or reorganizing in ways that maintain their essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and transformation (Béné et al. 2012).

Two resilience considerations have been examined in this evaluation. First, the analysis looked at how resilience is considered in the GEF portfolio in the two biomes, whether (1) in terms of risk management, (2) as a co-benefit, or (3) integrated into a

Box 3.3 The Mounafanyi Women Group: Mamou, Guinea

The women-owned market gardening group in Mounafanyi consists of 20 women who grow vegetables throughout the year. The group was created with support from the GEF's Community-based Land Management (GEF ID 1877) project. As of this writing, Mounafanyi has more than \$1,000 saved in its bank account. Using the revenues earned from gardening, the group has bought a piece of land to build an elementary school for the members' children. The women's cooperative association aims to contribute to the overall socioeconomic development of their communities. An agriculture extension technician residing in the village provides technical advice to the group, connecting the women to available government services for tools and seed supplies.

multiple benefits framework as explained in [box 3.4](#) (GEF STAP 2014). Second, the analysis looked at the core component of the resilience concept in resilience-focused projects, identifying whether resilience was viewed (1) in a static system/engineering sense, (2) as incremental change, or (3) as transformational change. Types of resilience thinking are outlined in [box 3.5](#).

Resilience is addressed in climate change adaptation projects mostly in the form of climate risk management and as a co-benefit. Support to climate change adaptation through LDCF and SCCF funds aims to strengthen resilience and reduce vulnerability to the adverse impacts of climate change in GEF recipient countries. The GEF additionally supports the integration of climate adaptation into development. Though all climate change adaptation projects under the LDCF/SCCF trust funds included resilience considerations, 37 percent of nonclimate change adaptation projects showed some evidence of resilience considerations. Resilience considerations in the terminal evaluations of projects completed between 2007 and 2014 focused on risk management and resilience as a co-benefit. When looking at the entire portfolio covered by this evaluation, spanning from GEF-4 to GEF-6, a move to resilience considerations being integrated within the project's multiple benefits framework was observed. When present, resilience considerations and thinking were in the form of incremental change or in a static system/engineering sense.

Almost all the country case studies found evidence of resilience thinking in projects implemented in all five countries. In Mali, resilience considerations were integrated as an incremental change in the multiple benefits framework. The project Integrating Climate Resilience into Agricultural Production for Food Security in Rural Areas (GEF ID 3979) specifically contributed toward achievement of at least four of seven priorities for the agricultural sector contained in the national adaptation program of action. This contribution included the development

Box 3.4 Climate resilience in the GEF

Resilience as risk management. A first level of response emerges from pure risk management considerations: sustained delivery of future global environmental benefits 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 the resilience of human socioeconomic systems to climate change; it is therefore worth seeking resilience co-benefits of GEF focal area interventions, or in some cases, using 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 socioeconomic 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.

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

Box 3.5 Types 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) defined 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 several levels (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 Pelling (2011), these shifts may include a combination of technological innovations, institutional reforms, behavioral shifts, and cultural changes.

the food security of vulnerable households, and restoring soil fertility through climate-resilient techniques.

In Nigeria, resilience thinking in the completed GEF projects and in the two recent and ongoing projects is integrated as an incremental change in the multiple benefits framework. The SPWA-BD: Niger Delta Biodiversity Project (GEF ID 4090) aimed at increasing the ecological representation and ecosystem resilience of a system of state- and community-based protected or specially managed areas. The project’s strategic approach was to mainstream biodiversity management objectives into oil and gas laws, policies, and oil company operations to ensure that mainstreaming actions consider the Niger Delta’s ecological integrity and sustainability. However, there are no clear linkages in project documents to country priorities on resilience, because such priorities have not been established or documented. The Great Green Wall (GGW): Nigeria Erosion and Watershed Management Project (GEF ID 4907) is another example of resilience thinking integrated into the multiple benefits framework as an incremental change. With the overall aim of reducing vulnerability to soil erosion in targeted sub-watersheds, the project supports the country’s transformation agenda to achieve greater environmental and economic security.

Four of the projects reviewed in Guinea-Bissau have strengthened the resilience of the country and local communities to climate change and reduced their vulnerability to natural disasters and other shocks. Two of the projects completed between 2007 and 2014—Combating Living Resource Depletion and Coastal Area Degradation in the Guinea Current LME through Ecosystem-based Regional Actions (GEF ID 1188) and Adaptation to Climate Change—Responding to Shoreline Change and Its Human Dimensions in West Africa through Integrated Coastal Area Management (GEF ID 2614)—together with

two more recent projects—Strengthening Resilience and Adaptive Capacity to Climate Change in Guinea-Bissau Agrarian and Water Sectors (GEF ID 4019) and Promoting Investments in Small and Medium Scale Renewable Energy Technologies in the Electricity Sector (GEF ID 5331)—have reduced Guinea-Bissau’s fragility and improved national resilience to climate risks.

Surprisingly, no evidence of resilience thinking was found in GEF projects in Mauritania, where only the most recent project, Improving Climate Resilience of Water Sector Investments with Appropriate Climate Adaptive Activities for Pastoral and Forestry Resources in Southern Mauritania (GEF ID 5190), described clear linkages with country priorities on resilience, with links to the national adaptation program of action and other country strategies in alignment with country priorities.

Of the countries visited, Uganda had by far the most developed policies and institutions dealing with climate resilience. Established in 2008, operates The Climate Change Department, under the Ministry of Water and Environment and produces estimates of nationally determined contributions and prepares official government pronouncements to contribute to the international discussion on reduction of carbon emissions. Its Adaptation Section coordinates the implementation of adaptation and resilience projects within the country. Despite this conducive national framework, however, climate resilience is only now beginning to be considered in projects. Notably, resilience was given some prominence in the Integrated Landscape Management for Improved Livelihoods and Ecosystem Resilience in Mount Elgon (GEF ID 5718) project and the SIP: Enabling Environment for SLM to Overcome Land Degradation in the Cattle Corridor of Uganda (GEF ID 3393) project. In the latter project, to reinforce landscape resilience, tree planting was integrated into the landscape to reduce wind speed and increase water retention. The technologies promoted through these projects help keep

more water and nutrients in the soil, and conservation agriculture increases maximum use of resources and productivity. The projects also have further enhanced community resilience by organizing community members to undertake joint landscape management activities, while savings groups simultaneously seek to reduce land mortgaging for small loans.

FRAGILITY

Overall, the analysis of outcome and sustainability ratings showed no difference between projects implemented in fragile countries in the biomes and those that were not. Moreover, this evaluation found that financially viable and beneficiary-relevant alternative livelihood systems tended to continue even in countries experiencing fragility, conflict, and/or violence—especially when these are located away from capital cities where conflict tends to occur. These findings emerged from the analysis of the 13 countries in the biomes that are or have been a country affected by fragility, conflict, and violence in the last 10 years (World Bank 2018) ([annex D](#)). The GEF has provided support in all of those countries, including through 44 completed projects, 11 of which were designed or implemented at the time when the country was not fragile. Of the remaining 33 projects, 28 were included in the APR 2019 terminal evaluation data set. Fifty-seven percent of those projects were rated in the satisfactory range for outcomes and 39 percent were rated as having outcomes likely to be sustained. These percentages are comparing to the sustainability cohort of national and regional interventions, where 59 percent of projects were rated in the satisfactory range for outcomes at the time and 39 percent for likely sustainability. When looking at the entire cohort covered by this evaluation (GEF-4 to GEF-6), there were a few cases in which implementation was interrupted because of the emergence of a fragile situation, but that the project continued when the situation returned to

normal. This was the case for 7 percent of GEF-4 to GEF-6 projects and 12 percent of those completed between 2007 and 2014.

Fragility has affected the timely delivery of GEF support but has mostly not affected the outcomes and sustainability of GEF support in the two biomes. The evaluation had the opportunity to visit projects in three countries—Guinea, Mali, and Mauritania—that have been or are still in a fragile situation. The situation in Guinea directly affected timely delivery of GEF support. In 2008–10, there was an interruption of the Support Program for Village Communities World Bank project due to civil unrest following the president’s death; this forced the World Bank to suspend all operations in the country. The Community-based Land Management (GEF ID 1877) and the Coastal Marine and Biodiversity Management (GEF ID 1273) projects were stopped as well, because they were hosted and executed through the World Bank’s Support Program for Village Communities. Interviews with World Bank and government representatives indicated that this unforeseen interruption caused serious delays during implementation, but no other major consequences were discerned.

In Mali, the Biodiversity Conservation and Participatory Sustainable Management of Natural Resources in the Inner Niger Delta and Its Transition Areas, Mopti Region (GEF ID 1152) had delays in implementation of its agreement with the government’s funding arm for local development (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, following the supervisory mission in April 2013, 22 contracts amounting to CFAF 110 million (\$182,350) were canceled, but other activities continued, as reported in the project’s terminal evaluation. Other projects that were visited continued operations despite the fragile situation.

Mauritania was at one time in 2007 classified with marginal fragility, and its experience demonstrates how insecurity in the region can negatively affect project outcomes. During implementation of the Mauritania component of the regional project Enhancing Conservation of the Critical Network of Sites Required by Migratory Waterbirds on the African/Eurasian Flyways (GEF ID 1258), the stated objective of growing equitable biodiversity-friendly tourism by increasing park revenues was negatively affected by unexpected insecurity issues and political instability linked to the events of August 2008 and by several foreign terrorist attacks on European visitors in other parts of the country. These events brought about a major reduction in tourist numbers and revenues to the entire country—a situation from which, as observed during the field verification mission, Mauritania has not yet fully recovered.

The negative effects of emerging fragile situations have not affected profitable and beneficiary-relevant alternative livelihood activities in the biomes. Even in countries such as Mali that have been fragile for many years, financially viable and beneficiary-relevant alternative livelihood activities tend to continue. This finding further informs the discussion of this evaluation on context-related factors that potentially hinder the likelihood of sustainability of outcomes from GEF-supported projects. The Gourma Biodiversity Conservation (GEF ID 1253) project in Mali demonstrated that alternative income-generation activities under individual household control (market gardens, small ruminants, credit associations) seem to have worked—and are still working in the current insecurity situation.

PRIVATE SECTOR

Although not initially identified as a cross-cutting issue to be investigated in this evaluation, the private sector emerged from case study analysis as a

potentially important cross-cutting element of GEF interventions with an influence on sustainability. The decision was thus made to take a closer look at private sector engagement in GEF-supported projects in the biomes.

The private sector has had limited involvement in GEF projects in the biomes; when involved, it has contributed to sustainability and trade-offs.

Fifty-six percent of the projects reviewed in this evaluation showed evidence of some form of private sector engagement in the countries of the two biomes. Projects engaged with the private sector either as a stakeholder (32 percent) or for input on project design to promote buy-in from inception (18 percent). Only 15 percent of projects engaged with the private sector during the design stage to secure cofinancing. Of these, only two project terminal evaluations reported evidence of private sector cofinancing provided after project completion. As to involvement during implementation, 25 percent of projects showed evidence of having established public-private partnerships. Fifteen percent of these partnerships were established where existing country regulatory frameworks enabled the private sector to address environmental issues.

In the Guinea-Bissau country case study, the private sector was engaged only in the procurement of goods and services for the project itself. In contrast, in Uganda, the private sector was included

to help with project sustainability. Specifically, the Protected Areas Management and Sustainable Use (GEF ID 1830) project increased private sector investment in park facilities. The private sector was persuaded to develop infrastructure in the parks, such as hotels and camps in the reserve areas, thus generating income and employing local community members. This action enhanced the nexus between environmental conservation and increased income for the private sector, as well as for local government districts through the levy of hotel taxes.

The evaluation of GEF support on national environmental laws and policies in selected countries demonstrated the importance of legal reforms and frameworks in paving the way for the private sector to operate in countries (GEF IEO 2018d). An example in the biomes is the Lighting Africa Program Expansion (GEF ID 4495), which demonstrated the importance of GEF support to legal and regulatory frameworks in stimulating the engagement of the private sector. Created to transform the off-grid market by removing barriers and providing market intelligence, the program improved the enabling environment by developing a quality assurance infrastructure; facilitating business-to-business interactions; helping governments address policy barriers; providing business development services; and facilitating access to finance for manufacturers, local distributors, and other stakeholders.

Conclusions and recommendations

4.1 Conclusions

The Sahel and Sudan-Guinea Savanna biomes experience severe environmental challenges, driven by climate change among the major underlying causes. The most common challenges are deforestation and land degradation, biodiversity loss, and desertification. Other important challenges in the two biomes include water quality/quantity threats and threats to inland as well as coastal marine water resources, mining, and natural disasters. The pressing socioeconomic needs of a rapidly growing population compound the challenges at hand. Degradation of agricultural lands coupled with the high variability of rainfall poses obstacles to the food security and poverty reduction efforts in the region.

Against this background of constraints, this evaluation examined the relevance, performance, and sustainability of GEF interventions, based on a desk review of the GEF project portfolio in the 23 biome countries from GEF-4 to GEF-6, and on five in-depth country case studies selected based on the aggregate and geospatial analysis of the portfolio under review. The evaluation took a closer look at the determinants of sustainability by focusing on a cohort of projects completed between

2007 and 2014. This approach allowed for enough time after completion—five years for outcome sustainability—to be robustly revisited and assessed. The evaluation questions were answered through a mixed-methods approach using both quantitative and qualitative analytical tools. This evaluation has reached the following conclusions, presented hereafter under six main headings corresponding to the main themes embedded in the evaluation questions.

OVERALL RELEVANCE TO COUNTRY ENVIRONMENTAL PRIORITIES

Conclusion 1: GEF support to the Sahel and Sudan-Guinea Savanna biomes increased consistently from the pilot phase onwards. Over the years, the Sahel and Sudan-Guinea Savanna countries have substantially benefited from GEF investments. From the pilot phase onwards, GEF support doubled every two replenishment periods, reaching over \$600 million both in GEF-5 and GEF-6. Support continues to be strong, having reached \$220 million plus an equivalent amount of additional set-aside funds at midway through GEF-7. GEF finance has leveraged several times the allocated STAR grants in additional cofinancing resources for its interventions.

Conclusion 2: GEF support addresses the main environmental challenges faced by countries in the two biomes, and there are no major gaps.

This evaluation concludes that GEF support is well aligned and highly relevant to national environmental priorities in the countries of the two biomes. Most of the GEF support to these countries has focused on climate change, the underlying cause of most environmental challenges in the biomes. Seventy-eight percent of the climate change focal area support in the two biomes is invested in support to adaptation. Land degradation started to be addressed in GEF-4 through focal area-specific support and continued afterwards mainly through multifocal area interventions. The review of project documents in the Sahel and Sudan-Guinea Savanna biomes portfolio and interviews with GEF focal points in case study countries strongly confirmed that GEF interventions are well aligned with the governments' environmental priorities in the Sahel and Sudan-Guinea Savanna. Staffs from the ministries of environment and related government institutions indicated that the GEF is an important source of environment funding contributing to national sustainable development planning. In the areas of institutional development and governance, an area in high need of both financial and technical support in the biomes and where the GEF concentrates most of its efforts, more than half of the projects reviewed focus on policy frameworks and skills building. Both areas, much in need in the biomes, can benefit from the institutional support provided by the GEF, which has largely demonstrated its comparative advantage and additionality in the other world regions where it intervenes.

RELEVANCE OF GEF FINANCIAL AND TECHNICAL SUPPORT

Conclusion 3: Relevance of GEF support has not been affected by the GEF move toward integrated programming, including through multifocal projects and programmatic approaches. Although

investment in programs initially increased in GEF-4 and substantially decreased in GEF-5 and GEF-6, programs and their respective child projects are becoming larger in size, and a move from single focal area toward multifocal interventions is observed in the two biomes. This trend signals an important change in the way GEF programs are designed and implemented in this region, which is reflective of the GEF's move toward integrated programming to achieve impact at scale and address the main drivers of environmental degradation. The increase in the size of child projects is viewed favorably by country stakeholders, who tend to view projects in terms of the direct benefits they generate within the national boundaries.

Conclusion 4: There has been an expansion of coverage with new Agencies in the biome countries, a positive development in terms of more choice for countries and more diversity of expertise. A shift toward more diversity in GEF Agencies is observed from GEF-4 onward in the two biomes. This culminated in GEF-7, where for the first time in GEF history, the cumulative portfolio share of the three original GEF Agencies, UNDP, UNEP, and the World Bank, has gone under 50 percent. However, no clear trend emerges when the GEF Agencies' comparative advantage in specialized technical knowledge. Most Agencies active in the Sahel and Sudan-Guinea Savanna biomes have a rather diversified portfolio that covers all GEF focal areas. Importantly, countries select GEF Agencies based on a larger set of attributes than just their technical area of specialization, including, among other factors, the history of engagement between the GEF Agency and the country in which the project is going to be implemented.

OVERALL PERFORMANCE AND SUSTAINABILITY

Conclusion 5: Projects in the two biomes and in Africa are overall rated lower than the overall

GEF portfolio. According to an analysis of the most recent available APR data from the 2019 cohort, completed projects in the Sahel and Sudan-Guinea Savanna biomes were rated lower in terminal evaluations than projects in the Africa region and lower still than the overall GEF portfolio on all performance indicators. The same trend is observed in the two rating dimensions of interest in this evaluation, namely outcomes and sustainability. This finding supports previous findings from IEO performance as well as country portfolio analyses in Sub-Saharan Africa. Whereas projects in Africa tend to have lower ratings, more recent terminal evaluations of GEF-4 to GEF-6 projects in the biomes reported higher project ratings than those reported in terminal evaluations of earlier projects completed between 2007 and 2014, which is promising.

Conclusion 6: While 85 percent of multifocal projects had higher outcomes, only 38 percent had ratings in the satisfactory range for their likely sustainability. The multifocal cohort is the one that was rated the lowest compared with single focal area cohorts. Otherwise, the broader adoption analysis of completed projects reviewed for sustainability in the biomes indicates that for 73 percent of these projects no action was taken during implementation to stimulate broader adoption of outcomes postcompletion. Clearly, there is room for improvement on fostering broader adoption and likelihood of sustainability of project outcomes through consideration of sustainability measures at design in the biomes, especially in multifocal interventions. This is particularly important in consideration of the GEF's move toward integrated programming and multifocal support.

Conclusion 7: Demonstrating sustainability takes time. A large part of the data gathering and analysis effort in this evaluation has focused on understanding what happens to the outcomes of GEF interventions a few years after completion.

The results of this analysis confirmed a similar finding from both the 2017 APR and the recently completed SIDS SCCE, namely that projects tend to show higher observed sustainability of outcomes at postcompletion than at terminal evaluation stage. Though it's plausible that as time goes by, context-related factors increasingly come into play as compared to project-related ones, field observations in this evaluation underscored the importance of designing projects with due consideration of measures fostering the likely sustainability of outcomes postcompletion.

FACTORS OF SUSTAINABILITY

Conclusion 8: Financial sustainability is an issue in Sub-Saharan Africa overall, which is particularly challenging in the biomes. This evaluation has found financial sustainability in the biome countries as the weakest among four dimensions of sustainability, namely the financial, institutional, environmental, and political. The likelihood of financial sustainability goes from 72 percent in the overall GEF-4 to GEF-6 portfolio down to 57 percent in Africa and 46 percent in the countries of the two biomes. Limited or lack of postproject financing has been confirmed as a major context-related hindering factor in five out of the six country case studies. These findings reiterate the importance of planning already at the design stage for setting up viable financial mechanisms and measures that take over from where the project outcomes left off at completion and that continue delivering benefits over time. Financial considerations are important also where strengthening of local institutions and capacities has succeeded. Although the likelihood of institutional sustainability was the highest ranked sustainability dimension both in Africa and in the biomes (i.e., above 80 percent in both cohorts), case studies pointed at several examples where the institutions have been strengthened but stopped short of funding postcompletion and could not continue operating.

Conclusion 9: Context-sensitive, technologically appropriate project design positively affects the sustainability of outcomes in the biomes.

Design that promotes sustainability takes into due consideration the country socioeconomic and political context as well as the local conditions and knowledge, and includes measures and activities designed to support, from both the financial and institutional standpoint, the continued delivery of outcomes postcompletion. Field observations in this evaluation met with successful designs that included long-lasting infrastructure investments requiring limited associated operating costs, as well as missed opportunities from substantial investments in skills and capacities where the trainees cannot apply what they learned due to lack of funds postcompletion.

Conclusion 10: Designing profitable beneficiary-relevant alternative livelihood activities and working with existing institutions to include environmental considerations in local development plans emerged as new project-related sustainability factors in the biomes.

These factors, not highlighted in the IEO's previous sustainability assessments, emerged both from the review of terminal evaluations of sustainability cohort projects and the postcompletion verifications conducted in the countries visited by this evaluation. Several country study examples—both in terms of successes as well as failures—confirmed the importance of designing profitable alternative livelihood activities that correspond as much as possible to the real needs in the everyday lives of beneficiaries. Small infrastructure operations and maintenance have demonstrated their dependence on being within the financial reach of households. Local authorities the evaluation team met in Guinea, Guinea-Bissau, and Mali included environmental conservation activities in their commune and/or municipality sustainable development plans and budgets.

Conclusion 11: Not much consideration is given at project design to the influence that synergies and trade-offs between socioeconomic and environmental objectives have on the prospects for sustainability in the biomes.

While in general the socioeconomic priorities are considered by GEF interventions in the biomes, only a small percentage of project design documents in the relevance cohort discuss how to address synergies or mitigate trade-offs between short-term and long-term, environment, and development objectives. As highlighted in the introductory paragraphs of this concluding chapter, in addition to sharing many common environmental challenges, the 23 countries in the two biomes also face pressing socioeconomic challenges, affecting the severity of the environmental issues at hand. National infrastructure and socioeconomic development investments are often given priority over environmental conservation initiatives. It is not surprising that findings from case studies and interviews conducted in this evaluation consistently indicate the importance of nexus thinking between environmental and socioeconomic objectives and between short-term and long-term planning in enhancing sustainability. Field observations provide several examples demonstrating that when alternate livelihood systems with a clear, positive environment/socioeconomic nexus were in place, the chances of sustainability of the environmental benefits generated by GEF interventions were greater.

GENDER AND RESILIENCE

Conclusion 12: Gender considerations are increasingly incorporated within GEF interventions in the two biomes.

Consistent with similar findings of previous IEO analyses, this evaluation confirms that in the two biomes' countries, gender is considered during project implementation even when not specifically addressed at the design stage. This is demonstrated by the comparison between gender considerations assessed at entry

and at completion, as well as from many examples field-verified in all the five country case studies. Gender considerations are important also in the discussion on factors for outcome sustainability. This evaluation has brought forward several examples confirming that when alternative livelihood activities were led by women, they tended to be more sustainable compared with men-controlled ones.

Conclusion 13: Resilience to climate risks is addressed in climate change adaptation projects mostly in the form of climate risk management and as a co-benefit.

Promoting resilience to climate risks is a key aspect in the geographic region covered by this evaluation, as demonstrated by the large and growing number of adaptation interventions as well as the considerable amount of LDCF and SCCF funding in the two biomes. When looking at the entire portfolio covered by this evaluation, spanning from GEF-4 to GEF-6, a move to resilience considerations being integrated within the project's multiple benefits framework is observed. Resilience considerations in the sustainability cohort projects focused on risk management and resilience as a co-benefit. Newer GEF projects, whether the source of funding is the main GEF Trust Fund, the LDCF, or the SCCF, integrated resilience within the project's multiple benefits framework.

FRAGILITY

Conclusion 14: Fragility has affected the timely delivery of GEF support but has mostly not affected outcomes and sustainability of GEF support in the two biomes.

Overall, the outcome and sustainability ratings show no difference between projects implemented in fragile countries in the biomes and those that were not. As observed in country visits in Mali, Guinea, and Mauritania, country insecurity and the emergence of fragile situations can significantly delay implementation and outcomes. However, activities such as alternate

livelihood systems that are demonstrated to be financially viable and beneficiary-relevant tend to continue, especially when these are located away from capital cities. The negative effects of a socio-political crisis tend to occur in the capital and other urban areas, where most of the population resides. This evaluation found several examples in which the negative effects of suddenly emerged fragile situations have tended to be less felt in rural areas, in activities with a clear and tangible financial viability, and in activities that have a high correspondence with a beneficiary need.

4.2 Recommendations

Two main recommendations can be derived from these findings and conclusions to inform future GEF programming in the Sahel and Sudan-Guinea Savanna biomes. Both have wider applicability to all the world regions where the GEF intervenes:

Recommendation 1: Project and program design in the biomes must include a discussion on how sustainability, including financial sustainability, is going to be addressed and managed.

A well-designed intervention should include measures and activities that will support the continued delivery of outcomes beyond the life of the project. Sustainability factors identified at the design stage should be tracked by GEF Agencies during implementation, and terminal evaluations should report on these. Financial sustainability must be given priority in the design and implementation of GEF support in the biomes and in Africa overall. The GEF Secretariat and GEF Agencies should elaborate financial arrangements at the project design stage that can continue after project completion to deliver benefits over time. Support to institutions should be designed considering measures to enable those institutions to operate postcompletion on a sufficient and stable financial footing.

Recommendation 2: A clear discussion on how to foster synergies between environment and development must be included in design and managed through implementation. When proposals in the two biomes are being designed and appraised, attention should be paid to the influence that synergies between socioeconomic and environmental objectives have on the prospects for sustainability. Not much consideration has been given at the project design stage to the influence that synergies between socioeconomic and environmental objectives have on the prospects for sustainability

in the biomes. Several examples observed in the five countries visited provided compelling evidence indicating that when these considerations have been taken into account in design and implementation the prospects for sustainability postcompletion greatly improved. Fostering synergies between the environmental and development objectives should be more systematically pursued as the GEF already increasingly considers socioeconomic co-benefits in its recent portfolio.

Projects reviewed

GEF ID	Project title	Country	Biome	GEF Agency	GEF period	Modality	Project status	Type of review
1234	Community-based Coastal and Marine Biodiversity Management Project	Benin	Sudan-Guinea Sav.	WB	GEF-3	FSP	C	R, S
3704	Integrated Adaptation Programme to Combat the Effects of Climate Change on Agricultural Production and Food Security	Benin	Sudan-Guinea Sav.	UNDP	GEF-4	FSP	C	R
3770	SPWA-BD: Incorporation of Sacred Forests into the Protected Areas System of Benin	Benin	Sudan-Guinea Sav.	UNDP	GEF-4	MSP	C	R
4756	Disposal of POPs and Obsolete Pesticides and Strengthening Life-cycle Management of Pesticides	Benin	Sudan-Guinea Sav.	FAO	GEF-5	FSP	UI	R
5002	Strengthening Climate Information and Early Warning Systems in Western and Central Africa for Climate Resilient Development and Adaptation to Climate Change	Benin	Sudan-Guinea Sav.	UNDP	GEF-5	FSP	C	R
5215	GGW: Forests and Adjacent Lands Management Project	Benin	Sudan-Guinea Sav.	WB	GEF-5	FSP	UI	R
5232	Flood Control and Climate Resilience of Agriculture Infrastructures in Oueme Valley	Benin	Sudan-Guinea Sav.	AfDB	GEF-5	FSP	UI	R
5431	Strengthening the Resilience of the Energy Sector in Benin to the Impacts of Climate Change	Benin	Sudan-Guinea Sav.	UNDP	GEF-5	FSP	UI	R
5752	Promotion of Sustainable Biomass-based Electricity Generation in Benin	Benin	Sudan-Guinea Sav.	UNDP	GEF-5	FSP	UI	R
5807	Preparation of Benin's First Biennial Update Report (BUR1) to UNFCCC	Benin	Sudan-Guinea Sav.	UNEP	GEF-5	EA	UI	R
6974	Improving Mobility in Parakou	Benin	Sudan-Guinea Sav.	AfDB	GEF-6	MSP	UI	R
1063	Forest and Environment Development Policy Grant (FEDPG)	Cameroon	Sudan-Guinea Sav.	WB	GEF-3	FSP	C	R, S
2549	Sustainable Agro-Pastoral and Land Management Promotion under the National Community Development Program Support Program (PNDP)	Cameroon	Sudan-Guinea Sav.	WB	GEF-3	FSP	C	R, S

GEF ID	Project title	Country	Biome	GEF Agency	GEF period	Modality	Project status	Type of review
3821	CBSP Sustainable Community Based Management and Conservation of Mangrove Ecosystems in Cameroon	Cameroon	Sudan-Guinea Sav.	FAO	GEF-4	FSP	C	R
4084	CBSP Conservation and Sustainable Use of the Ngoyla Mintom Forest	Cameroon	Sudan-Guinea Sav.	WB	GEF-4	FSP	UI	R
4641	Disposal of POPs and Obsolete Pesticides and Strengthening Sound Pesticide Management	Cameroon	Sudan-Guinea Sav.	FAO	GEF-5	FSP	UI	R
4674	Support to Cameroon for the Revision of the NBSAPs and Development of Fifth National Report to the CBD	Cameroon	Sudan-Guinea Sav.	UNEP	GEF-5	EA	UI	R
4739	Participative Integrated Ecosystem Services Management Plans for Bakassi Post Conflict Ecosystems (PINESMAP-BPCE)	Cameroon	Sudan-Guinea Sav.	UNEP	GEF-5	FSP	UI	R
4785	Promoting Integrated Biomass and Small Hydro Solutions for Productive Uses in Cameroon	Cameroon	Sudan-Guinea Sav.	UNIDO	GEF-5	FSP	UI	R
4800	Sustainable Forest Management under the Authority of Cameroonian Councils	Cameroon	Sudan-Guinea Sav.	FAO	GEF-5	FSP	UI	R
5060	Developing Core Capacity for MEA Implementation in Cameroon	Cameroon	Sudan-Guinea Sav.	UNEP	GEF-5	MSP	UI	R
5210	Sustainable Farming and Critical Habitat Conservation to Achieve Biodiversity Mainstreaming and Protected Areas Management Effectiveness in Western Cameroon SUFACHAC	Cameroon	Sudan-Guinea Sav.	UNEP	GEF-5	MSP	A	R
5263	Enhancing the Resilience of Poor Communities to Urban Flooding in Yaounde	Cameroon	Sudan-Guinea Sav.	AfDB	GEF-5	FSP	UI	R
5367	PCB Reduction In Cameroon Through The Use Of Local Expertise And The Development Of National Capacities	Cameroon	Sudan-Guinea Sav.	UNEP	GEF-5	FSP	UI	R
5796	A Bottom Up Approach to ABS: Community Level Capacity Development for Successful Engagement in ABS Value Chains in Cameroon (<i>Echinops giganteus</i>)	Cameroon	Sudan-Guinea Sav.	UNDP	GEF-5	MSP	UI	R
9116	Promoting Access to Renewable Energy and Development of IT Tools for Rural Communities of Cameroon	Cameroon	Sudan-Guinea Sav.	AfDB	GEF-6	MSP	UI	R
9155	Integrated and Transboundary Conservation of Biodiversity in the Basins of the Republic of Cameroon	Cameroon	Sudan-Guinea Sav.	UNDP	GEF-6	FSP	CEO	R
9172	Development of Minamata Initial Assessment in Cameroon	Cameroon	Sudan-Guinea Sav.	UNEP	GEF-6	EA	UI	R
9470	LCB-NREE Cameroon child project: Improving Agro-Pastoral Systems in the Far North Region of Cameroon	Cameroon	Sudan-Guinea Sav.	AfDB	GEF-5	FSP	CEO	R
5163	Enabling Activities to Review and Update the National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants (POPs)	Central African Republic	Sudan-Guinea Sav.	UNIDO	GEF-5	EA	UI	R
5504	Reducing Rural and Urban Vulnerability to Climate Change by the Provision of Water Supply	Central African Republic	Sudan-Guinea Sav.	AfDB	GEF-5	FSP	UI	R
9532	LCB-NREE CAR child project: Enhancing Agro-ecological Systems in Northern Prefectures of the Central African Republic [CAR]	Central African Republic	Sudan-Guinea Sav.	AfDB	GEF-5	FSP	UI	R

GEF ID	Project title	Country	Biome	GEF Agency	GEF period	Modality	Project status	Type of review
3533	Protected Area Project (Projet d'Appui a la Relance de la Conservation des Parcs et Reserves, PARC-CI)	Côte d'Ivoire	Sudan-Guinea Sav.	WB	GEF-4	FSP	C	R, S
3876	SPWA-CC: Promotion of Energy Efficiency Lighting in Public, Commercial and Residential Buildings	Côte d'Ivoire	Sudan-Guinea Sav.	UNEP	GEF-4	MSP	UI	R
4005	SPWA-CC: Promoting Renewable Energy-based Grids in Rural Communities for Productive Uses	Côte d'Ivoire	Sudan-Guinea Sav.	UNIDO	GEF-4	MSP	C	R
4693	Support to Côte d'Ivoire for the Revision of the NBSAPs and Development of Fifth National Report to the CBD	Côte d'Ivoire	Sudan-Guinea Sav.	UNEP	GEF-5	EA	UI	R
4970	Integrated Management of Protected Areas in Côte d'Ivoire, West Africa	Côte d'Ivoire	Sudan-Guinea Sav.	UNEP	GEF-5	FSP	UI	R
5101	Strengthened Environmental Management Information System for Coastal Development to Meet Rio Convention Objectives	Côte d'Ivoire	Sudan-Guinea Sav.	UNDP	GEF-5	MSP	C	R
5362	Obsolete Pesticides Management Project	Côte d'Ivoire	Sudan-Guinea Sav.	WB	GEF-5	FSP	UI	R
5500	Enabling Activities to Review and Update the National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants (POPs)	Côte d'Ivoire	Sudan-Guinea Sav.	UNIDO	GEF-5	EA	UI	R
5788	Assessment of Land Degradation Dynamic in Coffee -Cocoa Production and Northern Ivory Coast to Promote SLM Practices and Carbon Stock Conservation ALDD SLM CSC	Côte d'Ivoire	Sudan-Guinea Sav.	UNEP	GEF-5	MSP	A	R
9130	Cities-IAP: Abidjan Integrated Sustainable Urban Planning and Management	Côte d'Ivoire	Sudan-Guinea Sav.	AfDB	GEF-6	FSP	UI	R
2794	SIP: Country Program for Sustainable Land Management (ECPSLM)	Ethiopia	Sudan-Guinea Sav.	WB	GEF-4	FSP	C	R, S
3154	Coping with Drought and Climate Change	Ethiopia	Sudan-Guinea Sav.	UNDP	GEF-3	MSP	C	R, S
3367	SIP: Community-Based Integrated Natural Resources Management in Lake Tana Watershed	Ethiopia	Sudan-Guinea Sav.	IFAD	GEF-4	FSP	UI	R
3736	Mainstreaming Agro-biodiversity Conservation into the Farming Systems of Ethiopia	Ethiopia	Sudan-Guinea Sav.	UNDP	GEF-4	FSP	C	R
4091	Capacity Building for Access and Benefit Sharing and Conservation and Sustainable Use of Medicinal Plants	Ethiopia	Sudan-Guinea Sav.	UNEP	GEF-4	FSP	UI	R
4222	Promoting Autonomous Adaptation at the community level in Ethiopia	Ethiopia	Sudan-Guinea Sav.	UNDP	GEF-4	FSP	C	R
4992	Strengthening Climate Information and Early Warning Systems to Support Climate Resilient Development and Adaptation to Climate Change	Ethiopia	Sudan-Guinea Sav.	UNDP	GEF-5	FSP	C	R
5040	Investment Promotion on Environmentally sound Management of Electrical and Electronic Waste: Up-Scale and Promotion of Activities and Initiatives on Environmentally Sound Management of Electrical and Electronic Waste	Ethiopia	Sudan-Guinea Sav.	UNIDO	GEF-5	MSP	C	R
5107	Enabling Activities to Review and Update the National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants (POPs)	Ethiopia	Sudan-Guinea Sav.	UNIDO	GEF-5	EA	UI	R

GEF ID	Project title	Country	Biome	GEF Agency	GEF period	Modality	Project status	Type of review
5220	PSG: Sustainable Land Management Project 2	Ethiopia	Sudan-Guinea Sav.	WB	GEF-5	FSP	UI	R
5440	Mainstreaming Incentives for Biodiversity Conservation in the Climate Resilient Green Economy Strategy (CRGE)	Ethiopia	Sudan-Guinea Sav.	UNDP	GEF-5	FSP	UI	R
5501	Promoting Sustainable Rural Energy Technologies (RETs) for Household and Productive Uses	Ethiopia	Sudan-Guinea Sav.	UNDP	GEF-5	FSP	UI	R
6967	CCA Growth: Implementing Climate Resilient and Green Economy plans in highland areas in Ethiopia	Ethiopia	Sudan-Guinea Sav.	UNDP	GEF-6	FSP	UI	R
9048	Ethiopian Urban NAMA: Creating Opportunities for Municipalities to Produce and Operationalise Solid Waste Transformation (COMPOST)	Ethiopia	Sudan-Guinea Sav.	UNDP	GEF-6	FSP	UI	R
9135	Food-IAP: Integrated Landscape Management to Enhance Food Security and Ecosystem Resilience	Ethiopia	Sudan-Guinea Sav.	UNDP	GEF-6	FSP	UI	R
9157	Enhanced Management and Enforcement of Ethiopia's Protected Areas Estate	Ethiopia	Sudan-Guinea Sav.	UNDP	GEF-6	FSP	CEO	R
1067	Integrated Coastal and Marine Biodiversity Management	Gambia	Sudan-Guinea Sav.	WB	GEF-2	MSP	C	R, S
3135	Adoption of Ecosystem Approach for Integrated Implementation of MEAs at National and Divisional Level	Gambia	Sudan-Guinea Sav.	UNEP	GEF-4	MSP	C	R, S
3368	SIP: Participatory Integrated Watershed Management Project (PIWAMP)	Gambia	Sudan-Guinea Sav.	AfDB	GEF-4	FSP	C	R
3728	Strengthening of The Gambia's Climate Change Early Warning Systems	Gambia	Sudan-Guinea Sav.	UNEP	GEF-4	MSP	C	R
3922	SPWA-CC: Promoting Renewable Energy Based Mini Grids for Productive Uses in Rural Areas in The Gambia	Gambia	Sudan-Guinea Sav.	UNIDO	GEF-4	FSP	C	R
3961	SPWA - The Gambia Biodiversity Management and Institutional Strengthening Project	Gambia	Sudan-Guinea Sav.	WB	GEF-4	MSP	C	R, S
4724	Enhancing Resilience of Vulnerable Coastal Areas and Communities to Climate Change in the Republic of Gambia	Gambia	Sudan-Guinea Sav.	UNDP	GEF-5	FSP	UI	R
5071	Strengthening Climate Services and Early Warning Systems in the Gambia for Climate Resilient Development and Adaptation to Climate Change – 2nd Phase of the GOTG/GEF/UNEP LDCF NAPA Early Warning Project	Gambia	Sudan-Guinea Sav.	UNEP	GEF-5	FSP	UI	R
5406	Community-Based Sustainable Dryland Forest Management	Gambia	Sudan-Guinea Sav.	FAO	GEF-5	FSP	UI	R
5529	Gambia Protected Areas Network and Community Livelihood Project	Gambia	Sudan-Guinea Sav.	UNDP	GEF-5	MSP	UI	R
5609	Greening the Productive Sectors in Gambia: Promoting the Use and Integration of Small to Medium Scale Renewable Energy Systems in the Productive Uses	Gambia	Sudan-Guinea Sav.	UNIDO	GEF-5	MSP	UI	R
5782	Adapting Agriculture to Climate Change in the Gambia	Gambia	Sudan-Guinea Sav.	FAO	GEF-5	FSP	UI	R
136	Natural Resource Management	Ghana	Sudan-Guinea Sav.	WB	GEF -1 (1994-1998)	FSP	C	R, S

GEF ID	Project title	Country	Biome	GEF Agency	GEF period	Modality	Project status	Type of review
777	Northern Savanna Biodiversity Conservation (NSBC) Project	Ghana	Sudan-Guinea Sav.	WB	GEF-2	FSP	C	R, S
2183	Community-based Integrated Natural Resources Management Project in Okyeman	Ghana	Sudan-Guinea Sav.	WB	GEF-3	MSP	C	R, S
2402	Sustainable Land Management for Mitigating Land Degradation, Enhancing Agricultural Biodiversity and Reducing Poverty (SLaM)	Ghana	Sudan-Guinea Sav.	UNDP	GEF-3	MSP	C	R, S
2785	Capacity Building for PCB Elimination	Ghana	Sudan-Guinea Sav.	UNDP	GEF-4	FSP	C	R
3004	Review of the National Biodiversity Strategy, Development of the Action Plan and Participation in the National Clearing House Mechanism	Ghana	Sudan-Guinea Sav.	UNEP	GEF-4	EA	A	R
3126	Establishing an Effective and Sustainable Structure for Implementing Multilateral Environmental Agreements	Ghana	Sudan-Guinea Sav.	UNDP	GEF-4	MSP	C	R, S
3218	Integrating Climate Change into the Management of Priority Health Risks	Ghana	Sudan-Guinea Sav.	UNDP	GEF-4	FSP	C	R
3369	SIP: Sustainable Land Management in Ghana	Ghana	Sudan-Guinea Sav.	WB	GEF-4	FSP	UI	R
3836	SPWA-BD: Management of Riparian Biological Corridors	Ghana	Sudan-Guinea Sav.	WB	GEF-4	MSP	UI	R
4368	Promoting Value Chain Approach to Adaptation in Agriculture	Ghana	Sudan-Guinea Sav.	IFAD	GEF-5	FSP	C	R
4528	West Africa Regional Fisheries Program in Ghana	Ghana	Sudan-Guinea Sav.	WB	GEF-4	FSP	UI	R
5138	Support to Ghana for the Revision of the National Biodiversity Strategy and Action Plan (NBSAPs and Development of Fifth National Report to the Convention on Biological Diversity (CBD)	Ghana	Sudan-Guinea Sav.	UNEP	GEF-5	EA	UI	R
5221	PSG-Additional financing - Sustainable Land and Water Management Project	Ghana	Sudan-Guinea Sav.	WB	GEF-5	FSP	UI	R
5445	Preparation of Ghana's Initial Biennial Update Report to UNFCCC	Ghana	Sudan-Guinea Sav.	UNEP	GEF-5	EA	A	R
9171	Enabling Preparation of Ghana's Fourth National Communication (NC4) and Second Biennial Update Report (BUR2) to UNFCCC	Ghana	Sudan-Guinea Sav.	UNEP	GEF-6	EA	UI	R
9340	Food-IAP: Sustainable Land and Water Management Project, Second Additional Financing	Ghana	Sudan-Guinea Sav.	WB	GEF-6	FSP	UI	R
9381	Development of Minamata Convention Initial Assessment (MIA) for Ghana	Ghana	Sudan-Guinea Sav.	UNDP	GEF-6	EA	UI	R
8	Rural Energy	Guinea	Sudan-Guinea Sav.	WB	GEF-2	FSP	C	R, S
1273	Coastal Marine and Biodiversity Management	Guinea	Sudan-Guinea Sav.	WB	GEF-3	FSP	C	R, S
1877	Community-based Land Management	Guinea	Sudan-Guinea Sav.	WB	GEF-3	FSP	C	R, S
3703	Increased Resilience and Adaptation to Adverse Impacts of Climate Change in Guinea's Vulnerable Coastal Zones	Guinea	Sudan-Guinea Sav.	UNDP	GEF-4	FSP	C	R
3958	SPWA-CC: Promoting Development of Multi-Purpose Mini-hydro Power Systems	Guinea	Sudan-Guinea Sav.	UNIDO	GEF-4	MSP	UI	R

GEF ID	Project title	Country	Biome	GEF Agency	GEF period	Modality	Project status	Type of review
4667	National Biodiversity Planning to Support the Implementation of the CBD 2011-2020 Strategic Plan in Guinea	Guinea	Sudan-Guinea Sav.	UNDP	GEF-5	EA	UI	R
4692	Strengthening Resilience of Farming Communities' Livelihoods against Climate Changes in the Guinean Prefectures of Gaoual, Koundara and Mali	Guinea	Sudan-Guinea Sav.	UNDP	GEF-5	FSP	C	R
5041	Strengthening Decentralized Management of the Environment to Meet Rio Convention Objectives	Guinea	Sudan-Guinea Sav.	UNDP	GEF-5	MSP	UI	R
5153	Enabling Activities to Review and Update the National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants (POPs)	Guinea	Sudan-Guinea Sav.	UNIDO	GEF-5	EA	C	R
5289	Developing a Market for Biogas Resource Development and Utilization in Guinea	Guinea	Sudan-Guinea Sav.	UNDP	GEF-5	FSP	UI	R
5382	Ecosystem-Based Adaptation Targeting Vulnerable Communities of the Upper Guinea Region	Guinea	Sudan-Guinea Sav.	UNDP	GEF-5	FSP	UI	R
1221	Coastal and Biodiversity Management Project	Guinea-Bissau	Sudan-Guinea Sav.	WB	GEF-3	FSP	C	R, S
3575	SPWA-BD: Support for the Consolidation of a Protected Area System in Guinea-Bissau's Forest Belt	Guinea-Bissau	Sudan-Guinea Sav.	UNDP	GEF-4	MSP	C	R
3817	SPWA-BD: Guinea-Bissau Biodiversity Conservation Trust Fund Project	Guinea-Bissau	Sudan-Guinea Sav.	WB	GEF-4	MSP	C	R, S
4019	Strengthening Resilience and Adaptive Capacity to Climate Change in Guinea-Bissau's Agrarian and Water Sectors	Guinea-Bissau	Sudan-Guinea Sav.	UNDP	GEF-4	FSP	UI	R
5331	Promoting Investments in Small to Medium Scale Renewable Energy Technologies in the Electricity Sector	Guinea-Bissau	Sudan-Guinea Sav.	UNIDO	GEF-5	MSP	UI	R
5368	Strengthening the Financial and Operational Framework of the National PA System in Guinea-Bissau	Guinea-Bissau	Sudan-Guinea Sav.	UNDP	GEF-5	FSP	UI	R
1475	Establishing the Basis for Biodiversity Conservation on Sapo National Park and in South-East Liberia	Liberia	Sudan-Guinea Sav.	WB	GEF-3	MSP	C	R, S
3284	Consolidation of Liberia's Protected Area Network	Liberia	Sudan-Guinea Sav.	WB	GEF-4	MSP	C	R, S
3837	SPWA-BD: Biodiversity Conservation through Expanding the Protected Area Network in Liberia (EXPAN)	Liberia	Sudan-Guinea Sav.	WB	GEF-4	MSP	C	R
3885	Enhancing Resilience of Vulnerable Coastal Areas to Climate Change Risks	Liberia	Sudan-Guinea Sav.	UNDP	GEF-4	FSP	UI	R
3944	SPWA-CC: Installation of multi purpose mini-hydro infrastructure (for energy & irrigation)	Liberia	Sudan-Guinea Sav.	UNIDO	GEF-4	FSP	UI	R
4268	Enhancing Resilience to Climate Change by Mainstreaming Adaption Concerns into Agricultural Sector Development in Liberia	Liberia	Sudan-Guinea Sav.	UNDP	GEF-4	FSP	UI	R
4950	Strengthening Liberia's Capability to Provide Climate Information and Services to Enhance Climate Resilient Development and Adaptation to Climate Change	Liberia	Sudan-Guinea Sav.	UNDP	GEF-5	FSP	UI	R

GEF ID	Project title	Country	Biome	GEF Agency	GEF period	Modality	Project status	Type of review
5108	Enabling Activities to Review and Update the National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants (POPs)	Liberia	Sudan-Guinea Sav.	UNIDO	GEF-5	EA	UI	R
5712	Improve Sustainability of Mangrove Forests and Coastal Mangrove Areas in Liberia through Protection, Planning and Livelihood Creation- as a Building Block Towards Liberia's Marine and Coastal Protected Areas	Liberia	Sudan-Guinea Sav.	CI	GEF-5	MSP	UI	R
8015	Enhancing Resilience Of Liberia Montserrado County Vulnerable Coastal Areas To Climate Change Risks	Liberia	Sudan-Guinea Sav.	UNDP	GEF-6	MSP	UI	R
9292	Increasing Energy Access through the Promotion of Energy Efficient Appliances in Liberia	Liberia	Sudan-Guinea Sav.	AfDB	GEF-6	FSP	CEO	R
942	Local Empowerment and Environmental Management Project - Micro Watershed and Environmental Management Project	Nigeria	Sudan-Guinea Sav.	WB	GEF-2	FSP	C	R, S
1503	National Fadama Development Program II (NFDP II): Critical Ecosystem Management	Nigeria	Sudan-Guinea Sav.	WB	GEF-3	FSP	C	R, S
2828	Rural Electrification and Renewable Energy Development	Nigeria	Sudan-Guinea Sav.	WB	GEF-3	MSP	C	R, S
3384	SIP: Scaling up SLM Practice, Knowledge, and Coordination in Key Nigerian States	Nigeria	Sudan-Guinea Sav.	WB	GEF-4	FSP	C	R, S
3794	SPWA-CC: Promoting Energy Efficiency in Residential and Public Sector in Nigeria	Nigeria	Sudan-Guinea Sav.	UNDP	GEF-4	FSP	C	R
3804	Less Burnt for a Clean Earth: Minimization of Dioxin Emission from Open Burning Sources	Nigeria	Sudan-Guinea Sav.	UNDP	GEF-4	FSP	C	R
3827	SPWA-CC: Nigeria Urban Transport	Nigeria	Sudan-Guinea Sav.	WB	GEF-4	FSP	C	R
3943	SPWA-CC: Mini-grids based on Renewable Energy (small-hydro and biomass) Sources to Augment Rural Electrification	Nigeria	Sudan-Guinea Sav.	UNIDO	GEF-4	FSP	UI	R
4090	SPWA-BD: Niger Delta Biodiversity Project	Nigeria	Sudan-Guinea Sav.	UNDP	GEF-4	FSP	UI	R
4100	PCB Management and Disposal Project	Nigeria	Sudan-Guinea Sav.	WB	GEF-4	FSP	C	R
4439	GEF National Portfolio Formulation Document	Nigeria	Sudan-Guinea Sav.	GEFSec	GEF-5	EA	C	R
4671	Support to Nigeria for the Revision of the NBSAPs and Development of Fifth National Report to the CBD	Nigeria	Sudan-Guinea Sav.	UNEP	GEF-5	EA	UI	R
4907	GGW: Nigeria Erosion and Watershed Management Project (NEWMAP)	Nigeria	Sudan-Guinea Sav.	WB	GEF-5	FSP	UI	R
5167	Enabling Activities to Review and Update the National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants (POPs)	Nigeria	Sudan-Guinea Sav.	UNIDO	GEF-5	EA	UI	R
5345	De-risking Renewable Energy NAMA for the Nigerian Power Sector	Nigeria	Sudan-Guinea Sav.	UNDP	GEF-5	FSP	UI	R
5375	Scaling up Small Hydro Power (SHP) in Nigeria	Nigeria	Sudan-Guinea Sav.	UNIDO	GEF-5	FSP	UI	R
5745	Sustainable Fuelwood Management in Nigeria	Nigeria	Sudan-Guinea Sav.	UNDP	GEF-5	FSP	UI	R

GEF ID	Project title	Country	Biome	GEF Agency	GEF period	Modality	Project status	Type of review
5777	Preparation of Third National Communication (TNC) to the UNFCCC and Capacity Strengthening on Climate Change	Nigeria	Sudan-Guinea Sav.	UNDP	GEF-5	EA	UI	R
5871	Minamata Convention Initial Assessment in the Federal Republic of Nigeria	Nigeria	Sudan-Guinea Sav.	UNIDO	GEF-5	EA	UI	R
6976	Nigeria's First Biennial Update Report	Nigeria	Sudan-Guinea Sav.	UNDP	GEF-6	EA	UI	R
9143	Food-IAP: Integrated Landscape Management to Enhance Food Security and Ecosystem Resilience in Nigeria	Nigeria	Sudan-Guinea Sav.	UNDP	GEF-6	FSP	CEO	R
9161	LCB-NREE: Nigeria Child Project: Comprehensive and Integrated Management of Natural Resources in Borno State	Nigeria	Sudan-Guinea Sav.	AfDB	GEF-5	FSP	UI	R
9358	National Action Plan on Mercury in the Nigerian Artisanal and Small-Scale Gold Mining sector	Nigeria	Sudan-Guinea Sav.	UNIDO	GEF-6	EA	UI	R
3937	SPWA-CC: Promoting Mini Grids Based on Small Hydropower for Productive Uses in Sierra Leone	Sierra Leone	Sudan-Guinea Sav.	UNIDO	GEF-4	FSP	UI	R
4105	SPWA-BD: Wetlands Conservation Project	Sierra Leone	Sudan-Guinea Sav.	WB	GEF-4	FSP	C	R
4599	Building Adaptive Capacity to Catalyze Active Public and Private Sector Participation to Manage the Exposure and Sensitivity of Water Supply Services to Climate Change in Sierra Leone	Sierra Leone	Sudan-Guinea Sav.	UNDP	GEF-5	FSP	UI	R
4840	Energy Efficient Production and Utilization of Charcoal through Innovative Technologies and Private Sector Involvement	Sierra Leone	Sudan-Guinea Sav.	UNDP	GEF-5	FSP	UI	R
5006	Strengthening Climate Information and Early Warning Systems in Africa for Climate Resilient Development and Adaptation to Climate Change	Sierra Leone	Sudan-Guinea Sav.	UNDP	GEF-5	FSP	UI	R
5209	Building Resilience to Climate Change in the Water and Sanitation Sector	Sierra Leone	Sudan-Guinea Sav.	AfDB	GEF-5	FSP	UI	R
9454	Development of Minamata Initial Assessment and National Action Plan for Artisanal and Small Scale Gold Mining in Sierra Leone	Sierra Leone	Sudan-Guinea Sav.	UNEP	GEF-6	EA	UI	R
5907	Support to South Sudan for the Revision of the NBSAPs and Development of Fifth National Report to the CBD	South Sudan	Sudan-Guinea Sav.	UNEP	GEF-5	EA	P	R
4026	SPWA-BD: Strengthening the Conservation Role of Togo's National System of Protected Areas (PA)	Togo	Sudan-Guinea Sav.	UNDP	GEF-4	FSP	C	R
4570	Adapting Agriculture Production in Togo (ADAPT)	Togo	Sudan-Guinea Sav.	IFAD	GEF-5	FSP	C	R
4765	Strengthening National and Decentralized Management for Global Environmental Benefits	Togo	Sudan-Guinea Sav.	UNDP	GEF-5	MSP	C	R
5035	Enabling activities to review and update the national implementation plan for the Stockholm Convention on Persistent Organic Pollutants (POPs)	Togo	Sudan-Guinea Sav.	UNIDO	GEF-5	EA	UI	R
5279	Strengthening Climate Resilience of Infrastructure in Coastal Areas in Togo	Togo	Sudan-Guinea Sav.	AfDB	GEF-5	FSP	UI	R
5850	Togo's First Biennial Update Report (FBUR)	Togo	Sudan-Guinea Sav.	UNDP	GEF-5	EA	UI	R

GEF ID	Project title	Country	Biome	GEF Agency	GEF period	Modality	Project status	Type of review
1175	Conservation of Biodiversity in the Albertine Rift Forest Areas of Uganda	Uganda	Sudan-Guinea Sav.	UNDP	GEF-3	FSP	C	R, S
1830	Protected Areas Management and Sustainable Use (PAMSU)	Uganda	Sudan-Guinea Sav.	WB	GEF -1 (1994-1998)	FSP	C	R, S
1837	Extending Wetland protected Areas through Community Based Conservation Initiatives	Uganda	Sudan-Guinea Sav.	UNDP	GEF-4	MSP	C	R, S
3392	SIP: Sustainable Land Management Country Program	Uganda	Sudan-Guinea Sav.	WB	GEF-4	FSP	UI	R
3393	SIP: Enabling Environment for SLM to overcome land degradation in the cattle corridor of Uganda	Uganda	Sudan-Guinea Sav.	UNDP	GEF-4	FSP	C	R
3682	Developing an Experimental Methodology for Testing the Effectiveness of Payments for Ecosystem Services to Enhance Conservation in Productive Landscapes in Uganda	Uganda	Sudan-Guinea Sav.	UNEP	GEF-4	MSP	C	R, S
3854	Development of a National Clearing House Mechanism and Capacity Assessment for Taxonomy and Indigenous Knowledge(Add-on) (New title as of March 19, 2009)	Uganda	Sudan-Guinea Sav.	UNEP	GEF-4	EA	C	R
4456	Conservation and Sustainable Use of the Threatened Savanna Woodland in the Kidepo Critical Landscape in North Eastern Uganda	Uganda	Sudan-Guinea Sav.	UNDP	GEF-5	FSP	UI	R
4644	Addressing Barriers to the Adoption of Improved Charcoal Production Technologies and Sustainable Land Management Practices through an Integrated Approach	Uganda	Sudan-Guinea Sav.	UNDP	GEF-5	FSP	UI	R
4993	Strengthening Climate Information and Early Warning Systems in Africa to Support Climate Resilient Development and Adaptation to Climate Change	Uganda	Sudan-Guinea Sav.	UNDP	GEF-5	FSP	C	R
5042	Support to Alignment of Uganda's National Action Programme and Reporting Process to the UNCCD Ten-Year Strategy	Uganda	Sudan-Guinea Sav.	UNEP	GEF-5	EA	UI	R
5204	Building Resilience to Climate Change in the Water and Sanitation Sector	Uganda	Sudan-Guinea Sav.	AfDB	GEF-5	FSP	UI	R
5603	Reducing Vulnerability of Banana Producing Communities to Climate Change Through Banana Value Added Activities - Enhancing Food Security And Employment Generation	Uganda	Sudan-Guinea Sav.	UNIDO	GEF-5	FSP	UI	R
5625	Enabling Activities to Review and Update the National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants (POPs)	Uganda	Sudan-Guinea Sav.	UNIDO	GEF-5	EA	UI	R
5718	Integrated Landscape Management for Improved Livelihoods and Ecosystem Resilience in Mount Elgon	Uganda	Sudan-Guinea Sav.	UNDP	GEF-5	MSP	UI	R
9137	Food-IAP: Fostering Sustainability and Resilience for Food Security in Karamoja Sub Region	Uganda	Sudan-Guinea Sav.	UNDP	GEF-6	FSP	UI	R
9210	NAMA on Integrated Waste Management and Biogas in Uganda	Uganda	Sudan-Guinea Sav.	UNDP	GEF-6	FSP	CEO	R
9335	Strengthening Institutional Capacity for Effective Implementation of Rio Conventions in Uganda	Uganda	Sudan-Guinea Sav.	UNDP	GEF-6	MSP	CEO	R

GEF ID	Project title	Country	Biome	GEF Agency	GEF period	Modality	Project status	Type of review
876	Partnership for Natural Ecosystem Management Program (PAGEN)	Burkina Faso	Sahel	WB	GEF-2	FSP	C	R, S
1178	Sahel Integrated Lowland Ecosystem Management (SILEM), Phase I	Burkina Faso	Sahel	WB	GEF-3	FSP	C	R, S
2876	SPWA-CC: Ouagadougou Transport Modal Shift	Burkina Faso	Sahel	WB	GEF-4	MSP	C	R
3567	CPP: Burkina Faso - Sub-programme of the Northern Region-under Partnership Programme for Sustainable Land Management	Burkina Faso	Sahel	IFAD	GEF-3	FSP	C	R, S
3684	Strengthening Adaptation Capacities and Reducing the Vulnerability to Climate Change in Burkina Faso	Burkina Faso	Sahel	UNDP	GEF-4	FSP	C	R
4073	SPWA-CC: Promotion of Jatropha Curcas as a Sustainable Source of Agrofuel in Burkina-Faso	Burkina Faso	Sahel	UNDP	GEF-4	FSP	UI	R
4221	SPWA-BD: Protected Area Buffer Zone Management in Burkina Faso	Burkina Faso	Sahel	UNDP	GEF-4	MSP	C	R
4285	Promoting Energy Efficiency Technologies in Beer Brewing Sector in Burkina Faso	Burkina Faso	Sahel	UNIDO	GEF-4	MSP	C	R
4767	Capacity Development : Generating Global Environmental Benefits from Improved Local Planning and Decision-making Systems in Burkina Faso	Burkina Faso	Sahel	UNDP	GEF-5	MSP	UI	R
4971	Adapting Natural Resource Dependent Livelihoods to Climate induced Risks in Selected Landscapes in Burkina Faso: the Boucle du Mouhoun Forest Corridor and the Mare d'Oursi Wetlands Basin	Burkina Faso	Sahel	UNDP	GEF-5	FSP	UI	R
5003	Strengthening Climate Information and Early Warning Systems in Africa for Climate Resilient Development and Adaptation to Climate Change - Burkina Faso	Burkina Faso	Sahel	UNDP	GEF-5	FSP	UI	R
5014	Integrating Climate Resilience into Agricultural and Pastoral Production for Food Security in Vulnerable Rural Areas Through the Farmers Field School Approach.	Burkina Faso	Sahel	FAO	GEF-5	FSP	UI	R
5061	Enabling Activities to Review and Update the National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants (POPs)	Burkina Faso	Sahel	UNIDO	GEF-5	EA	UI	R
5187	GGW: Community based Rural Development Project 3rd Phase with Sustainable Land and Forestry Management	Burkina Faso	Sahel	WB	GEF-5	FSP	UI	R
9141	GEF-IAP: Participatory Natural Resource Management and Rural Development Project in the North, Centre-North and East Regions (Neer Tamba project)	Burkina Faso	Sahel	IFAD	GEF-6	FSP	UI	R
9711	National Action Plan on Mercury in the Artisanal and Small-Scale Gold Mining Sector in Burkina Faso	Burkina Faso	Sahel	UNIDO	GEF-6	EA	UI	R
1855	Community-Based Ecosystem Management Project	Chad	Sahel	WB	GEF-3	FSP	C	R, S
3959	SPWA-CC: Promoting renewable energy based mini-grids for rural electrification and productive uses	Chad	Sahel	UNIDO	GEF-4	FSP	C	R
5376	Enhancing the Resilience of the Agricultural Ecosystems	Chad	Sahel	IFAD	GEF-5	FSP	UI	R

GEF ID	Project title	Country	Biome	GEF Agency	GEF period	Modality	Project status	Type of review
5795	Promoting Energy Efficient Cook Stoves in Micro and Small-scale Food Processing Industries	Chad	Sahel	UNIDO	GEF-5	MSP	UI	R
9100	Minamata Convention Initial Assessment in Chad	Chad	Sahel	UNIDO	GEF-6	EA	UI	R
9476	LCB-NREE Chad Child Project: Integrated Management of Natural Resources in the Chadian part of the Lake Chad Basin	Chad	Sahel	AfDB	GEF-5	FSP	UI	R
3139	Enabling Activities to Facilitate Early Action on the Implementation of the Stockholm Convention on POPs	Eritrea	Sahel	UNIDO	GEF-4	EA	UI	R
3362	SIP: Catchments and Landscape Management	Eritrea	Sahel	IFAD	GEF-4	FSP	C	R
3364	SIP: Sustainable Land Management Pilot Project	Eritrea	Sahel	UNDP	GEF-4	FSP	C	R
3987	Eritrea: Prevention and Disposal of POPs and Obsolete Pesticides	Eritrea	Sahel	FAO	GEF-4	FSP	C	R
4559	Integrated Semenawi and Debubawi Bahri-Buri-Irrori- Hawakil Protected Area System for Conservation of Biodiversity and Mitigation of Land Degradation	Eritrea	Sahel	UNDP	GEF-5	FSP	UI	R
5389	Support to Eritrea for the Revision of the NBSAPs and Development of Fifth National Report to the Convention on Biological Diversity (CBD)	Eritrea	Sahel	UNEP	GEF-5	EA	A	R
5616	Enabling Activities to Review and Update the National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants (POPs)	Eritrea	Sahel	UNIDO	GEF-5	EA	UI	R
6923	Mainstreaming Climate Risk Considerations in Food Security and IWRM in Tsilima Plains and Upper Catchment Area	Eritrea	Sahel	UNDP	GEF-6	FSP	UI	R
9641	Development of Minamata Initial Assessment and National Action Plan for Artisanal and Small Scale Gold Mining in Eritrea	Eritrea	Sahel	UNEP	GEF-6	EA	UI	R
1152	Biodiversity Conservation and Participatory Sustainable Management of Natural Resources in the Inner Niger Delta and its Transition Areas, Mopti Region	Mali	Sahel	IFAD	GEF-3	FSP	C	R, S
1253	Gourma Biodiversity Conservation Project	Mali	Sahel	WB	GEF-2	FSP	C	R, S
1274	Household Energy and Universal Rural Access Project	Mali	Sahel	WB	GEF-3	FSP	C	R, S
3377	SIP: Fostering Agricultural Productivity in Mali	Mali	Sahel	WB	GEF-4	FSP	UI	R
3699	SPWA-CC: Promotion of the Use of Agrofuels from the Production and Use of Jatropha Oil in Mali	Mali	Sahel	UNDP	GEF-4	MSP	C	R
3763	SPWA-BD: Expansion and Strengthening of Mali's PA System	Mali	Sahel	UNDP	GEF-4	FSP	C	R
3776	Enhancing Adaptive Capacity and Resilience to Climate Change in the Agriculture Sector in Mali	Mali	Sahel	UNDP	GEF-4	FSP	C	R
3979	Integrating Climate Resilience into Agricultural Production for Food Security in Rural Areas	Mali	Sahel	FAO	GEF-4	FSP	C	R
4429	GEF National Portfolio Formulation Document	Mali	Sahel	GEFSec	GEF-5	EA	C	R

GEF ID	Project title	Country	Biome	GEF Agency	GEF period	Modality	Project status	Type of review
4822	Strengthening Resilience to Climate Change through Integrated Agricultural and Pastoral Management in the Sahelian zone in the Framework of the Sustainable Land Management Approach	Mali	Sahel	FAO	GEF-5	FSP	UI	R
5192	Strengthening the Resilience of Women Producer Group's and Vulnerable Communities in Mali	Mali	Sahel	UNDP	GEF-5	FSP	UI	R
5270	GGW Natural Resources Management in a Changing Climate in Mali	Mali	Sahel	WB	GEF-5	FSP	UI	R
5443	Third National Communication to the UNFCCC	Mali	Sahel	UNDP	GEF-5	EA	UI	R
5644	Enabling Activities to Review and Update the National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants (POPs) in the Republic of Mali	Mali	Sahel	UNIDO	GEF-5	EA	UI	R
5746	Scaling up and Replicating Successful Sustainable Land Management (SLM) and Agroforestry Practices in the Koulikoro Region of Mali	Mali	Sahel	UNEP	GEF-5	MSP	A	R
5819	Promoting Sustainable Electricity Generation in Malian Rural Areas through Hybrid Technologies	Mali	Sahel	UNDP	GEF-5	MSP	UI	R
6971	Generating Global Environment Benefits through Improved Environmental Information, Planning and Decision Making Systems	Mali	Sahel	UNDP	GEF-6	MSP	UI	R
2459	Community-based Watershed Management Project	Mauritania	Sahel	WB	GEF-3	FSP	C	R, S
3379	SIP: Participatory Environmental Protection and Poverty Reduction in the Oases of Mauritania	Mauritania	Sahel	IFAD	GEF-4	FSP	C	R, S
3893	Support to the Adaptation of Vulnerable Agricultural Production Systems	Mauritania	Sahel	IFAD	GEF-4	FSP	CEO	R
5190	Improving Climate Resilience of Water Sector Investments with Appropriate Climate Adaptive Activities for Pastoral and Forestry Resources in Southern Mauritania	Mauritania	Sahel	AfDB	GEF-5	FSP	UI	R
5580	Development of an Improved and Innovative Management System for Sustainable Climate-resilient Livelihoods in Mauritania	Mauritania	Sahel	UNEP	GEF-5	FSP	CEO	R
5639	Stocktaking and Update of National Biosafety Framework for Mauritania	Mauritania	Sahel	UNEP	GEF-5	MSP	A	R
5769	Promoting Sustainable Mini-grids in Mauritanian Provinces Through Hybrid Technologies	Mauritania	Sahel	UNDP	GEF-5	MSP	A	R
5792	PSG-Sustainable Landscape Management Project under SAWAP	Mauritania	Sahel	WB	GEF-5	FSP	UI	R
8029	West Africa Regional Fisheries Program SOP C1	Mauritania	Sahel	WB	GEF-5	FSP	UI	R
1275	Community-based Integrated Ecosystem Management Program under the Community Action Program	Niger	Sahel	WB	GEF-2	FSP	C	R, S
2380	Sustainable Co-Management of the Natural Resources of the Air-Tenere Complex	Niger	Sahel	UNDP	GEF-3	FSP	C	R, S
3381	SIP: Oasis Micro-Basin Sand Invasion Control in the Goure and Maine Regions (PLECO)	Niger	Sahel	UNDP	GEF-4	FSP	C	R
3382	SIP: Community Driven SLM for Environmental and Food Security	Niger	Sahel	WB	GEF-4	FSP	C	R, S

GEF ID	Project title	Country	Biome	GEF Agency	GEF period	Modality	Project status	Type of review
3383	SIP: Agricultural and Rural Rehabilitation and Development Initiative (ARRDI)	Niger	Sahel	IFAD	GEF-4	FSP	C	R
3760	SPWA-BD: Integrating the Sustainable Management of Faunal Corridors into Niger's Protected Area System	Niger	Sahel	UNDP	GEF-4	FSP	C	R
3796	SPWA-CC: Integration of Greenhouse Gas Emission Reductions in Niger's Rural Energy Service Access Program	Niger	Sahel	UNDP	GEF-4	FSP	C	R
4701	Scaling up Community-Based Adaptation (CBA) in Niger	Niger	Sahel	UNDP	GEF-5	FSP	UI	R
4702	Integrating Climate Resilience into Agricultural and Pastoral Production for Food Security in Vulnerable Rural Areas through the Farmers Field School Approach	Niger	Sahel	FAO	GEF-5	FSP	UI	R
5436	Disaster Risk Management and Urban Development Project	Niger	Sahel	WB	GEF-5	FSP	UI	R
5493	Enabling Activities to Review and Update the National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants (POPs)	Niger	Sahel	UNIDO	GEF-5	EA	UI	R
9136	Niger: Food-IAP: Family Farming Development Programme (ProDAF)	Niger	Sahel	IFAD	GEF-6	FSP	UI	R
9497	LCB-NREE Niger child project: Improving Sustainable Management of Natural Resources in Niger's Diffa Region	Niger	Sahel	AfDB	GEF-5	FSP	UI	R
921	Electricity Services for Rural Areas Project	Senegal	Sahel	WB	GEF-2	FSP	C	R, S
1189	Integrated Marine and Coastal Resource Management Project	Senegal	Sahel	WB	GEF-3	FSP	C	R, S
2268	SIP: Integrated Ecosystem Management in Four Representative Landscapes of Senegal, Phase 2	Senegal	Sahel	UNDP	GEF-4	FSP	C	R, S
3385	SIP: Sustainable Land Management in Senegal	Senegal	Sahel	WB	GEF-4	FSP	C	R, S
3386	SIP: Innovations in Micro Irrigation for Dryland Farmers	Senegal	Sahel	UNDP	GEF-4	MSP	C	R
4055	TT-Pilot (GEF-4): Technology Transfer: Typha-based Thermal Insulation Material Production in Senegal	Senegal	Sahel	UNDP	GEF-4	FSP	UI	R
4080	SPWA-BD: Participatory Biodiversity Conservation and Low Carbon Development in Pilot Ecovillages in Senegal	Senegal	Sahel	UNDP	GEF-4	FSP	C	R
4095	SPWA-CC: National Greenhouse Gas Reduction Program Through Energy Efficiency in the Built Environment	Senegal	Sahel	UNDP	GEF-4	MSP	UI	R
4888	Environmentally Sound Management of Municipal and Hazardous Solid Waste to Reduce Emission of Unintentional POPs	Senegal	Sahel	UNIDO	GEF-5	FSP	UI	R
5371	Project for the Restoration and Strengthening the Resilience of the Lake de Guiers Wetland Ecosystems (PRRELAG)	Senegal	Sahel	AfDB	GEF-5	MSP	UI	R
5449	PSG- Sustainable and Inclusive Agribusiness Development Project	Senegal	Sahel	WB	GEF-5	FSP	UI	R
5469	Enabling Activities to Review and Update the National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants (POPs)	Senegal	Sahel	UNIDO	GEF-5	EA	UI	R

GEF ID	Project title	Country	Biome	GEF Agency	GEF period	Modality	Project status	Type of review
5503	Mainstreaming Ecosystem-based Approaches to Climate-resilient Rural Livelihoods in Vulnerable Rural Areas through the Farmer Field School Methodology	Senegal	Sahel	FAO	GEF-5	FSP	UI	R
5566	Strengthening Land & Ecosystem Management Under Conditions of Climate Change in the Niayes and Casamance regions- Republic of Senegal	Senegal	Sahel	UNDP	GEF-5	FSP	UI	R
5802	Promoting SLM Practices to Restore and Enhance Carbon Stocks through Adoption of Green Rural Habitat Initiatives	Senegal	Sahel	UNEP	GEF-5	MSP	A	R
9123	Cities-IAP: Sustainable Cities Initiative	Senegal	Sahel	WB	GEF-6	FSP	UI	R
9134	Food-IAP: Agricultural Value Chains Resilience Support Project (PARFA)	Senegal	Sahel	IFAD	GEF-6	FSP	UI	R
3430	Implementing NAPA Priority Interventions to Build Resilience in the Agriculture and Water Sectors to the Adverse Impacts of Climate Change	Sudan	Sahel	UNDP	GEF-4	FSP	C	R
3748	Protected Area Network Management and Building Capacity in Post-conflict Southern Sudan	Sudan	Sahel	UNDP	GEF-4	FSP	C	R
3915	Integrated Carbon Sequestration Project in Sudan	Sudan	Sahel	IFAD	GEF-4	FSP	C	R
4745	Promoting Utility-Scale Power Generation from Wind Energy	Sudan	Sahel	UNDP	GEF-5	FSP	UI	R
4958	Climate Risk Finance for Sustainable and Climate Resilient Rainfed Farming and Pastoral Systems	Sudan	Sahel	UNDP	GEF-5	FSP	UI	R
5019	National Biodiversity Planning to Support the implementation of the CBD 2011-2020 Strategic Plan in Sudan	Sudan	Sahel	UNDP	GEF-5	EA	C	R
5030	Enabling Activities to Review and Update the National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants (POPs)	Sudan	Sahel	UNIDO	GEF-5	EA	UI	R
5619	GGW Sudan Sustainable Natural Resources Management Project SSNRMP	Sudan	Sahel	WB	GEF-5	FSP	UI	R
5651	Livestock and Rangeland Resilience Program	Sudan	Sahel	IFAD	GEF-5	FSP	UI	R
5673	Promoting the Use of Electric Water Pumps for Irrigation	Sudan	Sahel	UNDP	GEF-5	FSP	UI	R
5703	Enhancing the Resilience of Communities Living in Climate Change Vulnerable Areas of Sudan Using Ecosystem Based Approaches to Adaptation (EbA)	Sudan	Sahel	UNEP	GEF-5	FSP	UI	R
9108	Third National Communication (TNC) and First Biennial Update Report (BUR)	Sudan	Sahel	UNDP	GEF-6	EA	UI	R
9345	Minamata Convention: Initial assessment in the Republic of Sudan	Sudan	Sahel	UNIDO	GEF-6	EA	UI	R
9501	Rural Livelihoods' Adaptation to Climate Change in the Horn of Africa - Phase II (RLACC II)	Sudan	Sahel	AfDB	GEF-5	FSP	CEO	R
457	Conservation of Biodiversity through Participatory Rehabilitation of Degrade Land in Arid and Semi-Arid Cross- Border Zones of Mauritania and Senegal	Regional		UNDP	GEF -1 (1994-1998)	FSP	C	R, S

GEF ID	Project title	Country	Biome	GEF Agency	GEF period	Modality	Project status	Type of review
504	Management of Indigenous Vegetation for the Rehabilitation of Degraded Rangelands in the Arid Zone of Africa	Regional		UNEP	GEF-2	FSP	C	R, S
1093	Reversing Land and Water Degradation Trends in the Niger River Basin	Regional		WB	GEF-3	FSP	C	R, S
1111	Addressing Transboundary Concerns in the Volta River Basin and its Downstream Coastal Area	Regional		UNEP	GEF-3	FSP	C	R, S
1216	Building Scientific and Technical Capacity for Effective Management and Sustainable Use of Dryland Biodiversity in West African Biosphere Reserves	Regional		UNEP	GEF-3	FSP	C	R, S
1258	Enhancing Conservation of the Critical Network of Sites of Wetlands Required by Migratory Waterbirds on the African/Eurasian Flyways	Regional		UNEP	GEF-3	FSP	C	R, S
1325	Institutional Strengthening and Resource Mobilization for Mainstreaming Integrated Land and Water Management Approaches into Development Programs in Africa	Regional		WB	GEF-2	MSP	C	R, S
1348	Africa Stockpiles Program, P1	Regional		WB	GEF-3	FSP	C	R, S
1420	Reducing Dependence on POPs and other Agro-Chemicals in the Senegal and Niger River Basins through Integrated Production, Pest and Pollution Management	Regional		UNEP	GEF-3	FSP	C	R, S
1909	Protection of the Canary Current Large Marine Ecosystem (LME)	Regional		FAO	GEF-4	FSP	UI	R
2041	Managing Hydrogeological Risk in the Lullemeden Aquifer System	Regional		UNEP	GEF-3	MSP	C	R, S
2129	Demonstrating and Capturing Best Practices and Technologies for the Reduction of Land-sourced Impacts Resulting from Coastal Tourism	Regional		UNEP	GEF-3	FSP	C	R, S
2139	SIP: Transboundary Agro-Ecosystem Management Programme for the Kagera River Basin (Kagera TAMP)	Regional		FAO	GEF-4	FSP	C	R
2140	Removing Barriers to Invasive Plant Management in Africa	Regional		UNEP	GEF-3	FSP	C	R, S
2184	SIP: Stimulating Community Initiatives in Sustainable Land Management (SCI-SLM)	Regional		UNEP	GEF-4	MSP	C	R, S
2396	Dryland Livestock Wildlife Environment Interface Project (DLWEIP)	Regional		UNEP	GEF-3	MSP	C	R, S
2546	Demonstration of Sustainable Alternatives to DDT and Strengthening of National Vector Control Capabilities in Middle East and North Africa	Regional		UNEP	GEF-4	FSP	UI	R
2584	Nile Transboundary Environmental Action Project (NTEAP), Phase II	Regional		UNDP	GEF-4	FSP	C	R, S
2586	PAS: Implementing Sustainable Integrated Water Resource and Wastewater Management in the Pacific Island Countries - under the GEF Pacific Alliance for Sustainability	Regional		UNDP	GEF-4	FSP	C	R, S
2614	Adaptation to Climate Change - Responding to Shoreline Change and Its Human Dimensions in West Africa through Integrated Coastal Area Management	Regional		UNDP	GEF-3	FSP	C	R, S

GEF ID	Project title	Country	Biome	GEF Agency	GEF period	Modality	Project status	Type of review
2720	Develop Appropriate Strategies for Identifying Sites Contaminated by Chemicals listed in Annex A, B, and/or C of the Stockholm Convention	Regional		UNIDO	GEF-3	FSP	C	R, S
2770	Demonstration of a Regional Approach to Environmentally Sound Management of PCB Liquid Wastes and Transformers and Capacitors Containing PCBs	Regional		UNEP	GEF-4	FSP	UI	R
2820	Supporting the Development and Implementation of Access and Benefit Sharing Policies in Africa	Regional		UNEP	GEF-4	FSP	C	R
2865	Promotion of Strategies to Reduce Unintentional Production of POPs in the PERSGA Coastal Zone	Regional		UNIDO	GEF-4	MSP	C	R, S
2906	CBSP Sustainable Financing of Protected Area Systems in the Congo Basin	Regional		UNDP	GEF-4	FSP	UI	R
3101	Pacific Adaptation to Climate Change Project (PACC)	Regional		UNDP	GEF-4	FSP	C	R, S
3321	Mainstreaming Groundwater Considerations into the Integrated Management of the Nile River Basin	Regional		UNDP	GEF-4	MSP	C	R
3346	DSSA Malaria Decision Analysis Support Tool (MDAST): Evaluating Health Social and Environmental Impacts and Policy Tradeoffs	Regional		UNEP	GEF-4	MSP	C	R, S
3398	SIP: Eastern Nile Transboundary Watershed Management in Support of ENSAP Implementation	Regional		WB	GEF-4	FSP	C	R
3401	SIP: Equatorial Africa Deposition Network (EADN)	Regional		UNEP	GEF-4	FSP	UI	R
3522	CTI Arafura and Timor Seas Ecosystem Action Programme (ATSEA) - under the Coral Triangle Initiative	Regional		UNDP	GEF-4	FSP	C	R
3591	PAS: Strengthening Coastal and Marine Resources Management in the Coral Triangle of the Pacific - under the Pacific Alliance for Sustainability Program	Regional		ADB	GEF-4	FSP	UI	R
3619	CTI Strategies for Fisheries Bycatch Management	Regional		FAO	GEF-4	FSP	C	R
3664	PAS: Prevention, Control and Management of Invasive Alien Species in the Pacific Islands	Regional		UNEP	GEF-4	FSP	C	R
3673	Supporting the Implementation of the Global Monitoring Plan of POPs in Eastern and Southern African Countries	Regional		UNEP	GEF-4	MSP	C	R
3674	Supporting the Implementation of the Global Monitoring Plan of POPs in West Africa	Regional		UNEP	GEF-4	MSP	C	R
3779	CBSP Enhancing Institutional Capacities on REDD issues for Sustainable Forest Management in the Congo Basin	Regional		WB	GEF-4	FSP	UI	R
3781	SPWA-BD: Evolution of PA systems with regard to climate change in the West Africa Region	Regional		UNEP	GEF-4	FSP	C	R
3809	Red Sea and Gulf of Aden Strategic Ecosystem Management	Regional		WB	GEF-4	FSP	UI	R
3822	CBSP - A Regional Focus on Sustainable Timber Management in the Congo Basin	Regional		UNEP	GEF-4	FSP	UI	R

GEF ID	Project title	Country	Biome	GEF Agency	GEF period	Modal-ity	Project status	Type of review
3788	LGGE Promoting Energy Efficiency in Buildings in Eastern Africa	Regional		UNEP	GEF-4	FSP	C	R
3960	C BSP-Capacity Building for Regional Coordination of Sustainable Forest Management in the Congo Basin under the GEF Program for the Congo Basin	Regional		WB	GEF-4	MSP	C	R, S
3968	AFLDC: Capacity Strengthening and Technical Assistance for the Implementation of Stockholm Convention National Implementation Plans (NIPs) in African Least Developed Countries (LDCs) of the COMESA Subregion	Regional		UNEP	GEF-4	FSP	C	R
3969	AFLDC: Capacity Strengthening and Technical Assistance for the Implementation of Stockholm Convention National Implementation Plans (NIPs) in African Least Developed Countries (LDCs) of the ECOWAS Subregion	Regional		UNEP	GEF-4	FSP	C	R
3984	SPWA-BD: Development of a Trans-frontier Conservation Area Linking Forest Reserves and Protected Areas in Ghana and Côte d'Ivoire	Regional		FAO	GEF-4	MSP	C	R
4023	PAS: Implementing the Island Biodiversity Programme of Work by Integrating the Conservation Management of Island Biodiversity	Regional		UNEP	GEF-4	FSP	C	R
4066	PAS: Pacific POPs Release Reduction Through Improved Management of Solid and Hazardous Wastes	Regional		UNEP	GEF-4	FSP	UI	R
4074	Africa Stockpiles Program (ASP) - Project 1- Supplemental Funds for Disposal and Prevention	Regional		WB	GEF-4	FSP	UI	R
4178	SPWA-CC Promoting Coherence, Integration and Knowledge Management under Energy Component of SPWA	Regional		UNIDO	GEF-4	MSP	UI	R
4523	Support to Preparation of the Second National Biosafety Reports to the Cartagena Protocol on Biosafety-Africa	Regional		UNEP	GEF-5	MSP	UI	R
4569	Improve the Health and Environment of Artisanal and Small Scale Gold Mining (ASGM) Communities by Reducing Mercury Emissions and Promoting Sound Chemical Management	Regional		UNIDO	GEF-5	MSP	C	R
4611	Reducing UPOPs and Mercury Releases from the Health Sector in Africa	Regional		UNDP	GEF-5	FSP	UI	R
4668	Demonstration of Effectiveness of Diversified, Environmentally Sound and Sustainable Interventions, and Strengthening National Capacity for Innovative Implementation of Integrated Vector Management (IVM) for Disease Prevention and Control in the WHO AFRO Region	Regional		UNEP	GEF-5	FSP	UI	R
4740	Disposal of Obsolete Pesticides including POPs and Strengthening Pesticide Management in the Permanent Interstate Committee for Drought Control in the Sahel (CILSS) Member States	Regional		FAO	GEF-5	FSP	UI	R

GEF ID	Project title	Country	Biome	GEF Agency	GEF period	Modality	Project status	Type of review
4746	Implementation of Global and Regional Oceanic Fisheries Conventions and Related Instruments in the Pacific Small Island Developing States (SIDS)	Regional		UNDP	GEF-5	FSP	UI	R
4748	Improving Lake Chad Management through Building Climate Change Resilience and Reducing Ecosystem Stress through Implementation of the SAP Minamata Convention: Initial Assessment in Cabo Verde and São Tomé and Príncipe	Regional		UNDP	GEF-5	FSP	CEO	R
4886	Continuing Regional Support for the POPs Global Monitoring Plan under the Stockholm Convention in the Africa Region	Regional		UNEP	GEF-5	FSP	UI	R
4940	Implementation of the Strategic Action Programme for the Protection of the Western Indian Ocean from Land-based Sources and Activities (WIO-SAP)	Regional		WB	GEF-5	FSP	UI	R
4953	Mano River Union Ecosystem Conservation and International Water Resources Management (IWRM) Project	Regional		IUCN	GEF-5	FSP	UI	R
5133	Senegal River Basin Climate Change Resilience Development Project	Regional		WB	GEF-5	FSP	UI	R
5195	Building National and Regional Capacity to Implement MEAs by Strengthening Planning, and State of Environment Assessment and Reporting in the Pacific Islands	Regional		UNEP	GEF-5	FSP	UI	R
5404	R2R: Testing the Integration of Water, Land, Forest & Coastal Management to Preserve Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods in Pacific Island Countries	Regional		UNDP	GEF-5	FSP	UI	R
5454	Ratification and Implementation of the Nagoya Protocol on Access and Benefit Sharing (ABS) for the Member Countries of the Central African Forests Commission COMIFAC	Regional		UNEP	GEF-5	MSP	A	R
5487	Integrated Development for Increased Rural Climate Resilience in the Niger Basin	Regional		AfDB	GEF-5	FSP	CEO	R
5513	Western Indian Ocean Large Marine Ecosystems Strategic Action Programme Policy Harmonization and Institutional Reforms (SAPPHIRE)	Regional		UNDP	GEF-5	FSP	CEO	R
5633	Lead Paint Elimination Project in Africa	Regional		UNEP	GEF-5	MSP	UI	R
5634	Ratification and Implementation of the Nagoya Protocol in the Countries of the Pacific Region	Regional		UNEP	GEF-5	MSP	A	R
5674	Lakes Edward and Albert Integrated Fisheries and Water Resources Management Project	Regional		AfDB	GEF-5	FSP	UI	R
5798	Adaptive Management and Monitoring of the Maghreb's Oases Systems	Regional		FAO	GEF-5	MSP	UI	R
5860	Development of Minamata Convention on Mercury Initial Assessment in Africa	Regional		UNEP	GEF-5	EA	UI	R
6944	Development of Minamata Convention on Mercury Initial Assessment in Africa	Regional		UNEP	GEF-6	EA	UI	R
6964	Volta River Basin Strategic Action Programme Implementation Project	Regional		WB	GEF-6	FSP	UI	R
6982	Enhancing Capacity to Develop Global and Regional Environmental Projects in the Pacific	Regional		UNDP	GEF-6	MSP	C	R

GEF ID	Project title	Country	Biome	GEF Agency	GEF period	Modality	Project status	Type of review
9080	Integrated Health and Environment Observatories and Legal and Institutional Strengthening for the Sound Management of Chemicals in Africa (African ChemObs)	Regional		UNEP	GEF-6	FSP	UI	R
9098	Minamata Convention Initial Assessment in Francophone Africa II	Regional		UNIDO	GEF-6	EA	UI	R
9101	Minamata Convention Initial Assessment in Francophone Africa I	Regional		UNIDO	GEF-6	EA	UI	R
9118	Support to Preparation of the Third National Biosafety Reports to the Cartagena Protocol on Biosafety - AFRICA REGION	Regional		UNEP	GEF-6	MSP	UI	R
9173	Development of Minamata Convention Mercury Initial Assessment in Africa	Regional		UNEP	GEF-6	EA	UI	R
9276	Regional Project on the Development of National Action Plans for the Artisanal and Small-Scale Gold Mining in Africa	Regional		UNEP	GEF-6	EA	UI	R
9360	West Africa Regional Fisheries Program, Additional Financing	Regional		WB	GEF-6	FSP	UI	R
9446	Regional Project for the Conservation and Sustainable Development of Lake Chad: Enhancing Transboundary Cooperation and Integrated Water Resources Management in the Lake Chad Basin	Regional		AfDB	GEF-5	FSP	CEO	R
9491	Mainstreaming Conservation of Migratory Soaring Birds into Key Productive Sectors along the Rift Valley / Red Sea Flyway (Tranche II of GEF ID 1028)	Regional		UNDP	GEF-6	FSP	CEO	R
9533	Development of National Action Plan for Artisanal and Small Scale Gold Mining Mali and Senegal	Regional		UNEP	GEF-6	EA	UI	R
9547	Development of National Action Plan for Artisanal and Small Scale Gold Mining in Guinea and Niger	Regional		UNEP	GEF-6	EA	X	R
9817	Support to Eligible Parties to Produce the Sixth National Report to the CBD (Africa-1)	Regional		UNEP	GEF-6	MSP	UI	R
9824	Support to Eligible Parties to Produce the Sixth National Report to the CBD (Africa-2)	Regional		UNEP	GEF-6	MSP	UI	R

Note: *Agencies:* ADB = Asian Development Bank, AfDB = African Development Bank, CI = Conservation International, FAO = Food and Agriculture Organization of the United Nations, GEFSec = GEF Secretariat, IFAD = International Fund for Agricultural Development, IUCN = International Union for Conservation of Nature, UNIDO = United Nations Industrial Development Organization, WB = World Bank. *Modalities:* EA = enabling activity, FSP = full-size project, MSP = medium-size project. *Status:* A = Council approved, C = completed/closed, CEO = CEO approved/endorsed, P = pending approval, UI = under implementation, X = canceled. *Type of review:* R = relevance, S = sustainability.

Country case studies and projects visited

GEF ID	GEF Agency	Focal area	GEF period	Modality	Project title
Guinea					
1093	WB-UNDP	IW	GEF-3	FSP	Reversing Land and Water Degradation Trends in the Niger River Basin (regional)
1273	WB	BD	GEF-3	FSP	Coastal Marine and Biodiversity Management
1877	WB	LD	GEF-3	FSP	Community-based Land Management
3703	UNDP	CCA	GEF-4	FSP	Increased Resilience and Adaptation to Adverse Impacts of Climate Change in Guinea's Vulnerable Coastal Zones
4492	UNDP	CCA	GEF-5	FSP	Strengthening Resilience of Communities' Livelihoods against Climate Changes in Gaoual, Koundara and Mali
Mali					
1152	IFAD	BD	GEF-3	FSP	BD Conservation and Participatory SM of Natural Resources in the Inner Niger Delta, Mopti Region
1253	WB	BD	GEF-2	FSP	Gourma Biodiversity Conservation
1420	UNEP	MF	GEF-3	FSP	Reducing Dependence on POPs and Other Agro-Chemicals in the Senegal and Niger River Basins through IPPM (regional)
Mauritania					
1258	UNEP	BD	GEF-3	FSP	Enhancing Conservation of Network of Wetlands Required by Migratory Water Birds on African/Eurasian Flyways (regional)
2459	WB	LD	GEF-3	FSP	Community-based Watershed Management Project
2614	UNDP	CCA	GEF-3	FSP	Responding to Shoreline Change and Its Human Dimensions in West Africa through Integrated Coastal Area Management (regional)
3379	IFAD	LD	GEF-4	FSP	SIP: Participatory Environmental Protection and Poverty Reduction in the Oases of Mauritania
3893	IFAD	CCA	GEF-4	FSP	Support to the Adaptation of Vulnerable Agricultural Production Systems
5190	AfDB	CCA	GEF-5	FSP	Improving Climate Resilience of Water Sector Investments with Appropriate Climate Adaptive Activities for Pastoral and Forestry Resources in Southern Mauritania

GEF ID	GEF Agency	Focal area	GEF period	Modality	Project title
Nigeria					
942	WB	BD	GEF-3	FSP	Local Empowerment and Environmental Management Project
1503	WB	LD	GEF-3	FSP	National Fadama Development Program II: Critical Ecosystem Management Project
1258	UNEP	BD	GEF-3	FSP	Enhancing Conservation of Network of Wetlands Required by Migratory Water Birds on African/Eurasian Flyways (regional)
4090	UNDP	BD	GEF-4	FSP	Niger Delta Biodiversity Project
4907	WB	LD	GEF-5	FSP	GGW: Nigeria Erosion and Watershed Management Project
Uganda					
1175	UNDP	BD	GEF-3	FSP	Conservation of Biodiversity in the Albertine Rift Forest Protected Areas
1830	WB	BD	GEF-1	FSP	1830 Protected Areas Management and Sustainable Use (PAMSU)
2140	UNEP	BD	GEF-3	FSP	Removing Barriers to Invasive Plant Management in Africa (regional)
3393	UNDP	LD	GEF-4	FSP	SIP: Enabling Environment for SLM to Overcome Land Degradation in the Cattle Corridor of Uganda
4644	UNDP	MF	GEF-5	FSP	Addressing Barriers to Adoption of Improved Charcoal Production Technologies and SLM
5718	UNDP	MF	GEF-5	FSP	Integrated Landscape Management for Improved Livelihoods and Ecosystem Resilience in Mount Elgon
3377	WB-UNDP	LD	GEF-4	FSP	Strategic Investment Plan - Fostering Agricultural Productivity in Mali
3763	UNDP	BD	GEF-4	FSP	SPWA-BD: Expansion and Strengthening of Mali's Protected Area System
3979	FAO	CCA	GEF-4	FSP	Integrating Climate Resilience into Agricultural Production for Food Security in Rural Areas
5270	WB	MF	GEF-5	FSP	GGW- Natural Resources Management in a Changing Climate in Mali

Note: Agencies: AfDB = African Development Bank, FAO = Food and Agriculture Organization of the United Nations, IFAD = International Fund for Agricultural Development, WB = World Bank. Focal areas: BD = biodiversity, CCA = climate change adaptation, IW = international waters, LD = land degradation, MF = multifocal. Modalities: FSP = full-size project.

Sustainability factors observed in country case studies

	Guinea	Guinea-Bissau	Mali	Mauritania	Nigeria	Uganda
Contributing factors						
Project-related	Working with existing decentralized institutions through local development plans	Stakeholder engagement during implementation	Beneficiary-relevant, cost-effective ALS with positive environment-development nexus under individual rather than community management	Good project design	Good project design	Alignment with national priorities
	Partnering with a national program with a strong track record	Supporting local community institutions based on their own investment priorities	Appropriate technology	Beneficiary-relevant, cost-effective ALS with positive environment-development nexus in the short to medium term	Beneficiary-relevant, cost-effective ALS with positive environment-development nexus under individual rather than community management	Good project design
	Beneficiary-relevant, cost-effective ALS with positive environment-development nexus	Integrating women in groups	Working with existing decentralized institutions through local development plans		ALS requiring minimum postproject maintenance, but yielding economic benefits over time	Stakeholder engagement at design and during implementation
	Promoting women-led ALS	Establishment of a biodiversity conservation trust fund	Promoting women-led ALS		Promoting self-financing aspects for parks' internal revenue generation	
	Creation of local inter-commune institution for SLM		Creation of local inter-commune institution			

	Guinea	Guinea-Bissau	Mali	Mauritania	Nigeria	Uganda
Context-related	Donors' postproject financing	Existing protected areas regulation	Govt. postproject financing	Beneficiaries' postproject financing	Govt. postproject financing	Postproject follow-up of selected technologies/practices
	Local-level technicians retained in local govt. offices	Postproject follow-up of selected technologies/practices		Local-level technicians retained in local govt. offices	GEF and other donors' postproject financing through follow-up projects	
Hindering factors						
Project-related	Poor project design	Limited local stakeholder engagement at design	Poor project design	Poor project design	Poor project design	Projects not institutionalized in line ministries
		Insufficient environmental awareness raising	ALS not cost-effective for beneficiaries in the long term		ALS not cost-effective for beneficiaries in the long term	Insufficient and/or poorly designed ALS
		Lengthy GEF project cycle	Absence of environment-development nexus	ALS not cost-effective for beneficiaries in the long term	Community rather than individual ALS	Lengthy GEF project cycle
Context-related	Govt. priorities favoring economic development over conservation	Govt. priorities favoring economic development over conservation	Insecurity affecting protected area management	No postproject funding to maintain infrastructure	Short-term profit-seeking economic activities	Govt. priorities favoring economic development over conservation
	Political interference/weak enforcement of laws and policies	Limited/no govt. postproject financing	Limited postproject funding	Insecurity	Demographic pressures	Political interference/weak enforcement of laws and policies
	Limited/no govt. postproject financing	Weak enforcement of protected areas		Central-level project staffs not adsorbed in relevant govt. institutions	Insecurity affecting protected area management	Limited govt. postproject financing
	Insecurity			Govt. uncontrolled private investments in coastal areas		Institutional changes
	Govt. uncontrolled private investments in coastal areas			Govt. uncontrolled private investments in coastal areas		Unfavorable land tenure systems
						Demographic pressures
				Prolonged dry weather		

Note: Table is color-coded to show similarities/relationships between contributing and hindering factors. Project-related factors are shown in shades of green; context-related are in shades of blue and purple. ALS = alternative livelihood systems.

Classification of fragile and conflict-affected situations in the biomes

Country	Fragility assessment/index value													FY18 mission	Trend	
	FY06	FY07	FY08	FY08	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18			
Benin																
Burkina Faso																
Cameroon				M	3.4											
Central African Republic	S	S	C	C	2.7	2.8	2.9	2.8	2.8	2.4	2.4	2.4	2.5	P	(0.0548)	
Chad	M	C	C	C	2.8	2.8	2.7	2.8	2.9	2.9	3.0	3.0	3.0		0.0335	
Côte d'Ivoire	C	S	C	C	2.7	2.9	2.8	2.9	3.1	3.3	3.4	3.5	3.5	K	0.1111	
Eritrea	C	C	C	C	2.4	2.3	2.3	2.2	2.0	2.0	2.1	2.0	2.0		(0.0482)	
Ethiopia																
Gambia	M	M	M	M	3.3						3.2	3.0	2.9	K	(0.0341)	
Ghana																
Guinea	C	C	C	C	3.1	3.0	3.1	3.1								0.0062
Guinea-Bissau	C	C	C	C	2.8	2.9	3.0	3.0	2.7	2.6	2.6	2.6	2.5	P	(0.0480)	
Liberia	S	S	C	C	3.1	3.2	3.3	3.4	3.4	3.3	3.3	3.3	3.2	K	0.0090	
Mali									3.7	3.6	3.5	3.5	3.6	K	(0.0370)	
Mauritania		M														
Niger																
Nigeria	C	C														
Senegal																
Sierra Leone	M	M	M	M	3.2	3.3	3.3	3.3	3.3	3.4	3.3	3.3	3.3	P	0.0028	
Somalia	S	S	C	C				1.1	1.2	1.1	1.1	1.1	1.5	P	0.0409	
South Sudan			C	C					2.2	2.2	2.1	1.9	1.7	K	(0.1240)	
Sudan	C	C	C	C	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	K	(0.0079)	
Togo	C	S	C	C	2.8	2.9	3.0	2.9	3.1		3.1	3.1	3.1		0.0361	
Uganda																

Source: World Bank 2018.

Note: C = core; M = marginal; S = severe. FY = fiscal year; K = peacekeeping; P = peacebuilding and political. Blank cells indicate no fragility threats. Fragility index scores have been rounded to first decimal point.

References

All URLs were checked before publication.

- Béné, Christophe, Rachel Godfrey Wood, Andrew J. Newsham, and Mark Davies, 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. Institute of Development Studies, Brighton, UK.
- Biggs, Eloise M., Eleanor Bruce, Bryan Boruff, John M.A. Duncan, Julia Horsley, Natasha Pauli, Kellie McNeill, Andreas Neef, Floris Van Ogtrop, Jayne Curnow, Billy Haworth, Stephanie Duce, Yukihiro Imanari. 2015. "[Sustainable Development and the Water-Energy-Food Nexus: A Perspective on Livelihoods.](#)" *Environmental Science & Policy*, 54: 389–397.
- Cutter, Susan L., Lindsey Barnes, Melissa Berry, Christopher Burton, Elijah Evans, Eric Tate, and Jennifer Webb. 2008. "A Place-based Model for Understanding Community Resilience to Natural Disasters." *Global Environmental Change* 18 (4): 598–606.
- Global Environment Facility (GEF). 2012. "[Policy on Gender Mainstreaming.](#)" SD/PL/02. GEF, Washington, DC.
- . 2015. [The GEF and the Sustainable Development Goals.](#) Washington, DC: GEF.
- . 2018. "[GEF-7 Programming Directions.](#)" Document Number GEF/R.7/19. GEF, Washington, DC.
- GEF Independent Evaluation Office (GEF IEO). 2009a. [Annual Country Portfolio Evaluation Report 2009.](#) Evaluation Report No. 50. Washington, DC: GEF IEO.
- . 2009b. [GEF Country Portfolio Evaluation: Benin \(1991–2007\).](#) Evaluation Report No. 41. Washington, DC: GEF IEO.
- . 2009c. [GEF Country Portfolio Evaluation: Cameroon \(1992–2007\).](#) Evaluation Report No. 45. Washington, DC: GEF IEO.
- . 2013. [OPS5 First Report: Cumulative Evidence on the Challenging Pathways to Impact.](#) Evaluation Report No. 79. Washington, DC: GEF IEO.
- . 2014a. [Annual Country Portfolio Evaluation Report 2014.](#) Evaluation Report No. 95. Washington, DC: GEF IEO.
- . 2014b. [OPS5 Report: At the Crossroads for Higher Impact.](#) Evaluation Report No. 86. Washington, DC: GEF IEO.
- . 2015. "[Four-Year Work Program and Budget of the GEF Independent Evaluation Office: GEF-6.](#)" GEF/ME/C.48/01. GEF, Washington, DC.
- . 2016a. [Evaluation of the Expansion of the GEF Partnership.](#) Evaluation Report No. 131. Washington, DC: GEF IEO.
- . 2016b. [Program Evaluation of the Least Developed Countries Fund.](#) Evaluation Report No. 106. Washington, DC: GEF IEO.
- . 2017. [OPS6 Report: The GEF in the Changing Environmental Finance Landscape.](#) Evaluation Report No. 110. Washington, DC: GEF IEO.
- . 2018a. [Evaluation of Gender Mainstreaming in the GEF.](#) Evaluation Report No. 118. Washington, DC: GEF IEO.

- . 2018b. [Evaluation of Programmatic Approaches in the GEF](#). Evaluation Report No. 113. Washington, DC: GEF IEO.
- . 2018c. [Formative Review of the Integrated Approach Pilot \(IAP\) Programs](#). Evaluation Report No. 126. Washington, DC: GEF IEO.
- . 2018d. [Impact of GEF Support on National Environment Laws and Policies](#). Evaluation Report No. 129. Washington, DC: GEF IEO.
- . 2018e. [Land Degradation Focal Area Study](#). Evaluation Report No. 120. Washington, DC: GEF IEO.
- . 2018f. [“Strategic Country Cluster Evaluations: Reference Group Meeting—June 6 2018.”](#) GEF IEO, Washington, DC.
- . 2018g. [“Strategic Country Cluster Evaluation: Sahel and Sudan-Guinea Savanna Biomes—Selection of Case Study Countries.”](#) GEF IEO, Washington, DC.
- . 2019a. [Annual Performance Report 2017](#). Evaluation Report No. 136. Washington, DC: GEF IEO.
- . 2019b. [“Strategic Country Cluster Evaluation: Sahel and Sudan-Guinea Savanna Biomes – Guidance Note for Country Case Studies.”](#) GEF IEO, Washington, DC.
- . 2022. [Strategic Country Cluster Evaluation: Small Island Developing States](#). Evaluation Report No. 140. Washington, DC: GEF IEO.
- GEF IEO and UNDP IEO (Global Environment Facility Independent Evaluation Office and United Nations Development Programme Independent Evaluation Office). 2015. [Joint GEF-UNDP Evaluation of the Small Grants Programme](#). Evaluation Report No. 97. Washington, DC: GEF IEO.
- GEF STAP (Global Environment Facility Scientific and Technical Advisory Panel). 2014. [“Delivering Global Environmental Benefits for Sustainable Development.”](#) STAP Report to the 5th GEF Assembly. GEF, Washington, DC.
- Holling, C. S. 1973. [“Resilience and Stability of Ecological Systems.”](#) *Annual Review of Ecology and Systematics* 4: 1–23.
- Kumssa, Asfaw, and John F. Jones. 2010. [“Climate Change and Human Security in Africa.”](#) *International Journal of Sustainable Development and World Ecology* 17: 453–61.
- Pelling, Mark. 2011. [Adaptation to Climate Change](#). New York: Routledge.
- Riley, A. 2012. [“Africa’s Biomes—The Guinea-Congo Forests.”](#) 10,000 Birds. Blog post November 13.
- Trollope, Winston S.W., and Lynne A. Trollope. 2004. [“Prescribed Burning in African Grasslands and Savannas for Wildlife Management.”](#) *Arid Lands Newsletter*, 55, May/June.
- UN (United Nations). 2013. [Africa Renewal 2013. The Sahel: One Region, Many Crises](#). New York: UN.
- UN-DESA (United Nations Department of Economic and Social Affairs). 2014. [“International Decade for Action ‘Water for Life’ 2005-2015 – Water and Cities.”](#) UN-DESA, New York.
- UNEP (United Nations Environment Programme). 2006. [Africa Environment Outlook 2: Our Environment, Our Health](#). Nairobi: UNEP.
- . 2007. [Global Environment Outlook GEO-4: Environment for Development](#). Nairobi: UNEP.
- . 2016. [Africa Environment Outlook GEO-6: Regional Assessment for Africa](#). Nairobi: UNEP.
- . 2019. [Environmental Rule of Law: First Global Report](#). Nairobi: UNEP.
- UNEP DEWA (Division of Early Warning and Assessment). 2008. [Africa: Atlas of Our Changing Environment](#). Nairobi: UNEP-DEWA.
- USAID (United States Agency for International Development). 2013. [West Africa Environmental Threats and Opportunities Assessment](#). Washington, DC: USAID.
- World Bank. 2015. [Africa’s Population Boom: Will It Mean Disaster or Economic and Human Development Gains?](#) Washington, DC: World Bank.
- . 2018. [“Harmonized List of Fragile Situations FY 18.”](#) World Bank, Washington, DC.



The Independent Evaluation Office of the Global Environment Facility (GEF) was established by the GEF Council in July 2003. The Office is independent from GEF policy making and its delivery and management of assistance.

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

Within the GEF, the Office facilitates cooperation on evaluation issues with professional evaluation networks; this includes adopting evaluation guidelines and processes consistent with international good practices. We also collaborate with the broader global environmental community to ensure that we stay on the cutting edge of emerging and innovative methodologies.

To date, the Office has produced over 100 evaluation reports; explore these on our website: www.gefio.org/evaluations.



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