




# The GEF in Africa



*Unsustainable exploitation of Africa's natural resources by its burgeoning population, is brewing trouble. Nature is issuing red alerts, as evidenced by the many catastrophes that are being experienced, aggravating food shortages, water scarcity, diseases, conflicts, migration, and poverty, all of which could culminate in the destabilization of economies.*

*Rose Mwebaza*

*UNEP Regional Director and Representative, Regional Office for Africa*



# Table of Contents

Foreword	3
Introduction	7
Biodiversity and Wildlife Conservation	13
Land Degradation and Drought	21
Conserving and Restoring Forests and Their Multiple Benefits	29
Climate Change Mitigation	35
Climate Change Adaptation	45
Managing Water Resources, from Source to Sea	55
Tackling Pollution and Waste Management	67
Integrated Programming for Systems Transformation	75



# Foreword


The African continent, characterized by diverse economies, geographies, and ecosystems, faces significant environmental challenges that will impact the continent and the world. Efforts to address these challenges require protecting and sustainably using Africa's environmental resources and understanding the intricate and complex linkages between those resources and the development aspirations of countries across the continent.

In Africa as around the globe, land degradation and drought, deforestation, biodiversity loss, climate change, air and water pollution, coastal erosion, and overexploitation of water resources put stress on key systems that underpin economic growth and human well-being. At the same time, these systems—including food and agriculture, urban development, energy and transportation infrastructure, tourism, and the exploitation of natural resources—can also contribute significantly to environmental degradation due to ineffective policies and institutions, financial limitations, and insufficient capacity.

Since its inception in 1991, the Global Environment Facility (GEF) has steadfastly supported African countries as they seek effective and innovative approaches to a nature-positive economy. The GEF has helped implement more than 1,800 projects in Africa, with a total investment of \$6.2 billion. These investments have leveraged over \$40 billion from other stakeholders, including governments, bilateral and multilateral partners, the private sector, and civil society organizations.

As a financial mechanism for international environmental treaties, the GEF has played a catalytic role in tackling the major environmental issues facing Africa. This publication details the GEF's work and illustrates how African countries, with GEF support, are diligently working to fulfill their obligations under these agreements.

Seen together, the examples that follow provide valuable insights into the GEF's tangible contributions in the African region over the last 30 years. The GEF's initiatives in Africa span biodiversity and wildlife conservation, chemicals and



waste management, forests, water resources, and climate change adaptation and mitigation, as well as integrated programming across Africa that addresses food security, commodities, wildlife, sustainable cities, and more.

GEF investments in Africa align with the 2030 agenda for sustainable development. The GEF is also working within the strategic framework for the socioeconomic transformation of the continent over the next 50 years, as envisioned in the African Union's Agenda 2063.

The GEF looks forward to deepening its successful partnerships in Africa based on a whole-of-society approach that engages young people, women, Indigenous people, local communities, and the private sector. We must include all to continue to promote solutions that help nations achieve their ambition of ensuring human well-being through the wise management and protection of nature.

*Carlos Manuel Rodríguez, CEO and Chairperson  
Global Environment Facility (GEF)*



*Since its inception in 1991, the Global Environment Facility has steadfastly supported African countries as they seek effective and innovative approaches to a nature-positive economy.*





# Introduction

Africa is endowed with a substantial share of the world's renewable and non-renewable natural resources—arable land, water, oil, natural gas, minerals, forests, and wildlife. Africa is home to 60 percent of the best solar resources globally, and approximately 30 percent of the world's mineral reserves are found in Africa. Furthermore, the continent has 40 percent of the world's gold, up to 90 percent of its chromium and platinum, and the largest reserves of cobalt, diamonds, platinum, and uranium. Africa holds 65 percent of the world's arable land and 10 percent of its internal renewable fresh water sources. Finally, Africa is the home of multiple biodiversity hotspots and provides habitats for critical ecosystems, biomes and wildlife.

Despite its rich biodiversity and natural resources, Africa is grappling with numerous environmental challenges exacerbated by climate change. These include land degradation, drought, deforestation, biodiversity loss, overexploitation of water resources, climate change, air and water pollution, coastal erosion, and pollution of air, water, and soil.

*Today the GEF is the world's leading public financial fund dedicated to smart, environmentally sound choices that boost local economies and protect the planet.*




The GEF is the largest multilateral fund dedicated to addressing these threats. Over its 30-year history, the GEF has been actively involved on the African continent, supporting countries in implementing provisions related to conventions such as the United Nations Framework Convention on Climate Change (UNFCCC), the Convention on Biological Diversity (CBD), the United Nations Convention to Combat Desertification (UNCCD), the Stockholm Convention, and, more recently, the Minamata Convention on Mercury. Notably, the recently launched Kunming-Montreal Global Biodiversity Framework Fund (GBFF) from the GEF aims to boost investment in nature restoration and renewal. Efforts are also underway to assist countries in preparing to ratify the United Nations High Seas Treaty or the Biodiversity Beyond National Jurisdiction (BBNJ) treaty—a legally binding instrument for the conservation and sustainable use of marine biological diversity beyond national jurisdiction.

Today the GEF is the world's leading public financial fund dedicated to smart, environmentally sound choices that boost local economies and protect the planet. Recognizing the threat of climate change to the continent, the GEF is actively involved in climate action by supporting low-carbon and climate-resilient development in Africa. Mitigation efforts cover sectors such as access to decarbonized energy, energy efficiency, net zero mobility, and nature-based solutions with high mitigation potential. Adaptation efforts are channeled through two trust funds: the Least Developed Countries Fund (LDCF) dedicated to supporting adaptation needs in LDCs (33 of Africa's 54 countries), and the Special Climate Change Fund (SCCF) accessible by other developing countries. Projects on adaptation span sectors such as agriculture, water, climate information services, and nature-based solutions. The GEF collaborates closely with other climate funds, such as the Green Climate Fund, through a long-term vision materialized in ongoing joint programming in Africa.

Freshwater resources in Africa are shared across multiple countries through groundwater aquifers, lakes, rivers, and wetlands. The GEF provides support to countries engaged in various surface and groundwater basins and freshwater ecosystem, including, for example, the Okavango Delta, Lake Victoria (the largest lake in Africa), and Lake Tanganyika, among others.

Drawing on its experience and achievements in focal areas over the past three decades, the GEF emphasizes an integrated approach for transformative

A photograph of a lush green forest with a zebu cow standing on a dirt path in the foreground. The cow is dark-colored with a prominent hump. The background is filled with dense tropical foliage, including palm trees and other green plants. The lighting is bright, suggesting a sunny day.

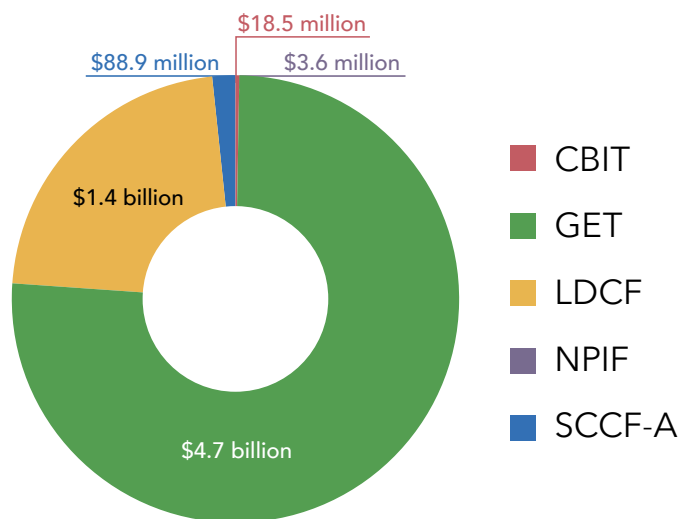
impact. The GEF operates as a partnership, delivering its work in Africa through collaboration with GEF Agencies. The 12 GEF Agencies operating in Africa provide a diverse range of experiences and options for African governments in developing projects for global environmental benefits. These agencies encompass four multilateral banks, including the Africa Development Bank (AfDB), the West African Development Bank (BOAD), the World Bank, and the Development Bank of Southern Africa (DBSA). Additionally, five UN Agencies (FAO, UNEP, UNDP, UNIDO, IFAD) and three international Non-Governmental Organizations (WWF-US, CI, IUCN) contribute to GEF projects. Collaboration involves various stakeholders at national and regional levels, including government representatives, civil society organizations, community representatives, and Indigenous peoples.

The growing sophistication of the GEF's work has not occurred in isolation, but rather as a result of its long experience with hundreds of programs and projects across Africa, which offer tangible evidence of how profoundly human health and well-being depend on healthy ecosystems, and of the limits to which we can exploit those systems before they collapse. That understanding has led to new ways of thinking about how to design and implement both broad programs and focused national efforts. This document reflects how GEF engagement across the continent has evolved through the various replenishment cycles.

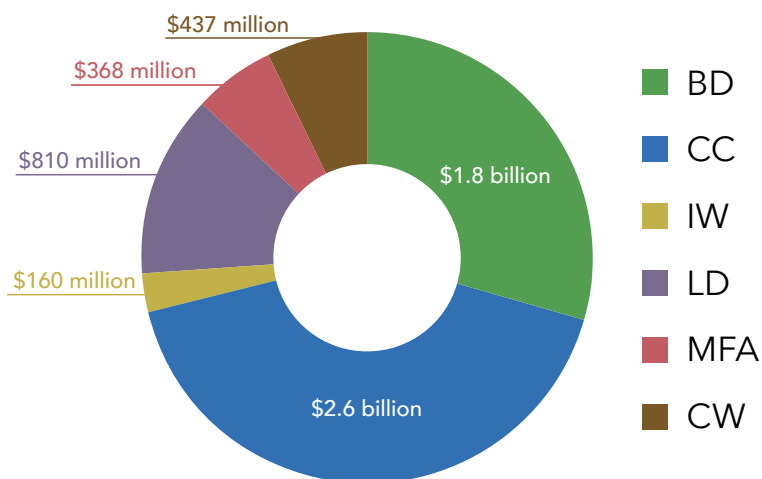
First, it outlines progress and achievements from focal area investments focused on safeguarding the continent's rich and unique biodiversity, tackling deforestation and forest degradation, promoting sustainable land management practices to arrest and reverse desertification, delivering climate change mitigation benefits across multiple sectors, and eliminating hazardous chemicals and waste that pose threats to people and the environment. Second, it describes how countries in the Africa region have embraced the integrated approach through GEF programs designed to tackle major drivers of global environmental degradation and advance transformative change in key economic systems. This includes programs on food systems and land use, commodities driving deforestation, and urbanization. This report concludes by outlining future directions for harnessing new opportunities linked to the multilateral environmental agreements, and in the context of commitments made through regional and sub-regional bodies across the continent.

ADB	Asian Development Bank
AfDB	African Development Bank
BD	Biodiversity
BOAD	West African Development Bank
CBIT	Capacity-building Initiative for Transparency
CC	Climate Change (Adaptation and Mitigation)
CI	Conservation International
CW	Chemicals and Waste
DBSA	Southern Africa Development Bank
EBRD	European Bank for Reconstruction and Development
FAO	Food and Agriculture Organization
GEFSEC	GEF Secretariat
GET	GEF Trust Fund
IAP	Integrated Approach Pilots
IFAD	International Fund for Agriculture and Development
IP	Integrated Programs
IUCN	International Union for the Conservation of Nature
IW	International Waters
LD	Land Degradation
LDCF	Least Developed Countries Fund
MFA	Multi-Focal Area
NPIF	Nagoya Protocol Implementation Fund
SCCF	Special Climate Change Fund
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Organisation
WB	World Bank
WWF-US	World Wildlife Fund - US

**Table 1: GEF Programming by Funding Source**



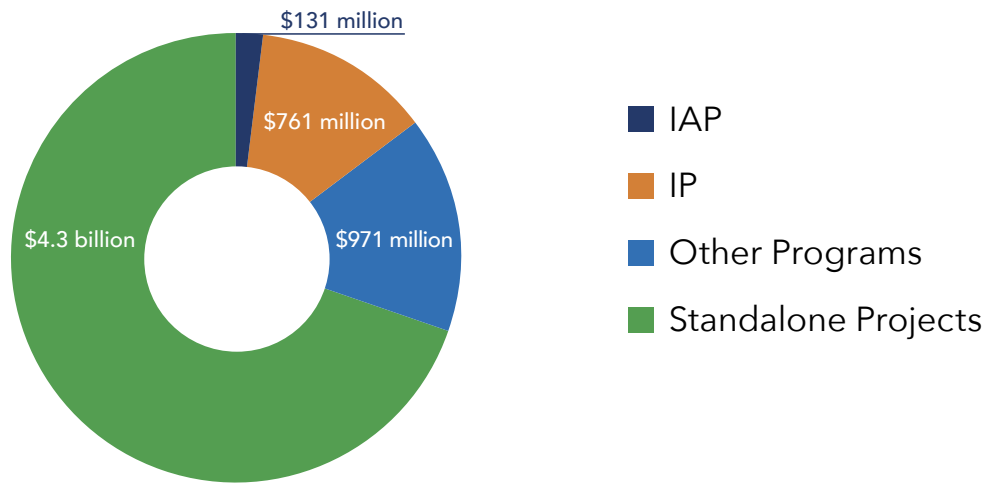
**Table 2: GEF Programming by Focal Area**



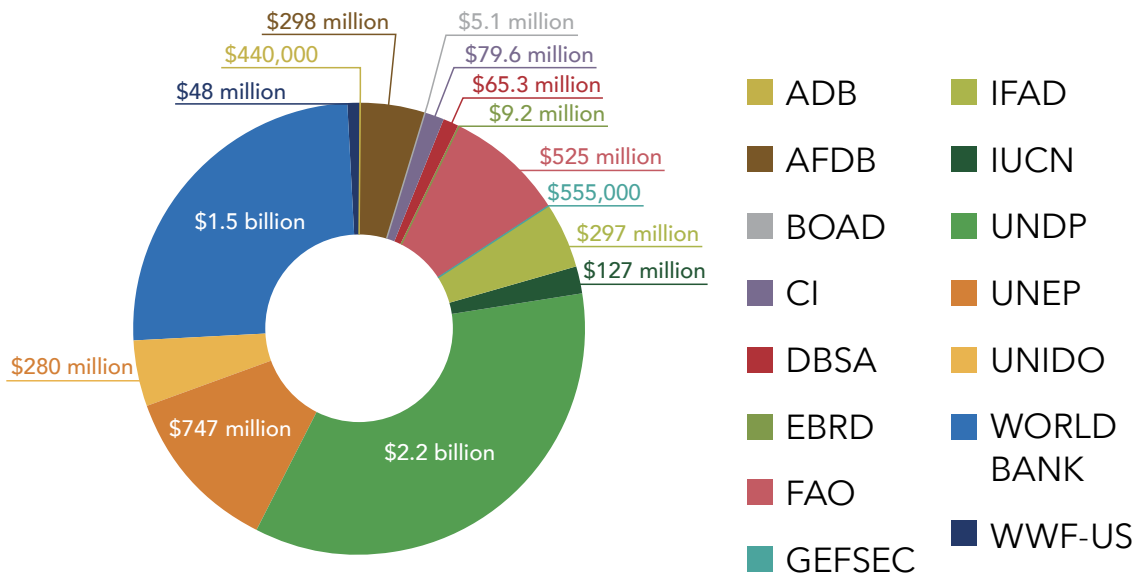
# Total GEF Funding to Date

February 2024

**Table 3. GEF Programming by IPs, IAPs, PFDs vs. Standalone Projects**



**Table 4. GEF Programming by Agency**





*A critical pillar of the GEF Biodiversity strategies over the last 30 years has been supporting the creation and effective management of protected area systems, buffer zones around protected areas, and biological corridors.*

# Biodiversity and Wildlife Conservation

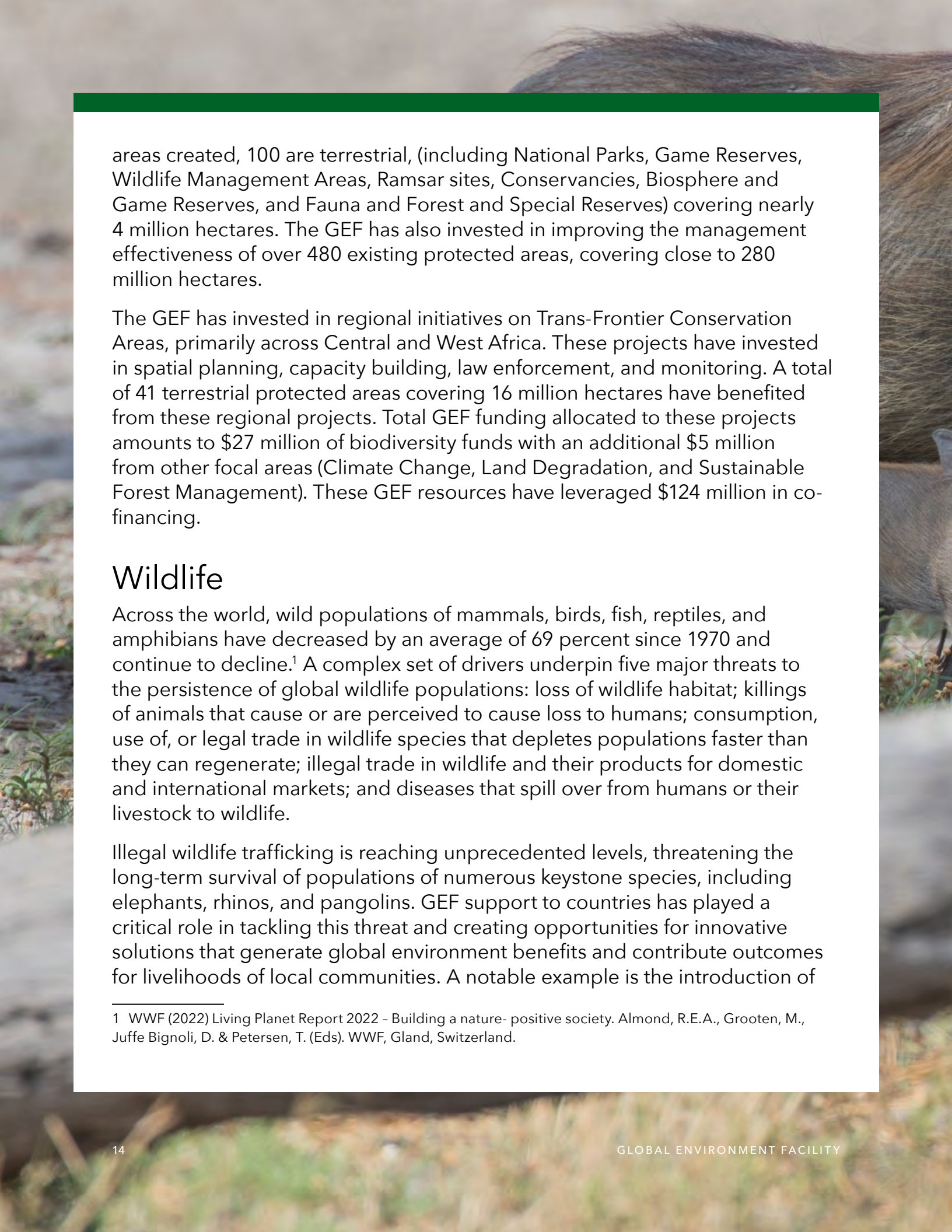
The GEF's long experience in Africa has demonstrated that dramatic expansion of biodiversity conservation is not only possible, but that such expansion can be part of broader efforts to bring biodiversity and ecosystem services into local and national economies. The GEF has supported the implementation of the Convention on Biological Diversity (CBD) since its inception and has positioned itself as one of the main funders for biodiversity conservation in Africa. The GEF's robust biodiversity portfolio includes over 400 projects worth \$1.8 billion and leveraging over \$7.5 billion in co-financing.

## Protected Areas

A critical pillar of the GEF Biodiversity strategies over the last 30 years has been supporting the creation and effective management of protected area systems, buffer zones around protected areas, and biological corridors. These strategies both protect biodiversity and render direct and indirect benefits to local communities and Indigenous peoples. The GEF has provided financial and technical assistance to eligible countries for the creation and effective management of terrestrial, coastal, and marine protected areas in 48 of Africa's 54 countries.

The GEF has invested more than \$600 million in projects almost exclusively dedicated to protected areas, and more than \$300 million in projects combining activities on protected areas with mainstreaming biodiversity in forestry, agriculture, and tourism. All in all, more than \$500 million dollars, or 40 percent of the funds in biodiversity conservation, have been invested in the creation and management of protected areas in Africa. These GEF investments have leveraged nearly \$1 billion in co-financing.

The GEF has contributed to the creation of over 160 terrestrial, coastal, and marine protected areas covering over 9 million hectares, and in the effective management of over 540 areas covering nearly 290 million hectares. Of the



areas created, 100 are terrestrial, (including National Parks, Game Reserves, Wildlife Management Areas, Ramsar sites, Conservancies, Biosphere and Game Reserves, and Fauna and Forest and Special Reserves) covering nearly 4 million hectares. The GEF has also invested in improving the management effectiveness of over 480 existing protected areas, covering close to 280 million hectares.

The GEF has invested in regional initiatives on Trans-Frontier Conservation Areas, primarily across Central and West Africa. These projects have invested in spatial planning, capacity building, law enforcement, and monitoring. A total of 41 terrestrial protected areas covering 16 million hectares have benefited from these regional projects. Total GEF funding allocated to these projects amounts to \$27 million of biodiversity funds with an additional \$5 million from other focal areas (Climate Change, Land Degradation, and Sustainable Forest Management). These GEF resources have leveraged \$124 million in co-financing.

## Wildlife

Across the world, wild populations of mammals, birds, fish, reptiles, and amphibians have decreased by an average of 69 percent since 1970 and continue to decline.<sup>1</sup> A complex set of drivers underpin five major threats to the persistence of global wildlife populations: loss of wildlife habitat; killings of animals that cause or are perceived to cause loss to humans; consumption, use of, or legal trade in wildlife species that depletes populations faster than they can regenerate; illegal trade in wildlife and their products for domestic and international markets; and diseases that spill over from humans or their livestock to wildlife.

Illegal wildlife trafficking is reaching unprecedented levels, threatening the long-term survival of populations of numerous keystone species, including elephants, rhinos, and pangolins. GEF support to countries has played a critical role in tackling this threat and creating opportunities for innovative solutions that generate global environment benefits and contribute outcomes for livelihoods of local communities. A notable example is the introduction of

---

<sup>1</sup> WWF (2022) Living Planet Report 2022 – Building a nature-positive society. Almond, R.E.A., Grooten, M., Juffe Bignoli, D. & Petersen, T. (Eds). WWF, Gland, Switzerland.





a Wildlife Conservation Bond (WCB, also known as “Rhino Bond”) to support South Africa’s efforts to conserve endangered species. Launched through a joint effort with the World Bank, this five-year, \$150 million bond included a potential performance payment from the GEF, which will contribute to protecting and increasing black rhino populations in two protected areas in South Africa, the Addo Elephant National Park and the Great Fish River Nature Reserve.

Through the WCB, investors are supporting the financing of activities to protect and grow a critically endangered species with clear conservation targets, contributing directly to biodiversity, and bringing jobs to local communities through the creation of conservation-related employment in a rural and underserved region of South Africa.

In addition to country-specific projects supported through the biodiversity focal area, the GEF integrated approach programs are helping to maximize impact by enabling participating countries to collaborate, addressing challenges beyond national boundaries and across global supply chains, to achieve the conservation of wildlife and landscapes, and ensure that countries and communities benefit from these natural assets. The GEF-8 program will contribute to sustaining populations of globally significant and threatened wildlife species through achieving four outcomes: healthy, stable, or increased populations of threatened wildlife; reduced threat from illegal, unsustainable, and high zoonotic-risk wildlife use and trade; community benefits ensure societal buy-in for wildlife conservation; and collaboration, capacity development, and partnerships to ensure maximum effectiveness.



A photograph of a savanna landscape. In the foreground, a person's arm is visible on the left side, holding a dark, round object. The background shows a herd of zebras grazing in a golden-brown field under a clear blue sky.

*The GEF has invested more than \$600 million in projects almost exclusively dedicated to protected areas, and more than \$300 million in projects combining activities on protected areas with mainstreaming biodiversity in forestry, agriculture, and tourism.*

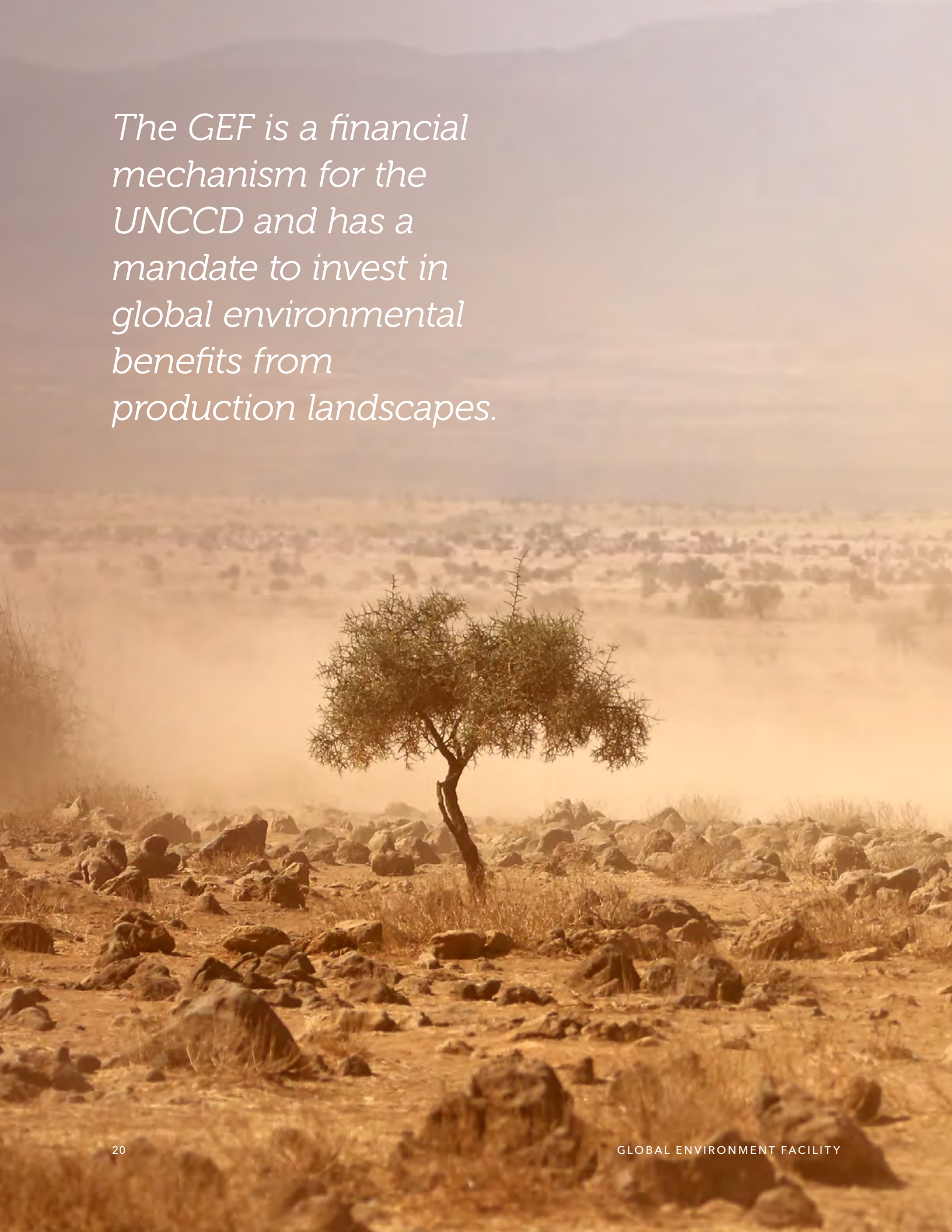
## Global Wildlife Program

**Projects under the Global Wildlife Program are working to conserve a range of wildlife, including species threatened by illegal wildlife trade (IWT), and their habitats through multiple interventions. Highlights include:**

- Through the *Enhanced Management and Enforcement of Ethiopia's Protected Area Estate Project*, Ethiopia has successfully reduced the poaching of major wildlife species in Chebera Churchura National Park to almost zero, supporting the recovery of wildlife populations in the park and its surroundings. The project also supported operationalizing IWT regional task forces and a national environmental crime unit, demonstrating the importance of designing integrated anti-poaching strategies that build capacity, engage stakeholders, and gain the commitment of local law enforcement.
- *Mali's Community-Based Natural Resource Management that Resolves Conflict, Improves Livelihoods, and Restores Ecosystems throughout the Elephant Range Project* aims to protect the Gourma elephant from poaching and improve the livelihoods of local communities that live along elephant migration routes in the Gourma Biosphere Reserve. Mali financed a successful antipoaching brigade of 45 agents, mobilized an additional 1,399 eco-guardians, trained a pool of anti-poaching trainers, and developed its national capacity to address wildlife crime.
- The *Strengthening the Conservation of Globally Threatened Species in Mozambique through Improving Biodiversity Enforcement and Expanding Community Conservancies Around Protected Areas Project* in Mozambique operationalized an Anti-Poaching Coordination Centre bringing together key agencies and the private sector across the region to combat illegal wildlife trafficking. Poaching decreased from 200 incursions per month in 2015 to five incursions per month in 2022, leading to a sense of greater regional safety and an uptick in tourism.

- *Combating Poaching and Illegal Wildlife Trade in Tanzania through an Integrated Approach* enabled Tanzania to establish Tasking and Coordinating Groups made up of multi-agency law enforcement personnel to monitor and combat poaching in key ecosystems. Tanzania strengthened the capacity of these groups based on a targeted needs assessment that helped identify gaps in skills, personnel, equipment, and enabling environment. The country is also reviewing and updating the National Strategy to Combat Poaching and the Illegal Wildlife Trade.
- By investing in climate-smart agricultural practices and community-based forestry management through the Zambia Integrated Forest Landscape Project, Zambia is improving the livelihoods of rural communities near Lukusuki and Luambe National Parks. Zambia's approach to integrated landscape management has not only enhanced benefits for people but also contributed to biodiversity conservation in the region.

*The GEF is a financial mechanism for the UNCCD and has a mandate to invest in global environmental benefits from production landscapes.*



# Land Degradation and Drought

Land degradation is a global issue that affects 1.52 billion ha.<sup>2</sup> Every year, 5-10 million ha of soils are lost.<sup>3</sup> The situation is particularly acute in drylands, which cover 45 percent of the Earth's total land area and are home to one in three people in the world today.<sup>4</sup> Land degradation and its more severe form, desertification, and drought affect climate change and climate change affects land degradation in a vicious circle.

In Africa, roughly 45 percent of the land is impacted by land degradation and desertification.<sup>5</sup> Climate change adds to an existing combination of challenges across the continent that begin with population growth. The United Nations projects that by 2050, Africa's population will reach 2.5 billion (compared to 1.34 billion in 2020), with Nigeria, Ethiopia, and Egypt being the most populous countries. This growth contributes to poverty, food insecurity, and unsustainable exploitation of natural resources in a context of natural soil fragility and water scarcity. All these factors add to tensions in regions where multiple countries are already vulnerable or experiencing conflicts.

The GEF is a financial mechanism for the UNCCD and has a mandate to invest in global environmental benefits from production landscapes. In December 2020, the UN took a resolution on the implementation of the UNCCD, especially to those countries experiencing serious drought and/or desertification, particularly in Africa.

All climate change scenarios predict that the consequences for Sub-Saharan Africa will be worse than for other parts of the world, especially in drylands, which face the risk of accelerating decline in vegetative productivity in agricultural, pasture, and grazing lands, as well as an increase in associated risks such as drought, water scarcity, yield loss, and loss of natural areas.<sup>6</sup>

2 UNCCD dashboard (2023)

3 Stavi & Lal (2015), in IPCC (2022).

4 Global Land Outlook, 2022 .

5 FAO (2021)

6 IPCC (2022)

Droughts are important drivers of land degradation and are expected to become more frequent. The failure of several consecutive rainfall seasons in the Horn of Africa, have caused the region's worst drought in 40 years (with Ethiopia, Kenya, and Somalia particularly hard hit), contributing to reduced agricultural productivity, increased food insecurity, and high food prices.<sup>7</sup> Aggravated by climate change, the impacts of drought are projected to increase in severity and duration, affecting all sectors of society: agriculture, energy, healthcare, transportation, and tourism.<sup>8</sup>

## Sustainable Land Management

In most developing countries, especially in Africa, sustainable land management (SLM) opens major opportunities for both the environment and people. SLM enables farmers to intensify existing land use more sustainably, enhancing productivity without degrading land resources. SLM also ensures improved management of agroecosystem services across production systems, reduces pressure on natural resources, and helps improve and sustain economic productivity and environmental sustainability.

SLM produces the greatest impact at scale when included in comprehensive landscape approaches that generate multiple benefits to reduce land degradation, slow water run-off, improve vegetation cover and biodiversity, and enhance soil quality, including carbon levels. All these aspects increase the resilience of ecosystems and provide adaptation options to smallholder farmers. Since the UNCCD COP12, SLM is more and more anchored in Land Degradation Neutrality targets, a voluntary approach to avoid land degradation, promote SLM, and promote land restoration when needed. All countries in Africa, with one exception, have committed to LDN targets.

The GEF channels most of its investments in SLM through the land degradation focal area. GEF priorities are linked to UNCCD objectives, supporting countries in institutional development and capacity building, land-use planning instruments, and support to smallholder farmer for sustainable agriculture practices such as conservation agriculture, no tillage, diversified crop rotations, agroecology practices, and techniques like terraces, zai pits, half-moon ditches, and stone bunds.

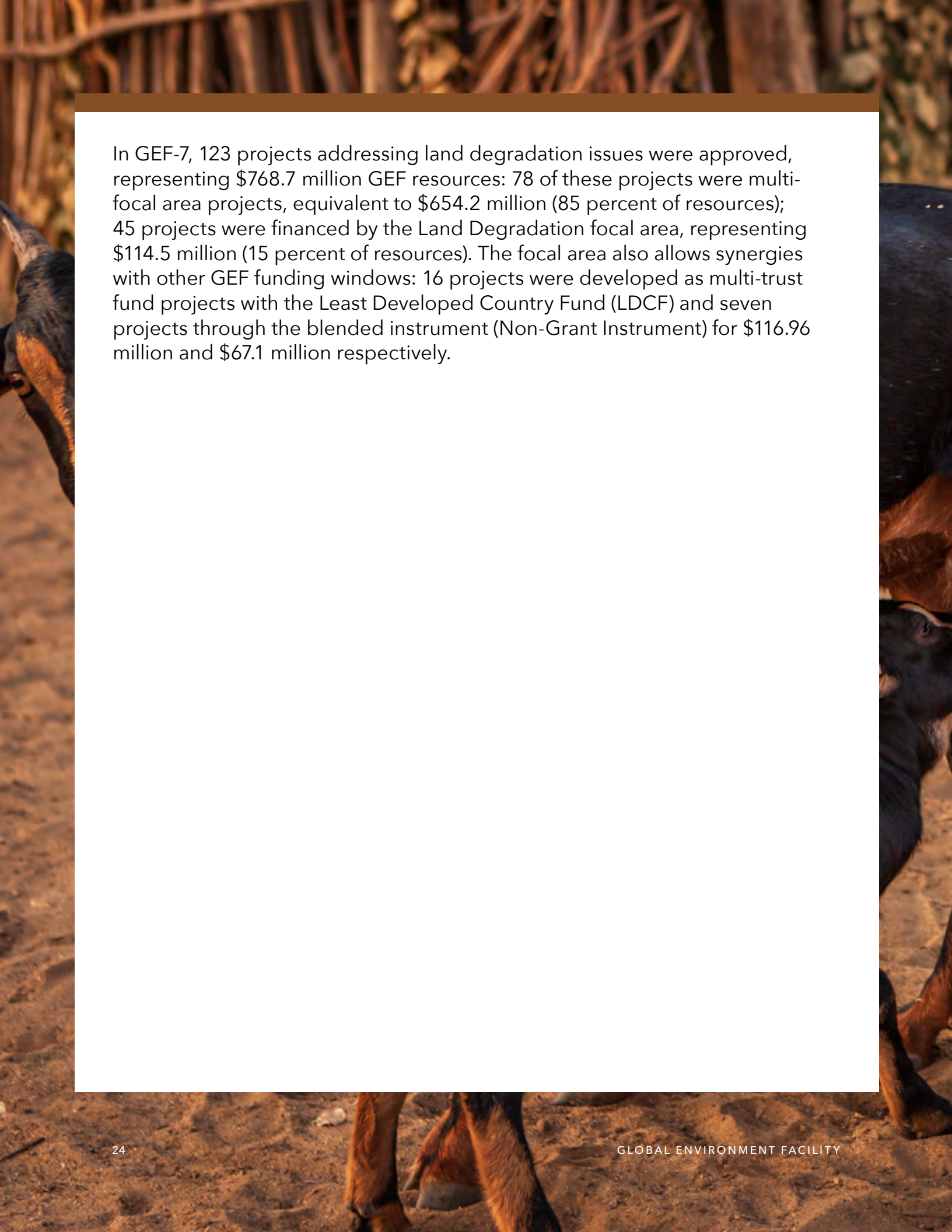
---

7 WMO, (2023)

8 <https://www.ipcc.ch/sr15/chapter/chapter-3/>



*Aggravated by climate change, the impacts of drought are projected to increase in severity and duration, affecting all sectors of society: agriculture, energy, healthcare, transportation, and tourism.*



In GEF-7, 123 projects addressing land degradation issues were approved, representing \$768.7 million GEF resources: 78 of these projects were multi-focal area projects, equivalent to \$654.2 million (85 percent of resources); 45 projects were financed by the Land Degradation focal area, representing \$114.5 million (15 percent of resources). The focal area also allows synergies with other GEF funding windows: 16 projects were developed as multi-trust fund projects with the Least Developed Country Fund (LDCF) and seven projects through the blended instrument (Non-Grant Instrument) for \$116.96 million and \$67.1 million respectively.



## The Great Green Wall Initiative

The Sahel is more vulnerable to climate change than nearly any region on Earth. Temperature increases in the Sahel are projected to be 1.5 times higher than the global average and will disproportionately affect millions of people. An estimated population of 135 million people live in the region and their livelihoods depend on lands that are already degraded. Recurring severe droughts increase food, water, and energy insecurity of local communities. That insecurity is also reflected in the region's political and social fragility.

This is the context for the Great Green Wall Initiative (GGWI), launched in 2007 under the auspices of the Africa Union. The GGWI area spans over nearly 8,000 km from the Atlantic coast to the Indian Ocean, including eleven francophone and four anglophone countries. The total area of interest of the GGWI is approximately 520 million ha, 17 percent of the African continent. The restorable land in the GGW Sahel is estimated at 162 million ha. However, the most recent GGWI assessment report showcased that only 4-20 percent of the initial land restoration target was reached by 2020, and it would be necessary to increase the current pace of land restoration to over 80,000 square kilometers annually.<sup>9</sup>

The Initiative has evolved through the experience of the participating countries, with the support of various donors and partners. Today, the GGWI is an integrated approach for landscape management and restoration to transform livelihoods. The ambition is to restore 100 million ha of degraded lands, sequester 250 million tons of carbon, and create 10 million green jobs in rural areas by 2030. The GGWI governance framework includes the Panafrican Agency of the GGWI steered by the Heads of States Summit of 11 countries and at national level by GGWI national agencies and focal points.

The GEF has a long history of supporting the GGWI through key catalytic interventions starting in GEF-5, which were continued in GEF-6 and GEF-7. Most recently, the GEF has funded the project *Harnessing the Great Green Wall Initiative for a Sustainable and Resilient Sahel* (implemented by UNEP) which engages with GGWI partners to foster meaningful dialogue with countries and

---

<sup>9</sup> Global Land Outlook report, 2022



lay out a longer-term vision for the region promoting systems transformation for sustainable and climate resilient growth. In the current GEF-8 cycle, countries have been offered the opportunity to develop a new programmatic approach. This will enable countries to fully harness commitments made by the global community to advance transformative change in the Sahel.

The Great Green Wall Multi-actor Accelerator, announced by the President of France Emmanuel Macron and other world leaders at the One Planet Summit on January 11th, 2021, seeks to facilitate the coordination and collaboration of donors and stakeholders involved in the GGWI. With the recent pledge of over \$19 billion in funding from a coalition of the Green Climate Fund (GCF), international development banks, and governments, the GGWI platform is poised to profoundly scale-up and accelerate efforts to sustain livelihoods, conserve biodiversity, and combat desertification and climate change. At the UNFCCC COP26 in Glasgow, the Bezos Earth Fund announced an additional \$1 billion to accelerate landscape restoration in the Great Green Wall countries.



*The GEF's vision is that forests are preserved, managed, and restored, generating global environmental benefits in response to the urgent climate, biodiversity, and land degradation crises, while empowering Indigenous peoples and local communities.*

# Conserving and Restoring Forests and Their Multiple Benefits

African forests are rich in biodiversity and provide food, medicine, fuel, and non-timber forest products for local communities and Indigenous people. Forests also play a crucial role in regulating water flow, sequestering carbon, and providing habitat for wildlife. African forests cover 636 million hectares (16 percent of world forest area), nearly all of them (98 percent) naturally regenerating forests. The continent includes the Congo Basin, the second largest tropical forest biome in the world, covering a land surface area of 301 million hectares across six countries.

African forests also face significant threats, particularly deforestation and forest degradation. Africa has the highest net annual loss of forests, losing 3.9 million hectares of forest every year. This deforestation is driven by various factors, including agriculture (both small-scale subsistence farming and large-scale commodity agriculture production), industrial logging, clearing for charcoal and fuelwood, urban expansion, construction of major infrastructure projects, and mining. The deforestation rate in the Congo Basin has doubled in the past 25 years, and up to 90 percent of West Africa's coastal rainforest has already been felled. This deforestation not only leads to the loss of biodiversity but also has negative impacts on the livelihoods of rural communities and the overall ecosystem services that forests provide.

The GEF's vision is that forests are preserved, managed, and restored, generating global environmental benefits in response to the urgent climate, biodiversity, and land degradation crises, while empowering Indigenous peoples and local communities. While the GEF supports a wide range of forests responding to the needs of beneficiary countries, primary forest are particularly important because they are irreplaceable, host the most important biodiversity, form crucial terrestrial carbon sinks, and play a critical role in ecosystems restoration.



*The GEF's integrated approach has helped bridge institutional silos and will continue to support forests through multi-focal area projects and programs.*

To achieve its vision and address the drivers of forest loss and degradation in Africa, the GEF approach seeks to maintain ecological integrity and functioning of forest landscapes and improve the livelihoods of its resident populations by:

- Strengthening conservation under different protection regimes through creation, effective management, and sustainable financing of protected areas, Indigenous territories, and other effective area-based conservation measures.
- Enhancing sustainable production and landscape restoration by restoring degraded areas and sustainably using natural resources along biodiversity-friendly value chains, ensuring economic and social inclusion, within a landscape connectivity approach.
- Strengthening governance and enabling environments for promoting conservation, restoration, and sustainable use in an inclusive and integrated manner; strengthening land use planning and institutional and community governance; mainstreaming conservation and sustainable development criteria into policies and incentives; and promoting coherence within sectoral policies.



- Promoting capacity building, communications, and regional cooperation by fostering coordination, knowledge exchange, innovation, and joint regional interventions, both between countries and with other regional initiatives.

Forests are at the heart of the GEF's integration agenda. The cross-cutting nature of work on forests offers the potential for generating multiple benefits. The GEF's integrated approach has helped bridge institutional silos and will continue to support forests through multi-focal area projects and programs. This approach plays an essential and ground-breaking role in integrating focal areas and different work streams under one common theme.

On key thematic areas and geographies, the GEF promotes programmatic approaches to maximize impact at scale. The GEF often focuses on certain contiguous geographies to maintain the ecological integrity of entire forest biomes by concentrating efforts and investments, and ensuring strong regional and cross-border coordination, knowledge management, and learning. The Congo Basin and Guinean Forests Integrated Programs are the results of this approach in Africa. So far, the GEF supported 22 regional programs in Africa with a total grant of more than \$400 million.

In total, the GEF has instituted more than 200 projects supporting the conservation and sustainable management of forests across African, providing around \$1.2 billion and leveraging \$7.8 billion of co-financing.



## ***Testing Innovative Approaches for Forest Conservation and Community Livelihoods in the Maï Ndombe Province, Democratic Republic of Congo<sup>10</sup>***

The GEF project brings incremental resources to the Maï Ndombe Province in view of: reducing carbon emissions with a special focus on community-managed forestry; ensuring an adequate consideration of biodiversity conservation, notably with the operationalization of the Tumba Lediima Nature Reserve (TLNR); empowering Indigenous peoples in the management of their own biodiversity/forest resources; and reinforcing the framework in charge of biodiversity at the national and provincial levels.

With resources from the Forest Investment Program (FIP, \$36.9 million) and the Central Africa Forest Initiative (CAFI, \$18.21 million), this is the first jurisdictional REDD+ program for results-based payments on a large scale in DRC and among the first in Africa. Its goal is to develop a provincial-level model for forest-smart development that provides alternatives to deforestation while simultaneously mitigating climate change, reducing poverty, and securing local livelihoods, enhancing the governance of natural resources, and protecting biodiversity. The project covers an area of 12.3 million hectares, including 9.8 million hectares of forests, in the province of Maï Ndombe.

---

<sup>10</sup> Improved Forested Landscape Management Project GEFID 9760, World Bank, GEF: \$6.21 million



## ***Securing Ecological Integrity in the Guinean forests Biome, West Africa***

The Guinean Forests of West span the southern part of West Africa into the northern region of Central Africa and cover approximately 620,000 km<sup>2</sup> in two distinct sub-regions: the Upper Guinean sub-region extending from Guinea-Bissau eastward to Sierra Leone, Liberia, Côte d'Ivoire, Ghana, Togo, and part of Benin; and the Lower Guinean sub-region extending from southern Nigeria into southwestern Cameroon and including São Tomé and Príncipe and Equatorial Guinea's islands. The forest biome supports high levels of species richness and endemism and provides valuable ecosystem services to well over 200 million inhabitants of the region.

The GEF has traditionally supported the countries in the Guinean forests of West Africa to create protected areas. However, the overall integrity of the biome is being undermined, and today it is one of the most threatened, with only 15 percent of the original forest cover still intact, and mostly restricted to transboundary areas across the region. Although countries in the region have invested in protection of these remnant forests, there is an urgent need for an biome-wide approach that will help secure integrity of the entire ecosystem.

The GEF-8 Guinean Forests Biome under the Amazon, Congo and Critical Forests Biome Integrated Program responds to this need and provides a unique opportunity for countries to engage in long-term collaboration and improved governance for safeguarding the forests. This will address the need for multiple sector engagement to address trade-offs and foster synergies, and promote comprehensive landscape-wide planning, inclusive decision-making, and transboundary initiatives.

Five countries (Guinea, Guinea Bissau, Liberia, Sierra Leone, and Togo) will develop national projects and collectively scale-up forest conservation in transboundary landscapes, such as Gola-Lofa-Mano between Liberia and Sierra Leone and the Zياما-Wonegizi-Wologozi complex between Guinea and Liberia. A dedicated regional platform will promote replication and scaling up of good practices, foster learning and knowledge exchange among countries, cultivate a community of practice, and strengthen the foundation for policy coherence and alignment efforts among all Guinean Forest biome countries.

An aerial photograph of a large-scale solar farm. The image shows numerous long, parallel rows of solar panels stretching across a vast, arid, reddish-brown desert landscape. The panels are arranged in a grid-like pattern, with significant spacing between the rows. In the upper right quadrant, there is a small, white, rectangular building, likely a control or maintenance structure. The overall scene is brightly lit, suggesting a clear, sunny day. The text is overlaid on the lower-left portion of the image.

*Given its mandate across multiple multilateral environment agreements, the GEF can simultaneously deliver multiple global environment benefits as well as social and economic co-benefits.*

# Climate Change Mitigation

Africa has the lowest global greenhouse gas emissions per capita of any region, yet it is also one of the regions with the most to gain from a net-zero world. Key development sectors in Africa are already experiencing widespread adverse climate impacts including biodiversity loss, water shortages, reduced food production, lost lives, and reduced economic growth.

Limiting global warming to 1.5°C is expected to substantially reduce damages to African economies, agriculture, human health, and ecosystems. Under the Paris Agreement, all countries are taking collective action to that end through Nationally Determined Contributions, and African countries have outlined ambitious plans for climate resilient and low-carbon development. Implementing those plans, which requires significant support, can help harness the region's resource potential to create social, economic, and environmental benefits. This is the case in both energy and urban systems and nature and agri-food systems, in a context where 55–62 percent of the sub-Saharan workforce is employed in agriculture and over two-thirds of the population relies directly or indirectly on forests for livelihoods.

The GEF is the oldest mechanism providing predictable and mostly grant-based climate finance to Africa. Given its mandate across multiple multilateral environment agreements, the GEF can simultaneously deliver multiple global environment benefits as well as social and economic co-benefits.

## A Joint Approach to the Climate and Nature Crisis

The GEF is committed to halting nature loss and ensuring that the world is nature-positive by 2030 and net-zero and pollution-free by 2050. The GEF takes an integrated approach to systems transformation, programming resources through the climate change focal area and through its integrated programs

(IPs). In GEF-8, countries can request funding for nature-based solutions with high mitigation potential. In addition, climate change resources are blended with funding from other focal areas to support the GEF IPs. Since GEF-6, these programs have supported cohorts of African countries to generate climate change impacts and knowledge, while also supporting objectives under other focal areas such as biodiversity, land degradation, and chemicals and waste.

## Advancing Africa's Energy Transition

Several of the GEF's programs supporting energy transitions in urban and energy systems have a strong regional focus on Africa, including:

- The Sustainable Cities Integrated Program, which has supported African cities since GEF-6 to advance integrated and systems-based approaches toward building net-zero carbon, nature-positive, inclusive, and climate-resilient cities.
- The Net-Zero Nature-Positive (NZNP) Accelerator Integrated Program, with country projects in Cote d'Ivoire, Morocco, Nigeria and Tanzania, aims to accelerate the implementation nature-positive and net-zero pathways by fostering government planning capacity and investing in nature and new technologies.
- The Global Program to Support Electric Mobility, implemented in collaboration with leading international organizations and partners from the private sector, finance, and academia, to support low- and middle-income countries around the world with the shift to electric mobility.
- The Global Cleantech Innovation Program, which aims to bring about transformative change in low- and middle-income countries by addressing market and policy shortcomings that prevent the emergence, deployment, and adoption of cleantech solutions in the long term, thus enabling countries to leapfrog to greener economies.
- The newly approved Global Clean Hydrogen Program, with five out of eight countries in Africa (Algeria, Egypt, Namibia, Nigeria, and South Africa), aiming to enhance national institutional capacities, policy frameworks and access to finance and to promote uptake of clean hydrogen as a key tool for net-zero pathways.

- The Africa Mini-Grid Program, which supports access to clean energy through technical assistance by promoting scaled up commercial investment in low-carbon mini-grids in Africa, with a focus on cost reduction levers and innovative business models.

## Innovative Tools and Technologies for Climate Action

The GEF drives innovation and fosters enabling conditions by combining technical assistance and investments, piloting innovative business models, financial mechanisms, supportive policies and regulations, strategies, and institutional arrangements. These approaches help trigger systemic transformations while creating or expanding markets for green products and services, generating jobs, and supporting economic growth. Renewable energy has been historically the predominant sector in Africa where GEF investment have applied this approach. Since its creation, 40 percent of GEF investments in Africa were indeed dedicated to renewables, followed by agriculture, forestry and other land uses (AFOLU) with 17 percent and by energy efficiency, with 14 percent. With six African countries participating since its creation (Lesotho, Morocco, Namibia, Nigeria, Senegal, and South Africa), the Global Cleantech Innovation Program is a good example of how GEF continues to foster innovation with Africa.

*The GEF drives innovation and fosters enabling conditions by combining technical assistance and investments, piloting innovative business models, financial mechanisms, supportive policies and regulations, strategies, and institutional arrangements.*



## Building Africa's Capacity to Track Climate Impacts

The GEF is providing much needed support for African countries to build their national capacities to monitor, analyze, and report progress on climate action. While this is directly related to the implementation of the transparency and reporting requirements set out in Article 13 of the Paris Agreement, the benefits of this type of support reach well beyond reporting. Initial lessons from the implementation of projects financed through the GEF's Capacity Building Initiative for Transparency (CBIT) show that improving access to and management of climate data is helping government agencies improve planning and take more informed decisions regarding economic and development priorities, both domestically and internationally. African countries have been effective in accessing CBIT resources compared to other regions, with almost 40 percent of the CBIT national projects being approved in Africa, out of a total of 84 national projects the GEF financed until December 2023. In addition to CBIT and project-based capacity building assistance, the GEF continues to provide financial support for countries to assess their technology development and deployment needs. African countries have made extensive use of this opportunity: more than a third of the Technology Needs Assessments projects that were carried out globally with GEF support to date are in Africa.

## Catalyzing Private Finance for Climate Action

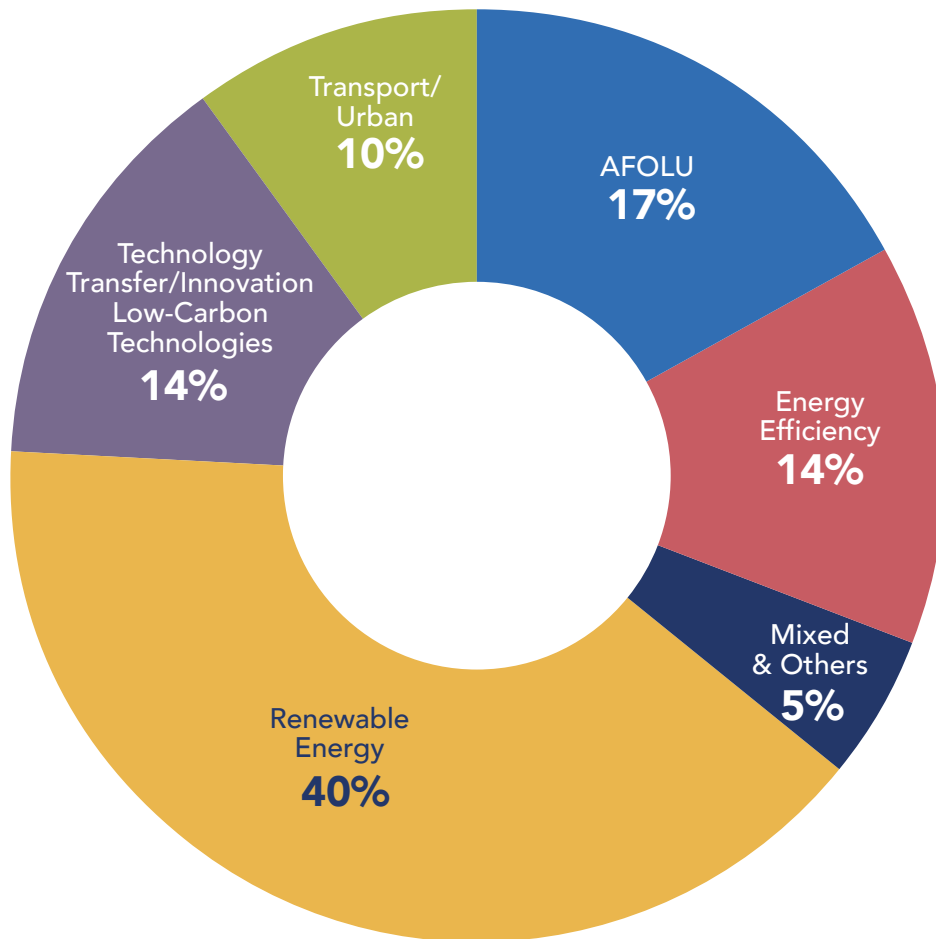
Resources from the GEF play a key role in piloting emerging innovative solutions, including technologies, management practices, supportive policies and strategies, and blended finance that fosters private sector engagement for technology and innovation, and more importantly scaling up. In a bid to prevent the economic fallout of COVID-19 from reversing progress toward wider and cleaner energy access in Africa, the GEF through its Blended Finance Program, and the Sustainable Energy Fund for Africa of the African Development Bank (AfDB) are investing in a financing platform, the Covid-19 Off-Grid Recovery Platform, that provides loans at affordable rates to firms selling medium and small-scale energy solutions across Africa. The GEF also mobilized its Non-Grant Instruments in the context of its project for Investing in Renewable Energy Project Preparation under the Fund for Energy Inclusion,



also managed by the AfDB, which helps small-scale renewable energy projects reach bankability and financial close and mobilizes private sector financing through reimbursable project preparation capital.

### **GEF-funded Climate Change Mitigation Projects in Africa by sector\***

*\*Calculated on the basis of GEF funding*





## *The GEF Africa Minigrids Program*

Worldwide, 840 million people—including over half of the population of the African continent—have no access to electricity, and thus no access to the improved income and savings that depend on electricity. Many millions more suffer from poor quality and unreliable grid-connected power, or expensive and carbon-intensive diesel generators. Furthermore, access to clean energy (SDG 7) is a fundamental enabler of the broader set of SDGs, as reliable electricity is an essential ingredient for lifting people out of poverty, improving health, boosting educational levels, reducing gender inequities, and enabling sustainable economic development.

Distributed solar technologies, particularly solar PV minigrids, are the lowest cost electrification pathway for 380 million people in Sub-Saharan Africa. Clean minigrids provide a viable alternative to conventional grid expansion and standalone solar systems, offering reliable and sustainable power supply. They can be built quickly and can unlock a range of socioeconomic benefits for the world's poorest people. The GEF-funded and UNDP-implemented Africa Minigrids Program (AMP) will boost energy access by focusing on reducing the cost and increasing commercial viability of renewable energy. In addition to a regional project and knowledge platform, the Program includes participation from more than 20 countries across Africa.

The AMP focuses on reducing hardware, software, and financing costs for minigrids and promotes innovative business models for minigrid deployment. By focusing on policies and regulations, innovative business models, private sector engagement, and innovative financing schemes, the AMP will scale up investments in the minigrid markets throughout the region, eventually contributing to more than 20 million tons of CO<sub>2</sub>e in emission reductions, benefitting more than 700,000 people, and supporting considerable progress in achieving SDG 7. Beyond its direct investments, the Program facilitates private investment and commercial financing by working with governments to build an enabling environment for minigrid development, and with stakeholders and partners to create a supportive ecosystem for minigrid developers and financiers.

## ***Supporting the Shift to Electric Mobility in Africa***

The escalating demand for transportation in low and middle-income countries (LMICs) is a primary driver of increased energy use and greenhouse gas emissions in the global road transport sector. Despite substantial progress in zero-emission mobility, particularly in the Global North and parts of the Global South, LMICs encounter challenges accessing essential knowledge, tools, and finance crucial for supporting this transition.

The Global Electric Mobility Program, backed by nearly \$80 million in GEF resources, currently encompasses 32 global country projects, with 10 in Africa and plans for further regional expansion. Operating at global, regional, and country levels, the program emphasizes aspects such as institutionalization, policy environments, business and finance readiness, and sustainability, while also investing in pilot projects.

Established during GEF-7, the Program comprises four global thematic working groups and four regional support and investment platforms, actively addressing all e-mobility barriers and developing demonstration pilots in participant countries. The Africa Regional Investment and Support Platform, hosted by the UN Environment Program, aids all 10 national projects through training, knowledge exchanges, and matchmaking activities between developers, financial institutions, and local governments.

GEF-8 introduces a new investment tranche to broaden country participation, support upscaled integrated e-mobility projects, and establish a global framework for challenges related to used electric vehicles, batteries end-of-life issues, and circularity. GEF-8 increases the number of national projects from 32 to 40, with further countries across Africa expected to join soon.

The combined GEF-7 and GEF-8 investments significantly enhance market readiness for the electric mobility shift in Africa, resulting in over 100 million tons of CO<sub>2</sub>e emission reductions globally. Additionally, the program targets the mitigation of persistent organic pollutants emissions and addresses e-waste and plastic litter associated with electric mobility.





# Climate Change Adaptation

Climate change poses a growing threat to all human and natural systems on Earth. Least Developed Countries (LDCs) and Small Island Developing States (SIDS), most of which are in Africa, are uniquely and acutely vulnerable to the impacts of climate change, which translate into a myriad of hazards affecting life, livelihoods, food security, and health. Adaptation measures are urgently needed in vulnerable developing countries to safeguard development gains and support resilient growth.

Huge financing and capacity gaps constrain developing countries in their ability to tackle climate change impacts. In addition, a lack of policy coherence, limited engagement of the private sector, barriers in technology innovation, and the low involvement of local communities restricts the transformation so urgently needed to create climate resilient societies.

The GEF supports adaptation to climate change in developing countries through two trust funds established in 2001 under the United Nations Framework Convention on Climate Change (UNFCCC).<sup>11</sup> The Least Developed Countries Fund (LDCF) is the only fund dedicated to supporting climate adaptation needs in LDCs. The fund is helping them address urgent, medium, and long-term climate priorities. The Special Climate Change Fund (SCCF), accessible by all developing countries, is focused on targeting the adaptation priorities of SIDS as well as catalyzing innovation, technology transfer, and private sector engagement. As is the case for the GEF Trust Fund, GEF support for climate change adaptation is based on a four-year strategy detailed in the GEF-8 Strategy for Climate Change Adaptation for the 2022-2026 period.<sup>12</sup>

The LDCF and SCCF provide grants for country projects, with dedicated allocations for LDCs and SIDS. The two funds have been the engines of a

---

11 GEF, 2023, <https://www.thegef.org/newsroom/publications/climate-change-adaptation>

12 GEF, 2022, GEF Programming Strategy on Adaptation to Climate Change for the Least Developed Countries Fund and the Special Climate Change Fund for the GEF-8 Period of July 1, 2022 to June 30, 2026 and Operational Improvements, Council Document GEF/LDCF.SCCF.32/04/Rev.01.

pioneering portfolio of 487 climate change adaptation projects and programs, with \$2.28 billion in grant resources as of September 30, 2023. The Funds have provided \$1.30 billion in grant resources to African countries since inception: \$1.27 billion from the LDCF, and \$29.24 million from the SCCF.

During the 2022-2026 period, each LDC can access at least \$20 million from the LDCF, and each non-LDC SIDS is able to access at least \$3 million from the SCCF. The LDCF is the major source of the GEF's financial support in African LDCs. There are 33 LDCs and three non-LDC SIDS in Africa. Additionally, the LDCF can support global and regional projects across LDCs, and the SCCF can support non-LDCs and SIDS in the areas of innovation, technology transfer, and private sector engagement.

Both the LDCF and SCCF support GEF investments in the Challenge Program for Adaptation Innovation.<sup>13</sup> This initiative, which provides seed funding outside of the GEF's regular investments, has demonstrated a unique ability to catalyze innovation in adaptation by directly engaging technology and private sector innovators, such as large-scale agricultural commodity managers, commercial financial institutions, academia, small and medium enterprises, and insurance providers.

### ***Focus of the LDCF and SCCF***

Each LDCF and SCCF project is focused on one or more sectors. Agriculture, water, climate information services, and nature-based solutions are the sectors that have had the greatest focus among all LDCF and SCCF projects since inception of the funds.

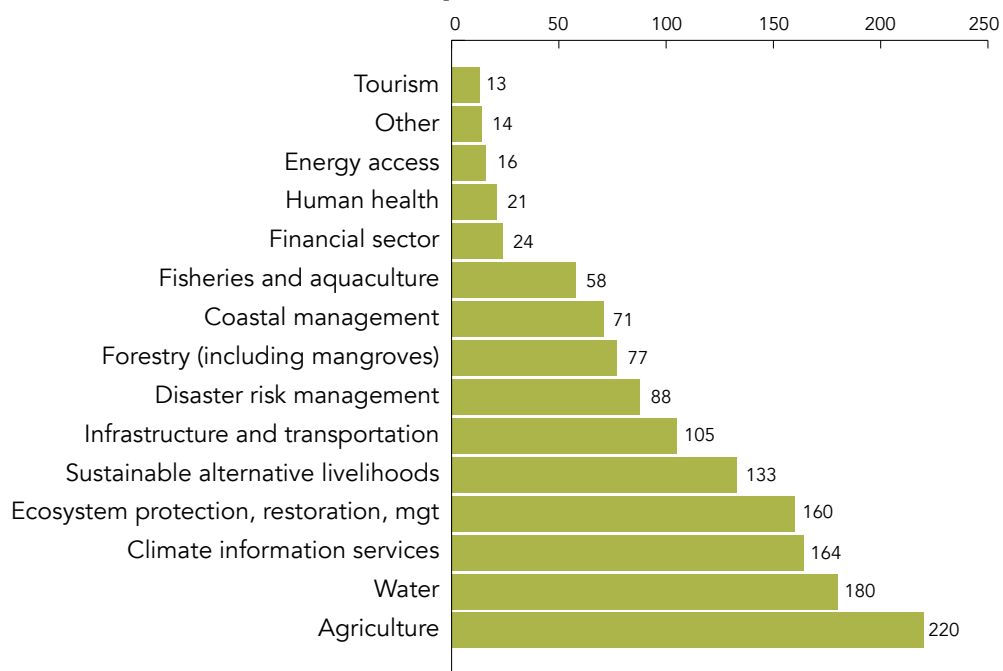
As part of the Long-term Vision on Complementarity, Coherence and Collaboration between the Green Climate Fund and the Global Environmental Facility 2023,<sup>14</sup> the GEF has deepened models for joint programming with the Green Climate Fund (GCF). Consistent with this vision, a partnership has formed to explore measures for joint programming in an initial set of five pilot countries, two of which—Rwanda and Uganda—are in Africa. The objective is to seek country opportunities for blended, parallel, and sequenced financing and to identify and jointly pursue important common themes for climate action.

13 GEF, 2023, Sectoral Distribution of all LDCF Projects since Inception, as of September 30, 2023

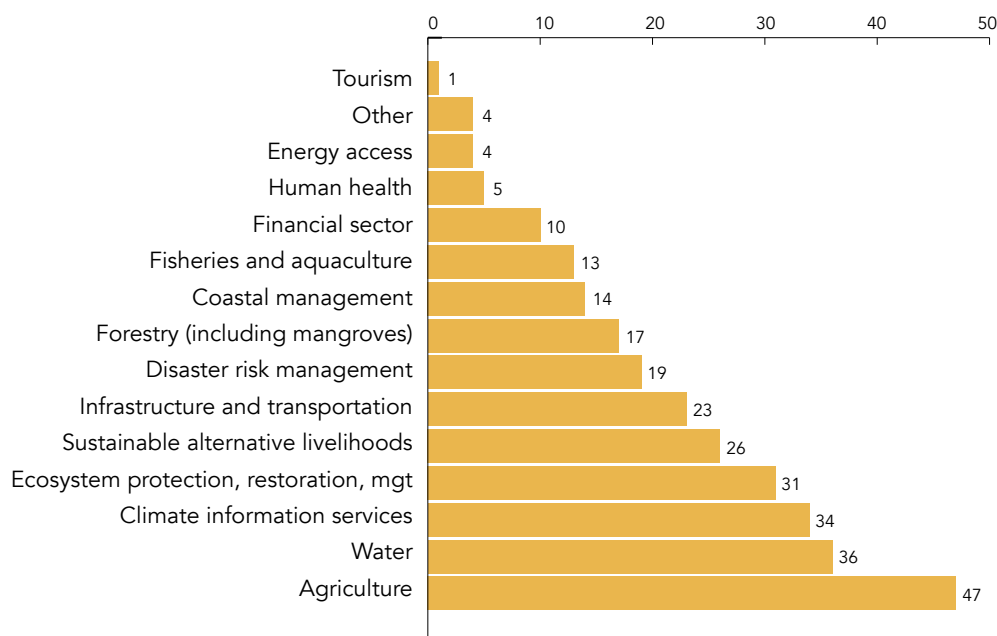
14 GEF, 2023, Long-term Vision on Complementarity, Coherence and Collaboration between the Green Climate Fund and the Global Environmental Facility 2023, GEF/C.64/Inf.07.



**Sectoral Distribution of all LDCF Projects since Inception, as of September 30, 2023<sup>15</sup>**

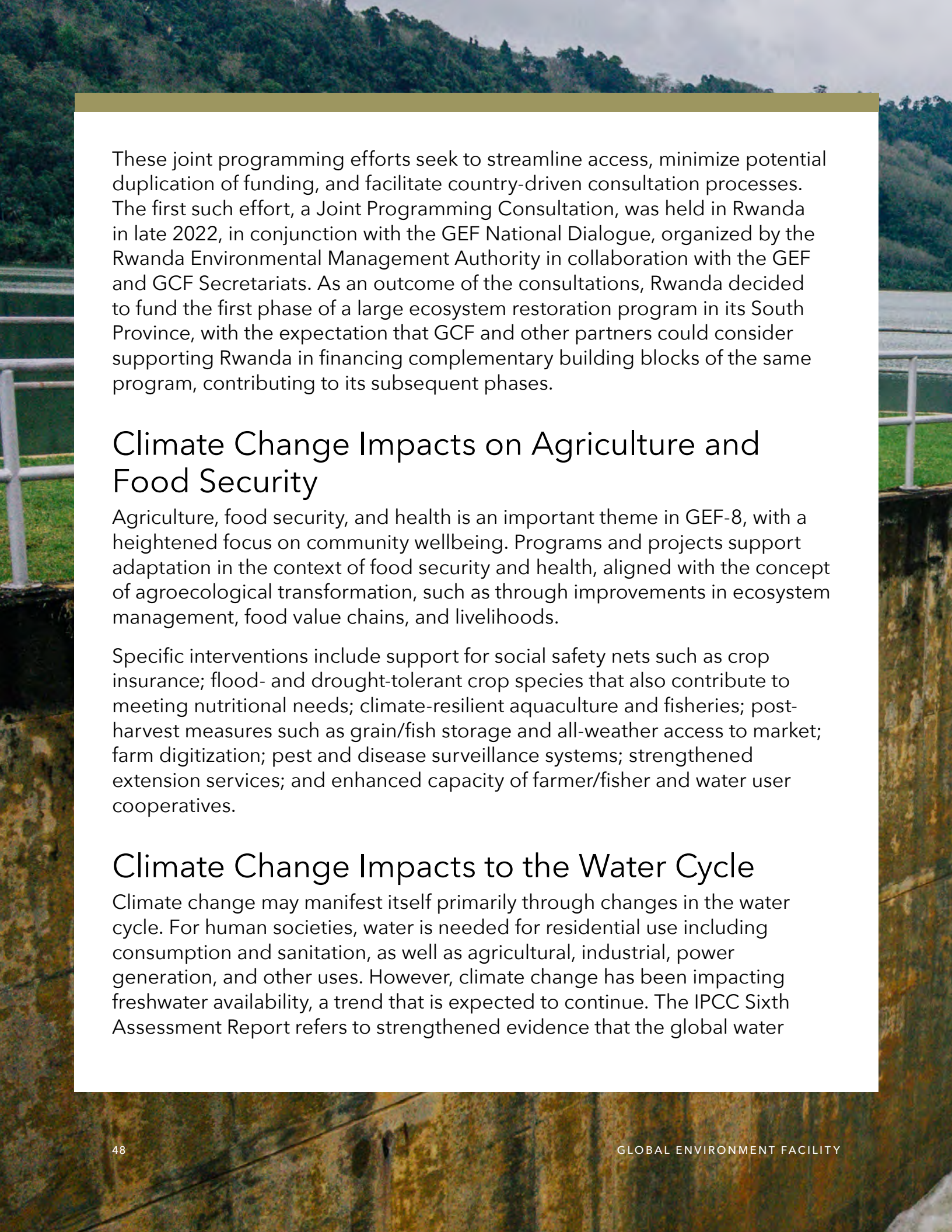


**Sectoral Distribution of all SCCF Projects since Inception, as of September 30, 2023<sup>16</sup>**



15 This graph considers all projects in all regions, including Africa.

16 This graph considers all projects in all regions, including Africa.



These joint programming efforts seek to streamline access, minimize potential duplication of funding, and facilitate country-driven consultation processes. The first such effort, a Joint Programming Consultation, was held in Rwanda in late 2022, in conjunction with the GEF National Dialogue, organized by the Rwanda Environmental Management Authority in collaboration with the GEF and GCF Secretariats. As an outcome of the consultations, Rwanda decided to fund the first phase of a large ecosystem restoration program in its South Province, with the expectation that GCF and other partners could consider supporting Rwanda in financing complementary building blocks of the same program, contributing to its subsequent phases.

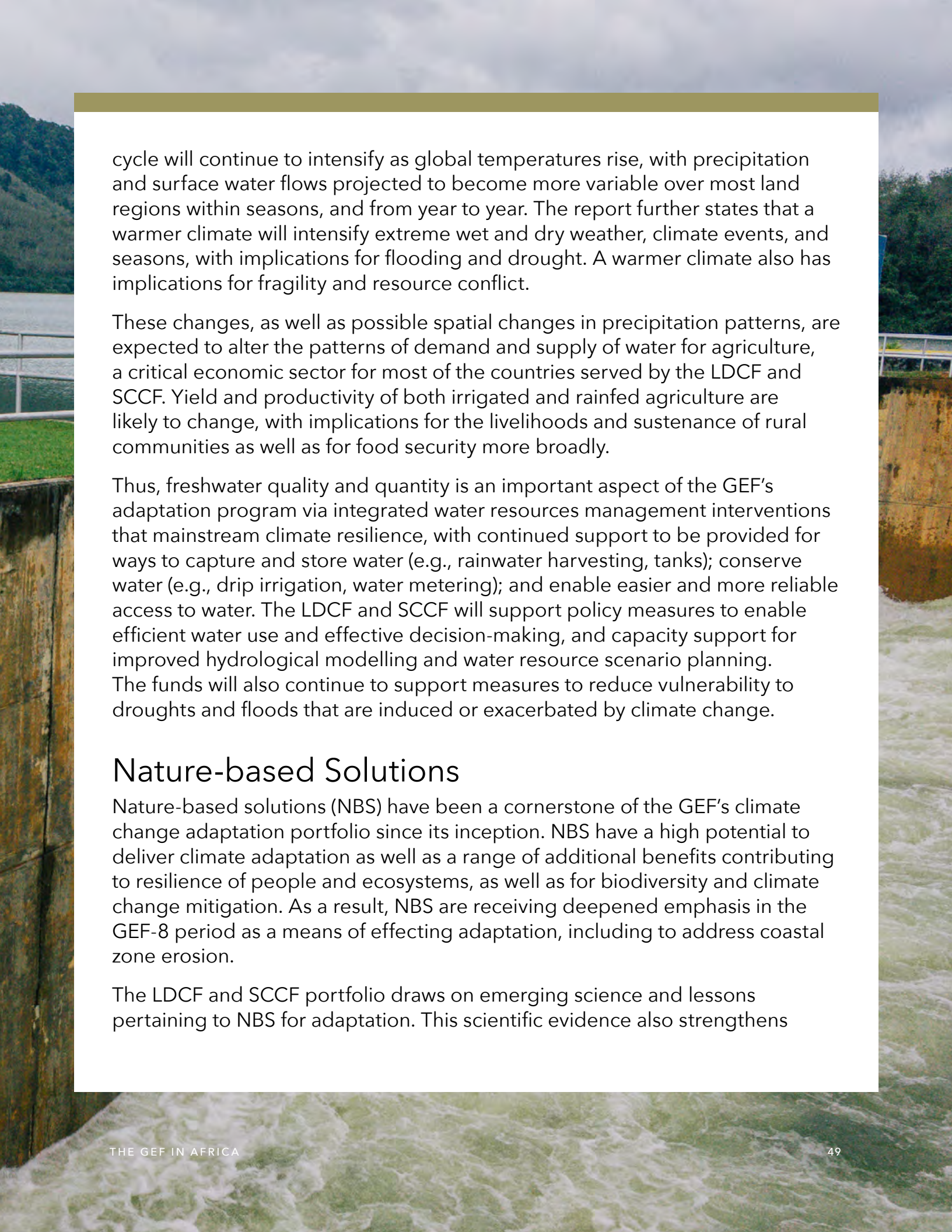
## Climate Change Impacts on Agriculture and Food Security

Agriculture, food security, and health is an important theme in GEF-8, with a heightened focus on community wellbeing. Programs and projects support adaptation in the context of food security and health, aligned with the concept of agroecological transformation, such as through improvements in ecosystem management, food value chains, and livelihoods.

Specific interventions include support for social safety nets such as crop insurance; flood- and drought-tolerant crop species that also contribute to meeting nutritional needs; climate-resilient aquaculture and fisheries; post-harvest measures such as grain/fish storage and all-weather access to market; farm digitization; pest and disease surveillance systems; strengthened extension services; and enhanced capacity of farmer/fisher and water user cooperatives.

## Climate Change Impacts to the Water Cycle

Climate change may manifest itself primarily through changes in the water cycle. For human societies, water is needed for residential use including consumption and sanitation, as well as agricultural, industrial, power generation, and other uses. However, climate change has been impacting freshwater availability, a trend that is expected to continue. The IPCC Sixth Assessment Report refers to strengthened evidence that the global water



cycle will continue to intensify as global temperatures rise, with precipitation and surface water flows projected to become more variable over most land regions within seasons, and from year to year. The report further states that a warmer climate will intensify extreme wet and dry weather, climate events, and seasons, with implications for flooding and drought. A warmer climate also has implications for fragility and resource conflict.

These changes, as well as possible spatial changes in precipitation patterns, are expected to alter the patterns of demand and supply of water for agriculture, a critical economic sector for most of the countries served by the LDCF and SCCF. Yield and productivity of both irrigated and rainfed agriculture are likely to change, with implications for the livelihoods and sustenance of rural communities as well as for food security more broadly.

Thus, freshwater quality and quantity is an important aspect of the GEF's adaptation program via integrated water resources management interventions that mainstream climate resilience, with continued support to be provided for ways to capture and store water (e.g., rainwater harvesting, tanks); conserve water (e.g., drip irrigation, water metering); and enable easier and more reliable access to water. The LDCF and SCCF will support policy measures to enable efficient water use and effective decision-making, and capacity support for improved hydrological modelling and water resource scenario planning. The funds will also continue to support measures to reduce vulnerability to droughts and floods that are induced or exacerbated by climate change.

## Nature-based Solutions

Nature-based solutions (NBS) have been a cornerstone of the GEF's climate change adaptation portfolio since its inception. NBS have a high potential to deliver climate adaptation as well as a range of additional benefits contributing to resilience of people and ecosystems, as well as for biodiversity and climate change mitigation. As a result, NBS are receiving deepened emphasis in the GEF-8 period as a means of effecting adaptation, including to address coastal zone erosion.

The LDCF and SCCF portfolio draws on emerging science and lessons pertaining to NBS for adaptation. This scientific evidence also strengthens



*Nature-based solutions have been a cornerstone of the GEF's climate change adaptation portfolio since its inception.*

the economic case for NBS and may help the LDCF and SCF portfolio bring about transformative shifts. The focus on NBS for the LDCF and SCCF is complementary to the GEF-8 programming directions for the GEF Trust Fund, which builds on NBS as a central theme to support a healthy planet and resilient populations. Opportunities exist for parallel programming with the GEF Trust Fund to enhance adaptation considerations in efforts to support net-zero, nature-positive targets, to value and monetize NBS, and to address socio-economic priorities of LDCs and SIDS.



## LDCF

### **African Climate Risk Insurance Facility-Derisking Adaptation to Climate Change in Africa**

*(Agency: AfDB)*

This project is establishing the African Climate Risk Insurance Facility (ACRIF) to promote climate risk insurance as a viable instrument of improving climate risk management, strengthen climate adaptation, and address fragility on the African continent, with a focus on Comoros, Djibouti, Somalia, and Sudan. This is being achieved by establishing a climate risk financing guarantee facility to enable participation of African LDCs in sovereign regional risk pool of the African Risk Capacity (ARC) program created by the African Union. The financing guarantee facility is combined with strengthening the expertise and understanding of public institutions and local insurance providers on climate risks, use of climate data, and design of climate related insurance products.

This project builds on the Africa Disaster Risk Financing (ADRFi) Program. Innovative aspects of the project include advancing market-based instruments to provide climate disaster risk finance and insurance solutions, and building on successful experiences in Latin America to pool risks regionally. Implemented by AfDB, with \$10 million from the LDCF, this project is expected to benefit 2.6 million people (50 percent female) and catalyze over \$22.5 million in co-financing.

## SCCF

### Acceleration of financial technology-enabled climate resilience solutions with the Catalyst Fund

*(GEF Agency: UNIDO)*

This project is accelerating financial technology-enabled climate resilience solutions in Kenya, Nigeria, Rwanda, South Africa, and Uganda. Together with the 50+ organizations participating, BFA Global will launch an ecosystem for innovation through the Catalyst Fund, at the intersection of modern finance and climate action, centered on vulnerable communities in emerging markets.

The project is accelerating startups to refine their products and scale them, building on a learn-by-doing approach developed by the Catalyst Fund. This is being achieved through a set of activities, including conducting a data-rich analysis of fintech startups enhancing climate resilience; accelerating startups; developing investment thesis briefs; building talent pipelines; and sharing learning and insight.

An innovative aspect of this project is that it will develop introduce climate change adaptation and resilience as an opportunity for the fintech ecosystem by accelerating solutions that enable climate vulnerable communities to grow economically. Implemented by UNIDO, with \$1 million of SCCF and LDCF finance, this project is expected to catalyze \$11 million in co-finance from different sources, as well as directly benefit over 12,000 people, 50 percent of whom are women.



Photo by Benedicte Kurzen/NOOR for FAO

*The GEF and GEF agencies are collaborating in Africa to improve water security, decrease pollution, and foster more sustainable uses of water and related natural resources.*



# Managing Water Resources, from Source to Sea

Africa's shared waters, such as major rivers like the Nile, the Senegal, the Niger, or the Okavango-Cubango, support many of the continent's unique, world-renowned environmental assets including the Okavango Delta, the Sudd—Africa's largest wetland— Lake Victoria, Lake Tanganyika, and the other Great African Lakes. These water resources may also be more important for development, livelihoods, and human and environmental health in Africa than any place on Earth, as 85 percent of water use in Africa is for agriculture, which also employs the majority of the people on the continent.

Yet agricultural yields and incomes in Africa remain low due to a variety of factors. Rainfall varies significantly by season, year, and region, especially in lower latitude countries. Climate change is making this variability even more challenging, and contributes to low runoff, which further decreases water availability for agriculture and other uses. Limited storage contributes to low resilience to climate extremes as well as to widespread water, energy, and food insecurity. At the same time the vast majority of water resources in Africa—surface water and aquifers—reach across borders and making cooperation among countries essential for water, food, and energy security and maintaining environmental assets. Increasing climate variability and change add to water stress and the need for cooperation across sectors and borders.

The GEF has decades of experience working to improve cooperative management in shared water ecosystems. The GEF and GEF agencies are collaborating in Africa to improve water security, decrease pollution, and foster more sustainable uses of water and related natural resources.

Realizing the long-term engagement and lengthy processes needed across sovereign nations to come to agreement on a legal and institutional governance framework for cooperation, GEF support to countries in most

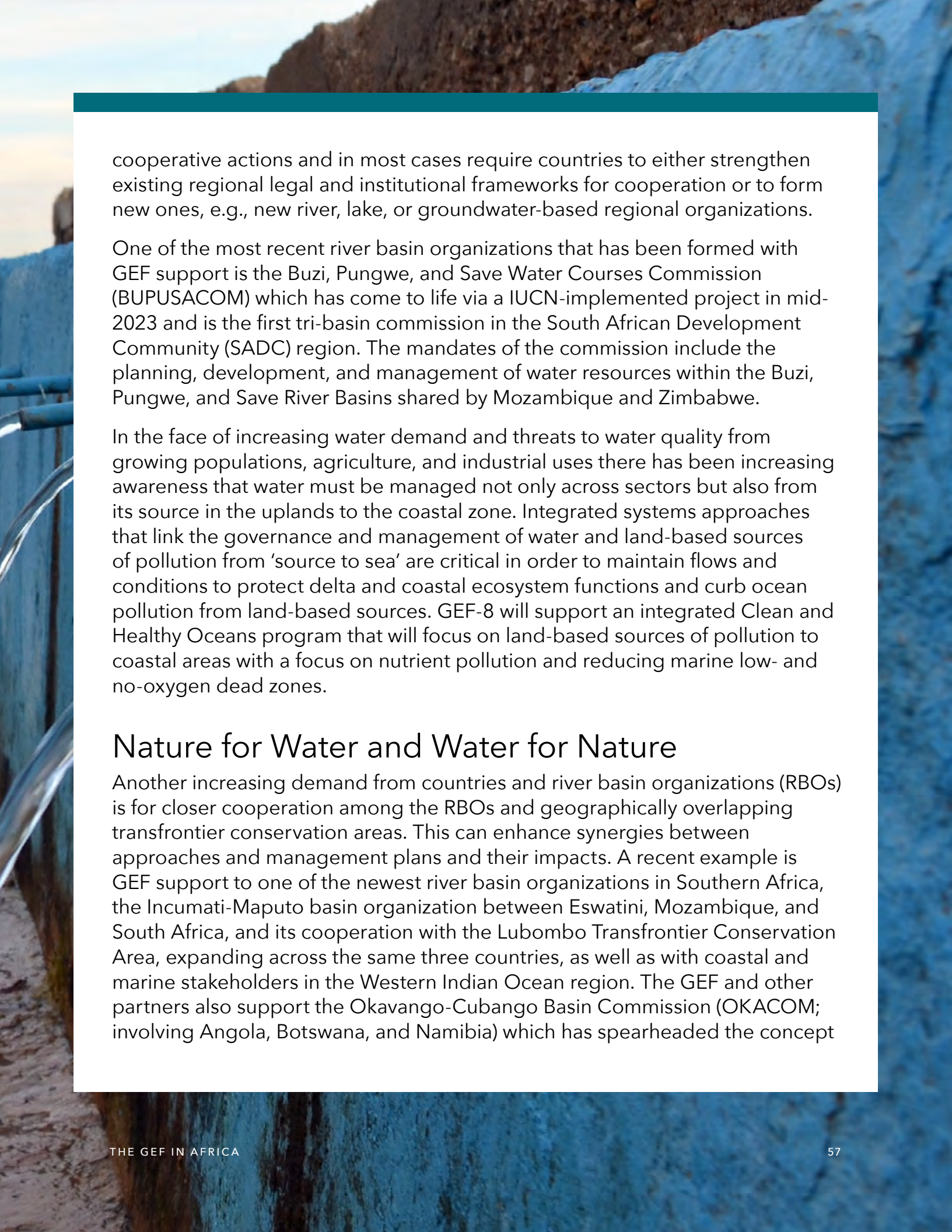
instances is via a structured approach in subsequent projects. Initial projects lay the foundation for progress by supporting exchanges and dialogue to build trust, collate common information, and come to a unified view of basin assets, opportunities, and challenges. There is also often a need to level the playing field in capacities across countries so they can engage in effective negotiations, to increase awareness across countries on the needs and limits of their counterparts, and to build relationships that can help find a common path.

## Cooperation on Water Across Sectors and Borders

Africa has the largest number of basins shared by three or more countries. Most countries share at least one river or lake with a neighboring country and similarly many of the main aquifers in Africa expand across more than one country. Given the central role of water to development—including to energy, food, and environmental security—this requires partnerships and cooperation across sectors and borders to achieve countries' development goals and at the same time tackle the triple global crises of climate change, biodiversity loss, and pollution. Yet, water governance and institutional frameworks are often weak and cooperation across countries on essential water resources is complex and requires time and facilitation. Where these cooperation processes do not take hold, unilateral developments can lead to tensions and lost opportunities for a cooperative approach that could bring about greater collective benefits.

While there is no blueprint to basin cooperation, the process often includes national and regional participatory processes to arrive at a Transboundary Diagnostic Analysis or State of the Basin Report in whatever format is appropriate to the situation based on available information. This informs a Vision for Cooperation, which in most cases goes way “beyond the river,” aiming at regional integration, cooperation, and benefits across sectors and borders.

Building on this vision, countries typically aim to formulate common actions to address challenges via soft measures—governance, policy, or information collection and exchange—or investments to address sectoral water needs and trade-offs, as well as nature-based and infrastructure solutions to address these needs. These “Strategic Action Plans” become commitments of countries for



cooperative actions and in most cases require countries to either strengthen existing regional legal and institutional frameworks for cooperation or to form new ones, e.g., new river, lake, or groundwater-based regional organizations.

One of the most recent river basin organizations that has been formed with GEF support is the Buzi, Pungwe, and Save Water Courses Commission (BUPUSACOM) which has come to life via a IUCN-implemented project in mid-2023 and is the first tri-basin commission in the South African Development Community (SADC) region. The mandates of the commission include the planning, development, and management of water resources within the Buzi, Pungwe, and Save River Basins shared by Mozambique and Zimbabwe.

In the face of increasing water demand and threats to water quality from growing populations, agriculture, and industrial uses there has been increasing awareness that water must be managed not only across sectors but also from its source in the uplands to the coastal zone. Integrated systems approaches that link the governance and management of water and land-based sources of pollution from 'source to sea' are critical in order to maintain flows and conditions to protect delta and coastal ecosystem functions and curb ocean pollution from land-based sources. GEF-8 will support an integrated Clean and Healthy Oceans program that will focus on land-based sources of pollution to coastal areas with a focus on nutrient pollution and reducing marine low- and no-oxygen dead zones.

## Nature for Water and Water for Nature

Another increasing demand from countries and river basin organizations (RBOs) is for closer cooperation among the RBOs and geographically overlapping transfrontier conservation areas. This can enhance synergies between approaches and management plans and their impacts. A recent example is GEF support to one of the newest river basin organizations in Southern Africa, the Incumati-Maputo basin organization between Eswatini, Mozambique, and South Africa, and its cooperation with the Lubombo Transfrontier Conservation Area, expanding across the same three countries, as well as with coastal and marine stakeholders in the Western Indian Ocean region. The GEF and other partners also support the Okavango-Cubango Basin Commission (OKACOM; involving Angola, Botswana, and Namibia) which has spearheaded the concept

of an acceptable development space and assessing future investment plans via a long-term planning framework, the Basin Development and Management Framework. OKACOM and its member countries are also in the process of operationalizing the Cubango-Okavango River Basin Fund, which will establish a sinking and endowment funding vehicle to enhance livelihoods, improve ecosystem resilience, and provide equitable benefits to the riparian states of Angola, Botswana, and Namibia. The integrity of this and many other river systems depends on the integrity of the upstream watersheds and avoiding large-scale deforestation of upstream areas as well as other source water protection efforts. Sustained funding streams, such as via Payment for Ecosystems Services mechanisms, Water and Conservation Trust Funds, and other innovative finance can be essential to incentivize ecosystem integrity in the long term.

## Conjunctive Management of Surface and Groundwater

Groundwater not only in Africa but across the globe has lagged in governance and sustainable management partly because its invisible nature and partly because the technical complexity of assessing the resource, especially groundwater systems that span multiple countries. This is especially true and adds challenges for the management of groundwater systems than span across multiple countries. The GEF supports transboundary groundwater and the conjunctive surface and groundwater management as these water sources need to be managed in an integrated manner. In cooperation with UNEP, UNDP, and UNIDO, the GEF is, for example, working with the Niger Basin Authority and the Sahara and Sahel Observatory to address interactions between the Niger river with the Iullemeden-ITTAS groundwater system. Furthermore, in Southern Africa, the GEF together with the World Bank supported the establishment of the SADC-Groundwater Management Institute as a sub-regional center of excellence that is working with several SADC-based river basin organizations and countries to integrate groundwater into basin management plans and actions as well as supporting community-based investments (see box). Groundwater holds great potential due to the greater resilience of underground water storage to climate influences and as water supply in prolonged droughts. Efforts for managed aquifer recharge

*The GEF supports transboundary groundwater and the conjunctive surface and groundwater management as these water sources need to be managed in an integrated manner.*



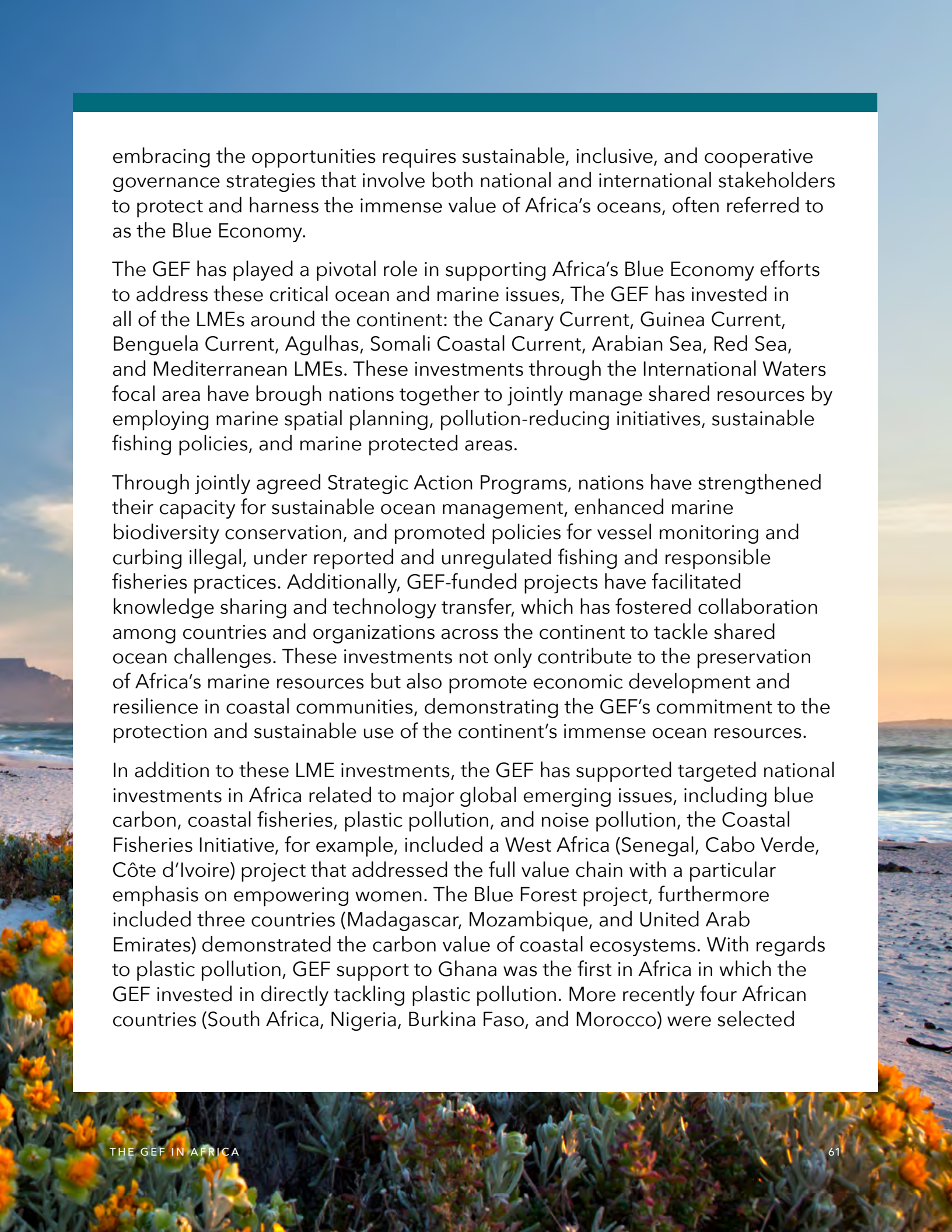
can be cost-effective solutions to increase subsurface storage especially for human settlements. Groundwater pollution, however, is an increasing threat across the globe that increases the need for conjunctive management. Pollution prevention via coherent policy approaches across sectors will be key to addressing this challenge as the clean-up of underground soil and water pollution is slow and extremely costly.

## Ocean and Marine Challenges

Africa is confronting significant threats to the health of marine and freshwater ecosystems; yet, at the same time is embracing growing opportunities for sustainable economic development. Coastal and marine areas in Africa, as in most parts of the globe, are home to urban and economic centers and trading hubs for marine based in and export routes as well as areas of coastal tourism. The value of fisheries and aquaculture alone was estimated at around \$24 billion by the World Bank (in 2011) which equalled about 1.3 percent of Africa GDP at the time and employing about 12 million people in fishing and fish processing. Notably around 60 percent of fish processing jobs are held by women.

Threats to the continent's marine resources are numerous, including unsustainable fishing, land-based pollution, habitat degradation, and climate change impacts. These threats and risks of pollution from marine oil and gas exploitation and transport and land-based sources of pollution not only endanger the ecological balance of Africa's coastal and marine ecosystems, but also jeopardize the livelihoods of millions of people who rely on the oceans for sustenance and income. Given the nature of the ocean environment these threats are not isolated and impacts from e.g. overfishing and pollution in one country have impacts on neighboring countries sharing common Large Marine Ecosystems (LMEs).

Consequently, the value of effective oceans governance in Africa cannot be understated. Properly managed marine resources can provide food security, economic growth, and employment opportunities, particularly for coastal communities. Furthermore, the coastal and marine resources hold untapped potential for renewable energy sources, transportation, carbon sequestration, filtration, tourism, and scientific research. Addressing the challenges while



embracing the opportunities requires sustainable, inclusive, and cooperative governance strategies that involve both national and international stakeholders to protect and harness the immense value of Africa's oceans, often referred to as the Blue Economy.

The GEF has played a pivotal role in supporting Africa's Blue Economy efforts to address these critical ocean and marine issues. The GEF has invested in all of the LMEs around the continent: the Canary Current, Guinea Current, Benguela Current, Agulhas, Somali Coastal Current, Arabian Sea, Red Sea, and Mediterranean LMEs. These investments through the International Waters focal area have brought nations together to jointly manage shared resources by employing marine spatial planning, pollution-reducing initiatives, sustainable fishing policies, and marine protected areas.

Through jointly agreed Strategic Action Programs, nations have strengthened their capacity for sustainable ocean management, enhanced marine biodiversity conservation, and promoted policies for vessel monitoring and curbing illegal, under reported and unregulated fishing and responsible fisheries practices. Additionally, GEF-funded projects have facilitated knowledge sharing and technology transfer, which has fostered collaboration among countries and organizations across the continent to tackle shared ocean challenges. These investments not only contribute to the preservation of Africa's marine resources but also promote economic development and resilience in coastal communities, demonstrating the GEF's commitment to the protection and sustainable use of the continent's immense ocean resources.

In addition to these LME investments, the GEF has supported targeted national investments in Africa related to major global emerging issues, including blue carbon, coastal fisheries, plastic pollution, and noise pollution. The Coastal Fisheries Initiative, for example, included a West Africa (Senegal, Cabo Verde, Côte d'Ivoire) project that addressed the full value chain with a particular emphasis on empowering women. The Blue Forest project, furthermore included three countries (Madagascar, Mozambique, and United Arab Emirates) demonstrated the carbon value of coastal ecosystems. With regards to plastic pollution, GEF support to Ghana was the first in Africa in which the GEF invested in directly tackling plastic pollution. More recently four African countries (South Africa, Nigeria, Burkina Faso, and Morocco) were selected

An aerial photograph of a tropical coastline. The foreground shows clear, turquoise water with white foam from waves breaking onto a narrow, sandy beach. The beach is bordered by a dense line of lush green vegetation and trees. In the background, a small town or village is visible, nestled in a valley between steep, forested hills. The sky is a clear, bright blue with a few wispy clouds. A dark teal horizontal bar is positioned at the top of the page, partially overlapping the sky.

for GEF-8 Circular Solutions Plastic Pollution Integrated Program, which will catalyze government policies, business practices, and public behavior shifts away from single use plastic to more circular approaches. Within a first GEF effort to address impacts on underwater noise pollution on marine life South Africa is part of the Global Partnership for the Mitigation of Underwater Noise from Pollution project, establishing a global partnership to engage and assist developing countries to raise awareness, build capacity, define baselines, and promote international policy dialogue on the mitigation of underwater noise from shipping.

The GEF is committed to continuing support for cooperation among countries across shared marine and freshwater systems and promoting national and regional policy reforms and investment across sectors and borders for sustainable management of these shared ecosystems.



## ***Conjunctive Management of Surface and Groundwater in the SADC Region***

The GEF supports the Southern African Development Community Groundwater Management Institute (SADC-GMI) in developing capacity and knowledge for inclusive groundwater management in the SADC region at the national and transboundary levels. Within SADC, implementing water governance arrangements have led to the establishment of RBOs. As groundwater governing institutions are undeveloped in Africa, the existing RBOs are the preferred option to promote and integrate key facets of groundwater management and protection. This has led SADC-GMI to establish formal cooperation with RBOs in SADC through a memorandum of understanding (MoU), establishing groundwater committees, training for conjunctive water resources management, and technical assistance. The Limpopo Watercourse Commission (LIMCOM) and SADC-GMI, for example, signed an MoU whose main objective is "to establish a collaboration platform between LIMCOM and SADC-GMI to support the mandates of the two organisations, particularly on promoting sustainable groundwater management and provide solutions to groundwater challenges." LIMCOM and SADC-GMI have collaborated on several groundwater projects, interventions, and programs in the Limpopo Basin, including: establishment of the LIMCOM Groundwater Committee; operationalising a Multi-Country Cooperation Mechanism for the Ramotswa Transboundary Aquifer, and developing a Limpopo Groundwater Strategy to improve the security, reliability, and quality of the Limpopo River Basin water resources. Recently, SADC-GMI also signed MoUs with the Komati Water Basin Authority and the Incomati and Maputo Watercourse Commission that are a foundation for building trust, clarifying expectations, and establishing a roadmap for future collaborations. The South African Department of Water and Sanitation has welcomed the signing of the agreements, saying the combined effort by the South Africa, Eswatini, and Mozambique could also contribute positively towards "peace, stability and prosperity of the Southern African region."

## *The Orange-Senqu Basin*

Lesotho, South Africa, Botswana, and Namibia rely on the Orange-Senqu River as a shared source of water resource for agriculture, fisheries, mining, energy production, manufacturing, tourism, biodiversity conservation, and household use. In 2000, these four riparian states established the Orange-Senqu River Commission (ORASECOM) for sustainable joint management of these transboundary water resources. A lot has been achieved within the last 23 years, including the Strategic Action Program (SAP) developed in 2015 to address issues of deteriorating water quality, increasing water demand, altered hydrological regime, land degradation, and spread of invasive species that are well documented in the Transboundary Diagnostic Analysis undertaken in 2013. As part of SPA implementation, these ORASECOM member states adopted the source-to-sea approach and jointly developed a transboundary water resource monitoring system to inform decision making on improving water quality, availability, and allocation for equity and sustainable environmental flows. For instance, in Lesotho, textile industries that use water from the Mohakere River (a tributary of the Orange-Senqu) started wastewater treatment and the government established discharge standards that are monitored based on the World Health Organization guidelines to reduce water pollution.

The Orange-Senqu River discharges into the Benguela Current Large Marine Ecosystem that supports important fish species, seabirds, and marine mammals. The survival of this marine biodiversity depends on the health of the Orange River mouth that is important for flood control, pollution retention, and breeding of some fish and bird species. Since 2010, ORASECOM and the Benguela Current Convention (BCC) Secretariat have worked together for integrated management of the Orange River mouth and adjacent marine area. For instance, in 2017 BCC supported the development of the Orange-Senqu Mouth Estuarine Management Plan and since then participated in basin surveys for environmental flows monitoring organized by ORASECOM on a regular basis.



*Pollution is a planetary threat, and its drivers, dispersion, and effects on health transcend local boundaries and demand a global response.*



# Tackling Pollution and Waste Management

Pollution in its various forms—air, water, and soil—is among the largest environmental challenges of the modern world, including Africa. Pollution has typically been viewed as a local issue to be addressed through national and subnational regulation or occasionally using regional policy. Now, it is increasingly clear and recognized that pollution is a planetary threat, and its drivers, dispersion, and effects on health transcend local boundaries and demand a global response.

The global community over the last several decades has adopted legally binding instruments international treaties—the Stockholm and Minamata Conventions and the Montreal Protocol—as well as and voluntary mechanisms such as the Global Framework on Chemicals to control, reduce, and phase out toxic hazardous chemicals and waste. Most recently the United Nations Environment Assembly set up the Intergovernmental Negotiating Committee on Plastic Pollution to develop an international legally binding instrument on plastic pollution, including in the marine environment.

Most African countries are now aware of and concerned with the dangers inherent to poor management of hazardous chemicals and toxic waste. However, most also remain far from establishing the legal and infrastructural framework for achieving sound management.

The GEF has a mandate to help developing countries address these challenges. Among the most critical pollution management issues in Africa that the GEF is working on are those related to the management of some categories of chemicals, products containing chemicals, and waste streams, including the use of mercury in Artisanal and Small-Scale Gold Mining (ASGM), use of organochloride and highly hazardous pesticides, management and disposal of polychlorinated biphenyl (PCB), treatment and management of medical wastes, and improper E-waste management.

## Artisanal and Small-Scale Gold Mining

Rising international gold prices are making ASGM an attractive employment alternative for struggling farmers, poor rural communities, and migrant laborers. The ASGM workforce is estimated at more than 1 million in both Ghana and Tanzania, for instance. Mercury is used as an amalgamation agent in ASGM operations with significant health consequences to miners and their families. The informal, illegal, and unregulated nature of mercury use in such operations has created a legacy of severe adverse and irreversible environmental and health damage.

## Obsolete/Highly Hazardous Pesticides

Over the past 45 years, many African countries have accumulated large quantities of pesticides that have now become unfit for use or reformulation. Although these chemicals are no longer effective for controlling pests, they remain potent chemical toxins, and, thus still need to be carefully stored, handled, or destroyed.


The amount of obsolete pesticides stockpiled across Africa is estimated at 50,000 tons and they exist in virtually all 54 countries.<sup>17</sup> The unwanted build-up of such products normally occurs due to inadequate stock management, failure to distribute the chemicals to farmers, bans, uncoordinated or inappropriate supply from donor agencies, unsuitable packaging, and supplier incentive programs.

The GEF/World Bank African Stockpile Programme was designed to address the issue of these obsolete pesticides that are leaking into the environment, contaminating soil, water, air, and food sources. Highly Hazardous Pesticides (HHPs) cause disproportionate harm to environment and human health, according to internationally accepted classification systems such as WHO or Global Harmonized System (GHS) or their listing in relevant binding international agreements or conventions.<sup>18</sup> Halting the use of HHPs could eliminate many of the most serious hazards to health and the environment.

---

17 <https://www.thegef.org/projects-operations/projects/1348>

18 Guidelines on Highly Hazardous Pesticides(fao.org)



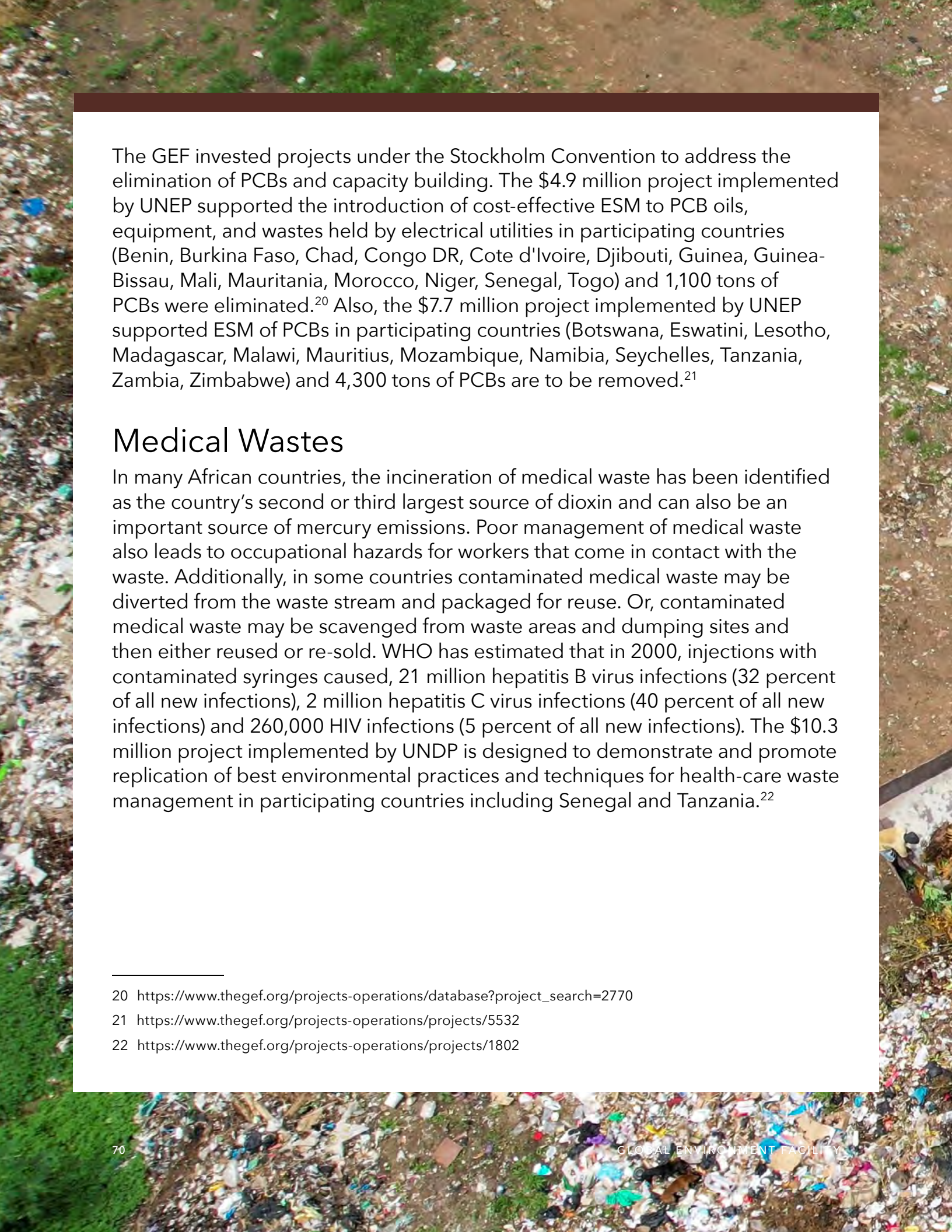
*The GEF/World Bank African Stockpile Programme was designed to address the issue of these obsolete pesticides that are leaking into the environment, contaminating soil, water, air, and food sources.*

## Polychlorinated Biphenyl (PCB)

The group of chemicals known as polychlorinated biphenyls (PCBs) is one of the original 12 POPs covered by the Stockholm Convention. Due to their physico-chemical properties such as excellent dielectricity, resistance to chemical and thermal degradation, and non-flammability, PCBs were manufactured worldwide for use in a wide range of applications, most importantly as insulating fluids in transformers. PCBs can cause serious health effects in humans and animals, including reproductive impairment and immune system dysfunctions and are categorized as Group 1—carcinogenic to humans—by the International Agency for Research on Cancer.<sup>19</sup> Provisions for Parties to the Stockholm Convention requests elimination of the use of PCBs in equipment by 2025 and environmentally sound waste management/disposal no later than 2028.

---

<sup>19</sup> <https://chm.pops.int/implementation/industrialpops/pcbs/overview/tabid/273/default.aspx>



The GEF invested projects under the Stockholm Convention to address the elimination of PCBs and capacity building. The \$4.9 million project implemented by UNEP supported the introduction of cost-effective ESM to PCB oils, equipment, and wastes held by electrical utilities in participating countries (Benin, Burkina Faso, Chad, Congo DR, Cote d'Ivoire, Djibouti, Guinea, Guinea-Bissau, Mali, Mauritania, Morocco, Niger, Senegal, Togo) and 1,100 tons of PCBs were eliminated.<sup>20</sup> Also, the \$7.7 million project implemented by UNEP supported ESM of PCBs in participating countries (Botswana, Eswatini, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, Tanzania, Zambia, Zimbabwe) and 4,300 tons of PCBs are to be removed.<sup>21</sup>

## Medical Wastes

In many African countries, the incineration of medical waste has been identified as the country's second or third largest source of dioxin and can also be an important source of mercury emissions. Poor management of medical waste also leads to occupational hazards for workers that come in contact with the waste. Additionally, in some countries contaminated medical waste may be diverted from the waste stream and packaged for reuse. Or, contaminated medical waste may be scavenged from waste areas and dumping sites and then either reused or re-sold. WHO has estimated that in 2000, injections with contaminated syringes caused, 21 million hepatitis B virus infections (32 percent of all new infections), 2 million hepatitis C virus infections (40 percent of all new infections) and 260,000 HIV infections (5 percent of all new infections). The \$10.3 million project implemented by UNDP is designed to demonstrate and promote replication of best environmental practices and techniques for health-care waste management in participating countries including Senegal and Tanzania.<sup>22</sup>

---

20 [https://www.thegef.org/projects-operations/database?project\\_search=2770](https://www.thegef.org/projects-operations/database?project_search=2770)

21 <https://www.thegef.org/projects-operations/projects/5532>

22 <https://www.thegef.org/projects-operations/projects/1802>





## E-waste

Generation of e-waste is growing in Africa. A total of 2.9 Mt of e-waste were generated in 2019 and around 3 Mt in 2021 and is expected to reach 4 million tons by 2030.<sup>23</sup> Improper e-waste management such as informal dismantling and open burning contributes significantly to the increasing environmental health risks in Sub-Saharan Africa. Over the past 20 years, the market for Information and Communication Technologies has grown exponentially and is estimated to be the fastest-growing waste stream in the world, at 20-50 million tons per year. The issue of e-waste has been migrating to developing countries, including those in Africa. The \$2 million project implemented by UNEP is designed to pilot a circular economy approach to dealing with the electronics sector in Nigeria and provide lessons learned to global and regional knowledge exchanges on the circular economy. The project also aims to deal directly with approximately 300 tons of electronics through which cost-effective recycling and disposal systems for various categories of e-waste in Nigeria.<sup>24</sup>

---

23 <https://www.mdpi.com/2076-3298/10/3/44>

24 <https://www.thegef.org/projects-operations/projects/10141>



## ***Improved management of E-waste and healthcare waste to reduce emissions of Unintentional produced POPs in Egypt<sup>25</sup>***

Egypt is one of Africa's biggest e-waste-generating countries at 0.58 million metric tons annually in 2019. The generation of health-care waste (HCW) had also rapidly increased in Egypt; the country generated an estimated 470,000 tons of medical waste in 2013.

The \$9.1 million project (with co-financing of \$142 million) implemented by World Bank aims to improve management of E-Waste and Healthcare Waste in Egypt. This project is designed to take advantage of both recent progress and future synergies to make significant changes regarding waste management and the emissions of uncontrolled POPs and other substances based on: (i) continued strengthening of the regulatory framework and enhancing implementation effectiveness; (ii) completing key analytical and feasibility studies to fill knowledge gaps and provide decision makers with needed data and analysis; and (iii) building upon successful pilot initiatives to concretize successes, e.g., formalizing the informal sector for E-Waste recycling and collection of small electronics, and expand into new priority areas such as printed circuit board recycling, collection and recycling of computers and other larger electronic, and establishing comprehensive HCW management in select hospitals. The project focuses on a life-cycle approach which promotes the adoption of improved production, consumption, and environmentally-sound disposal patterns including the recycling of E-Waste to reduce long-term need for hazardous materials. The Global Environmental Benefits is expected to be 7.14gTEQ based on a 10 percent reduction/avoidance of uncontrolled POPs emissions to air.

<sup>25</sup> <https://www.thegef.org/projects-operations/projects/10879>

## ***Global Opportunities for the Long-term Development of the ASGM sector (planetGOLD)<sup>26</sup>***

The planetGOLD programme works in partnership with governments, the private sector, and artisanal and small-scale gold mining (ASGM) communities to significantly improve the production practices and work environment of artisanal and small-scale miners. By working to close the financing gap, supporting formalization, raising awareness, and connecting mining communities with mercury-free technology and formal markets, the programme aims to demonstrate a pathway to cleaner and more efficient small-scale gold mining practices that benefit everyone, from mine to market. The program works globally, including 13 countries in Africa.

One key element of attracting finance and engaging formal markets is to ensure that gold produced under the planetGOLD programme is produced according to relevant environmental and social standards. The planetGOLD Criteria for Environmentally and Socially Responsible Operations was created to help position the planetGOLD programme participants to meet such requirements.

Supporting countries' commitments under the Minamata Convention on Mercury, the planetGOLD program is also working to eliminate mercury from the ASGM supply chain by: supporting efforts to integrate the ASGM sector into the formal economy, society, and regulatory system; introducing and facilitating access to mercury-free technologies and best practices in ASGM; facilitating miners' access to formal gold supply chains, in partnership with gold buyers and industrial users; piloting a range of models for access to investment and finance for small-scale miners and their communities.

<sup>26</sup> <https://www.planetgold.org/about>



*Through the integrated programs, the GEF is shifting the focus of its financing strategy for the global environment to align more directly with aspirations for development in Africa that is sustainable, resilient, and transformational.*

# Integrated Programming for Systems Transformation

Building on achievements through GEF focal area investments over the last two decades, the African region has also been a major focus for integrated programming to tackle drivers of global environmental degradation and deliver multiple benefits for people and the planet. These initiatives build on experiences with flagship programs such as the Great Green Wall Initiative, and management of conjunctive and shared river basins, lakes, and coastal marine ecosystems, and sustainable management of the tropical forest biomes.

Through the integrated programs, the GEF is shifting the focus of its financing strategy for the global environment to align more directly with aspirations for development in Africa that is sustainable, resilient, and transformational. Hence the programs help countries forge new alliances, increase the economies of scale, crowd-in private sector, and promote innovative mechanisms for financing environmental outcomes. The following programs highlight the innovative nature of this approach and its potential for delivering impactful outcomes across the continent.

## Global Wildlife Program

The GEF initially launched this program in 2015 to address growing threats to wildlife and sustainable development, such as poaching, trafficking, demand for illegal wildlife products, human-wildlife conflict, and insufficient livelihood opportunities for Indigenous peoples and local communities living alongside wildlife. Through an investment of \$230 million in GEF funding and an additional \$1.36 billion in co-financing, the GWP brings together 31 countries, including 18 in Africa. The program is supporting on-the-ground actions to reduce poaching, trafficking, and demand for wildlife and wildlife products illegally traded between Africa and Asia, as well as protect their natural habitats. In some cases, the projects are not only reducing poaching, but directly supporting the recovery of wildlife populations.

## Wildlife Conservation for Development

Building on progress and achievements of the GWP, a new Wildlife Conservation for Development Integrated Program in GEF-8 will seek to enable national, transboundary, regional, and global interventions to transform systems that are driving wildlife loss. Integrated and innovative interventions involving 15 countries, including eight in Africa (Eswatini, Ethiopia, Guinea, Kenya, Malawi, Mozambique, Uganda, and Zambia), will help to transform the way in which people coexist with wildlife and the global supply chains through which wildlife products are traded. Integration of wildlife conservation across landscapes and sectors, between countries and regions, and over supply chains will help maximize the program's impact and the potential contributions of wildlife conservation for development.

## Fostering Sustainability and Resilience of Food Security in Africa

With a GEF grant of \$120 million and more than \$800 million in co-financing, this integrated approach pilot program was designed to promote and scale-up practices that increase food security for smallholder farm households while ensuring long-term sustainability and resilience of the production systems in the dryland regions. Led by the International Fund for Agricultural Development (IFAD) and implemented from 2016 - 2023, the program, also branded as Resilient Food Systems (RFS), fostered a holistic approach to enhancing agricultural productivity and restoring degraded landscapes in smallholder farming systems across 12 countries.

## Taking Deforestation out of Commodity Supply Chains

This global program focused specifically on beef, oil palm, and soy that together account for 70 percent of tropical deforestation. The program, also referred to as the Good Growth Partnership, was led by the United Nations Development Program and implemented from 2016 - 2023, with a \$40 million GEF grant and an additional \$400 million in co-financing. It engaged actors in major producer countries for the three commodities, and companies and financial institutions


## ***Resilient Food Systems***

The Resilient Food Systems (RFS) Program has been one of the three pilot programs of GEF-6 to test integration modalities. It promoted sustainability and resilience among smallholder farmers through the sustainable management of natural resources—land, water, soils, and genetic resources—that are crucial for food security.

The RFS Program has been led by IFAD, in partnership with ICRAF-CIFOR. Twelve countries were selected through a competitive process: Burkina Faso, Burundi, Eswatini, Ethiopia, Ghana, Kenya, Malawi, Niger, Nigeria, Senegal, Tanzania, and Uganda. The program also received support from FAO, UNDP (in collaboration with AGRA), the World Bank, UNIDO, Conservation International, the Alliance of Biodiversity and CIAT, and UNEP.

The program supported the design of multi-stakeholder institutional frameworks at various levels: 11 platforms at national levels, 88 at district/landscape levels, and 1,177 at local levels. The policy engagement activities have resulted in 14 Natural Resource Management policy instruments. A total of 33 intra-country learning exchanges and nine south-south exchanges took place that led to the uptake of innovative practices.

The RFS program generated global environment benefits with more than 1.2 million ha under improved practices, 338,000 ha of lands restored, and 56,000 ha of protected areas with improved management. These activities led to the mitigation of 21.6 million of tCO<sub>2</sub>e equivalent of GHG. The program had 4,326,000 beneficiaries, of which 45 percent were women. The RFS program took part in the deployment of 22 sustainable value chains to the benefits of farmers: 70,000 farmers reported an increase in yields or animal production equal or above 10 percent.



associated with demand and supply to shift the entire supply chain toward zero-deforestation. Oil Palm was the priority commodity for the Africa region, where countries such as Liberia are already emerging as frontiers of expansion. The supply chain approach reinforced the need for all actors to embrace best practices and sustainability principles and for clear linkages to be established among the production, demand, and transaction actors.

## Food Systems, Land Use and Restoration

This program follows on achievements from Resilient Food Systems and Good Growth Partnership programs and focuses on promoting a system-wide approach that brings together strategies and stakeholders through integration of horizontal (interventions with actors within landscapes, policy reform, governance strengthening, etc.) and vertical (food value and supply chain commitments and financing) dimensions. At the core of this approach is the need for comprehensive land use planning to align priorities for development needs while protecting the natural environment and associated ecosystem services. Ten countries from the Africa region (Burundi, Cote d'Ivoire, Ethiopia, Ghana, Guinea, Kenya, Liberia, Madagascar, Tanzania, and Uganda) are participating in the program, with a focus on transforming the cocoa, coffee, oil palm, and rice systems.

## Urban Transformation through Sustainable Cities

This global program was launched in 2016 as a response to rapid urban expansion in many countries and associated problems—housing, waste management, infrastructure, etc., which require an integrated approach to addressing them sustainably. The GEF, in collaboration with the World Bank and the world's biggest city networks like C40 and ICLEI, launched the Global Platform for Sustainable Cities to help rapidly respond to demand for knowledge and expertise from cities. The Africa region, which is projected to have its urban population to more than triple from about 395 million in 2010 to 1.339 billion in 2050, is a major priority for this program. Cities from Cote d'Ivoire (Abidjan), Senegal (Dakar and Diaminado), and South Africa (Johannesburg) initially participated in the program, and later expanded to include Sierra Leone (Freetown) and Rwanda (Kigali).




## Dryland Sustainable Landscapes Program

This program is focused on helping countries avoid, reduce, and reverse further degradation, desertification, and deforestation of land and ecosystems in drylands, through the sustainable management of production landscapes. The targeted regions include the Miombo and Mopane ecosystems of southern Africa and the savannas of West Africa, with eight participating countries (Angola, Botswana, Burkina Faso, Kenya, Malawi, Mozambique, Namibia, Tanzania, Zimbabwe). Each country is taking a holistic approach that includes actions to foster resilience of production systems, promote restoration and rehabilitation, and improve local livelihoods. As a result, the program will deliver scalability beyond national boundaries by addressing common management challenges, recognizing the importance of transboundary commitment towards dryland restoration, landscape management at scale, and biodiversity conservation.

*At the core of this approach is the need for comprehensive land use planning to align priorities for development needs while protecting the natural environment and associated ecosystem services.*



An aerial photograph of rolling green hills under a blue sky with scattered white clouds. The hills are covered in lush green vegetation, and the perspective is from a high angle, looking down and across the landscape. The text is overlaid on a semi-transparent dark rectangle in the center of the image.

*Together with the GEF, UNEP has implemented projects in more than 160 countries. UNEP's current GEF-supported portfolio includes over 300 projects around the globe. As a science-based organization with 50 years' experience leading the global environmental agenda, UNEP combines cutting-edge environmental research capacity with deep expertise in policy development, institutional strengthening, and advocacy to ensure GEF projects achieve measurable impacts and sustainable change.*

*Rose Mwebaza  
UNEP Regional Director and Representative, Regional Office for Africa*

## DESIGN

Patricia Hord Graphik Design

## PRINTING

Professional Graphics Printing Co.

## PHOTO CREDITS

Cover iStock photo by Bartosz Hadyniak

Page 1 iStock photo by Lina Shatalova

Page 2 iStock photo by Nikada

Pages 4, 10, 12, 28, 36, 59 iStock photos by guenterguni

Page 6 iStock photo by Joel Carillet

Page 8 iStock photo by pierivb

Page 14 iStock photo by Pedro Ferreira do Amaral

Page 16 iStock photo by narvikk

Page 20 iStock photo by Ecopic

Page 22 iStock photo by Diy13

Page 24, 44, 66 iStock photo by hadynyah

Page 26 FAO photo by Benedicte Kurzen

Page 30 iStock photo by Adrian Wojcik

Page 32 iStock photo by peeterv

Page 33 iStock photo by luoman

Page 34 iStock photo by Sproetniek

Page 38 iStock photo by Chalffy

Page 40 iStock photo by jonathanfilskov-photography

Page 42 iStock photo by PeopleImages

Page 46 iStock photo by golero

Page 48 iStock photo by cyb3rking

Page 50 GEF photo by GEF

Page 52 iStock photo by GCShutter

Page 54 iStock photo by spoooh

Page 56 iStock photo by boujemaa akdim

Page 60 iStock photo by sculpies

Page 62 iStock photo by Mlenny

Page 64 iStock photo by himarkley

Page 68 iStock photo by Abd Almohimen Sayed

Page 70 iStock photo by Wirestock

Page 72 iStock photo by poco\_bw

Page 73 iStock photo by Jasper Ragetlie

Page 74 iStock photo by Starcevic

Page 76 iStock photo by Cheryl Ramalho

Page 78 iStock photo by Luca Prestia

Page 80 iStock photo by Byelikova\_Oksana

The Global Environment Facility (GEF) is a family of funds dedicated to confronting biodiversity loss, climate change, pollution, and strains on land and ocean health. Its grants, blended financing, and policy support helps developing countries address their biggest environmental priorities and adhere to international environmental conventions. Over the past three decades, the GEF has provided more than \$24 billion and mobilized \$138 billion in co-financing for 5,700 national and regional projects.

#### **MORE INFORMATION**

GEF Secretariat  
1818 H Street, NW, Mail Stop N8-800  
Washington, DC 20433 USA  
TEL: (202) 473-0508  
FAX: (202) 522-3240/3245  
EMAIL: [secretariat@thegef.org](mailto:secretariat@thegef.org)

February 2024

[www.thegef.org](http://www.thegef.org)



**global  
environment  
facility**  
INVESTING IN OUR PLANET