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Boxes, figures and tables

ARGENTINA, Salta, Candelabra Cacti

Acronyms and Abbreviations

AccelREDD	Accelerating the Implementation of REDD+ in Africa
BELA	Biodiversity, Ecosystems, and Landscape Assessment
BETF	Bank-Executed Trust Fund
BSP	Benefit sharing plan
BUFACAP	Burkina Faso Agricultural Carbon Project
CCDR	Country Climate and Development Report
CLIENT	Central Asia Climate and Environment
CWON	Changing Wealth of Nations
EnABLE	Enhancing Access to Benefits while Lowering Emissions
ENB	Environment, Natural Resources, and Blue Economy
ERPA	Emission Reductions Purchase Agreement
FAB	Feasibility-AmBitiousness
FAO	Food and Agriculture Organization of the United Nations
FCPF	Forest Carbon Partnership Facility
FOLUR	Food systems, land use and restoration
FSCAP	Food System Climate Action Plans
GBF	Kunming-Montreal Global Biodiversity Framework
GCFRP	Ghana Cocoa Forest REDD+ Program
GLF	Global Landscapes Forum
GWP	Global Wildlife Program
ha	Hectares
HIA	Hotspot intervention area
IBRD	International Bank for Reconstruction and Development
ICM	Integrated catchment management
IDA	International Development Association

IFAD	International Fund for Agricultural Development
ISFL	Initiative for Sustainable Forest Landscapes
KPI	Key performance indicators
KWBP	Korea World Bank Partnership Facility
LDCs	Least developed countries
LGAT	Landscape Governance Assessment Tool
LSMS-ISA	Living Standards Measurement Study—Integrated Surveys on Agriculture
LULUCF	Land use, land-use change, and forestry
MDB	Multilateral Development Bank
MDTF	Multi-donor trust fund
MIDA	Ministry of Agricultural Development of Panama
NbS	Nature-based solutions
NDC	Nationally Determined Contribution
NFR	National Forest Regulation
PASA	Programmatic Advice and Analytics
PES	Payments for ecosystem services
PforR	Payment for Results
PMU	Program Management Unit
REDD	Reducing Emissions from Deforestation and Forest Degradation
RETF	Recipient-executed trust fund
SDTF	Single-donor trust fund
SLBs	Sustainability-Linked Bonds
W+	Women's Empowerment Standard
WOCAN	Women Organizing for Change in Agriculture and Natural Resource Management

By Valerie Hickey, Global Director, Environment, Natural Resources and Blue Economy Global Practice, World Bank

Foreword

Healthy forests are foundational for economic development, food security, climate resilience, and nature. As worsening environmental crises test our planetary boundaries, investments in forests are key to ending poverty on a livable planet.

Forests deliver a multitude of local economic, environmental, and social benefits as well as play a key role in global environmental agendas. With the forestry sector providing one percent of formal employment formally, and many times that in livelihood support, investments in forests benefit families, local enterprises, and national economies. Well-managed forests, landscapes, and natural areas are among our most potent tools to address nature loss and climate change and build resilient rural communities.

PROGREEN, a global partnership of the World Bank, Germany, and Sweden, is sowing the seeds of a greener tomorrow. By helping countries achieve their national and global sustainable development goals in a cost-effective and scalable manner, the program is translating ambition into action at scale across 53 countries.

First and foremost, PROGREEN influences domestic public budgets and World Bank financing to catalyze restoring degraded landscapes, combating deforestation across diverse environments, and unlocking the role of forests in bending the curve of climate emissions to zero—from the lush forests of the Republic of Congo to the arid, rugged landscapes of Central Asia. For instance, in Burundi, PROGREEN played a key role in helping communities to craft model climate action plans that are being implemented with US$50 million of World Bank financing across the 2,692 *collines* (or hills) nationwide.

Secondly, PROGREEN is laying the groundwork today for the forest economies of tomorrow. When forests are managed sustainably, micro, small, and medium local companies flourish. In Northeast India, PROGREEN is championing private sector engagement with forest communities by identifying pathways for inclusion in value chains and capacity-building for high-value forest products.

Thirdly, forests are more than trees and jobs for communities around the world. PROGREEN embraces an inclusive approach to landscape co-management, actively involving forest-dependent communities and vulnerable groups. In Dominica, PROGREEN worked with the government and the Kalinago Council, representing the island's Indigenous People, on the development of a National Forest Policy to guide the sustainable management of forest resources using a collaborative approach that is anchored around traditional knowledge. The policy also paves the way for income generating activities, including nature-based tourism, for the Kalinago People, who are disproportionately represented among the nation's poor.

I want to commend PROGREEN on a dynamic and effective 2023—moving deeper into implementation in a wider set of countries. By offering guidance to our government partners, extending investment and grant financing to countries and communities, influencing World Bank Group financing, and bringing together impactful change-makers—including through partnership with the Global Landscapes Forum at events in Nairobi and Luxembourg, and at COP27—the seeds planted over the past three years are now growing and producing strong results.

Though a lot has been done, much more needs to be done. This story is still unfolding and we look forward to building on our partnership with Germany and Sweden to achieve more, faster and better—together with our country counterparts. The full impact of this partnership toward long term sustainable approaches for a livable planet will emerge over the long-term. I am excited at what the next years have in store.

1
Introduction

1.1 THE GLOBAL CONTEXT

As countries and communities across the globe continue to grapple with intensifying climate change, biodiversity loss, and pollution, there is growing recognition of the immense potential of forests, woodlands, and landscapes to tackle these three environmental crises. When well-managed, these ecosystems act as global public goods, contributing directly to economies and rural livelihoods. They are a major source of the environmental services that sustain agriculture; maintain soil fertility; reduce the risk of floods, droughts, and other natural disasters; protect watersheds; regulate the climate; and are home to most species of amphibians, birds, and mammals.

The adoption of the Kunming-Montreal Global Biodiversity Framework (GBF) at the United Nations Convention on Biological Diversity in December 2022 (COP15) underscored this global momentum. The GBF aims to meet people's needs through sustainable means by providing for reductions in threats to biodiversity and including tools for the implementation and mainstreaming of nature protection. In a similar vein, the Government of France convened governments in Libreville, Gabon, for the One Forest Summit in March 2023, with the aim of renewing collective ambition on the preservation and management of the world's forests. This was followed in June by a gathering of 100 countries in Paris at the Summit for a New Global Financing Pact, which further advanced the global dialogue on innovative financing approaches for reducing poverty, combating climate change, and preserving biodiversity. The momentum of interregional dialogue around sustainable landscape management continued with the Amazon Summit, hosted by the Government of Brazil in early August, and the Three Basins Summit, held in the Republic of Congo in October 2023. The Three Basins Summit brought together governments from the Amazon, Mekong, Borneo, and Congo basins around the growing urgency to mobilize resources and preserve 350 million hectares of tropical forests. These meetings marked increasing ambition along the road to COP28, which took place in Dubai in late November and early December of 2023.

With this as the global setting, the World Bank is actively responding to increased client demand for financing, knowledge, convening and decision-support tools by deploying institutional finance, multi-donor trust funded grants, and Global Environment Facility-funded programmatic mechanisms. The Global Partnership for Sustainable and Resilient Landscapes (PROGREEN), along with related environment programs, continues to raise the profile of biodiversity within World Bank operations, promote cost-effective conservation and restoration investments, emphasize equitable and inclusive actions, engage with clients on the value of ecosystem services, and advance outcomes-based finance approaches for nature.

1.2   ABOUT PROGREEN

PROGREEN supports rural livelihood development and landscape restoration while tackling declining biodiversity, forest loss, and deteriorating land fertility. The PROGREEN agenda is generously supported by a multi-donor trust fund with contributions from Germany and Sweden.

PROGREEN provides grant co-financing to lending and policy operations. Through country programs and knowledge activities, PROGREEN grants deepen impact and embed sustainable landscape management approaches in government policies and rural land management practices, so improving the livelihoods of communities. Its programs support analytics, knowledge development, and capacity-building to advance country engagements with the ultimate aim of scaling up landscape restoration and contributing to global dialogues on issues relating to forests, nature, biodiversity, and agriculture. PROGREEN grants also contribute to participatory processes that draw on data by supporting the gathering of evidence and development of tools that serve to help build consensus on the need for action, policy change, and investment.

PROGREEN has supported a growing number of client countries in myriad ways since it was established and funded in 2020. In addition to reducing the cost of borrowing and making investments in nature more attractive and less risky, it has helped to develop innovative analytics, build capacity, achieve consensus, and leverage additional funding from country and global partners. Having completed its third implementation year, PROGREEN is now engaged in 53 countries across the World Bank's seven administrative regions.

1.3   COLLABORATION FOR IMPACT

World Bank trust funds are accelerators that add value by focusing on key issues of nature and finance, building on the World Bank's country engagement model, blended finance approaches, efficient operating models, and ability to engage upstream at the policy level and downstream at the investment and implementation

level. In the 2023 financial year (FY23), the World Bank's environment and nature-focused trust funds—PROGREEN, PROBLUE, and the Global Program on Sustainability—initiated a process to more explicitly define their rationale, benefits, and opportunities for enhanced collaboration. This collaboration initiative forms part of a growing integrated land-to-sea approach across several business lines or sectors within the World Bank's Environment, Natural Resources, and Blue Economy (ENB) Global Practice.

With this approach, investments in nature can be made across terrestrial, coastal, and marine ecosystems by jointly developing knowledge, providing technical assistance, embedding skills through capacity-building and knowledge management. Trust fund initiatives can also better leverage larger country programs through linkages with World Bank investments. Better integration and collaboration between the nature trust funds will enhance their impact and influence across the diversity of landscapes and seascapes that lay the foundations for livable, breathable communities across the globe.

GUATEMALA - Agrarian Indigenous Community

Development partners from the World Bank and governments supporting PROGREEN, PROBLUE, and the Global Program on Sustainability met to discuss this collaboration in June 2023. During a weeklong engagement (see Box 1), the partners agreed on several concrete opportunities for the three nature trust funds to do more in the following key areas:

- Scale up country engagement with country-led catalytic grants
- Respond to demands arising from the GBF

Figure 1.

COUNTRIES WHERE PROGREEN HAS ENGAGED

This map was produced by the Cartography Unit of the World Bank Group. The boundaries, colors, denominations and any other information shown on this map do not imply, on the part of the World Bank Group, any judgment on the legal status of any

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In Focus

Box 1

PROGREEN JOIN PROBLUE AND THE GLOBAL PROGRAM ON SUSTAINABILITY FOR JOINT TECHNICAL MEETINGS AND SITE VISITS WITH DEVELOPMENT PARTNERS IN GHANA

Between June 12 and 16, 2023, the World Bank's Environment, Natural Resources, and Blue Economy (ENB) Global Practice gathered development partners from its three nature trust funds—PROGREEN, PROBLUE, and the Global Program on Sustainability—in Ghana to discuss sustainable natural resource management work across the landscape, seascape, natural capital accounting, and biodiversity agendas. The delegation from the World Bank joined Ghana-based colleagues, government partners, and development partners from Germany, the United Kingdom, Norway, Sweden, and the United States for a week of joint technical meetings, workshops, and field visits. The meetings aimed to:

- Spotlight collaboration between the three funds and associated successes, challenges, and opportunities
- Showcase Ghana as an example of collaboration for impact between the three funds
- Chart a path of more integrated action across the trust funds going forward.

As part of the joint technical meetings, the group visited Lake Bosomtwe, a UNESCO biosphere reserve where PROGREEN financing is helping to embed and improve sustainable landscape management practices. The group had the chance to meet with a host of local actors, from the district chief executive and representatives from the Water Resources Commission and Man and Biosphere Program, to the region's paramount chief.

The delegation also visited a PROBLUE site: Keta Lagoon, close to Ghana's border with Togo, where PROBLUE investments are helping coastal communities build resilience. At one such community, Anyanui, the delegation met with traditional leaders and community members for a frank exchange on the challenges arising from climate change and nature loss, and the changes that they hope to see from development projects. Some of the main issues highlighted included coastal erosion, the impacts of upstream development on water flow, and declining fish stocks.

GHANA -PROGREEN technical meetings with partners

- Scale and innovate on nature finance and private-sector engagement
- Engage further on issues related to gender, Indigenous Peoples, and local communities.

In FY23, one outcome from this collaboration is the ongoing work to build the case for nature finance (see "Assessment and Options: Analysis of Climate and Nature Financing Instruments and Opportunities"). Looking to FY24, the three multi-donor trust funds will also co-produce the next edition of the World Bank's "Changing Wealth of Nations" report.

1.4 DEEPENING THEMES OF INCLUSION, RESILIENCE, AND GREEN FINANCE

In FY23, PROGREEN started pursuing deeper engagements that emphasize social sustainability and private sector engagement. The program will increase efforts and collaboration across relevant global practices to scale up this effort.

As an example, PROGREEN is partnering with [Women Organizing for Change in Agriculture and Natural Resource Management (WOCAN)](#) in piloting new gender and climate finance instruments, including the W+ Standard. This certification framework provides metrics and procedures to quantify, verify, and monetize women's empowerment results within projects and supply chains, measuring six areas of improvement (time savings, health, education and knowledge, food security, income and assets, and leadership). Currently being piloted in Nepal, this approach benefits tree and forest ecosystems while ensuring that women also benefit through improved livelihoods.

PROGREEN is also ramping up activities related to the consultative processes with Indigenous Peoples, the stewards of much of the world's forest stock and biodiversity. In collaboration with the World Bank's climate and social sustainability teams, PROGREEN is co-financing with other trust funds a knowledge and consultation activity that will convene a series of stakeholder workshops toward "Understanding & Building Indigenous Peoples Resilience to Climate Shocks."

On private sector engagement and finance, the PROGREEN program management team continues to build out a coordinated program to bring value chain actors into PROGREEN landscapes in support of sustainable management. A portfolio assessment reinforced that PROGREEN support includes many examples of analytics and consultation to support market development, green financing, and sustainable value chains. In FY24, the team will establish project clusters for learning, knowledge exchange, and support to translate these analytics into partnerships and direct investment. The clusters include: five projects on ecotourism development (e.g., Argentina, Lower Mekong subregion); seven projects on accessing private finance for nature (e.g., Panama, Dominica); and six projects on value chain development and integration (e.g., India, the Maghreb region). Capacity-building at country-level will also be connected to knowledge and opportunities generated through global flagship initiatives like programs on nature-based tourism, nature-based solutions, and agriculture; and financing for forest and landscape restoration.

1.5 THE FISCAL YEAR IN REVIEW

In FY23, PROGREEN approved 15 new country and regional knowledge activities. Of the 15 country activities that were approved, four have a regional focus with cross-country collaboration within the World Bank's Western and Central Africa, Europe and Central Asia, Latin America and the Caribbean, and Middle East and North Africa regions. One is a new trilateral partnership for tropical forests between Brazil, the Democratic Republic of Congo, and Indonesia. The remaining 10 will be implemented in Honduras, Indonesia, Mozambique, Pakistan, Papua New Guinea, the Philippines, Senegal, South Sudan, Sri Lanka, and Zimbabwe. Many of these activities build on existing PROGREEN-funded work.

PROGREEN RESULTS 2021 – 2023 AT-A-GLANCE

Maintaining and improving ecosystem services in resilient production and conservation landscapes

9 completed activities

62 ongoing activities

in 53 countries

RESULTED IN:

Improved capacity and knowledge

129 knowledge products

35 tools

333 workshops, trainings, and consultations

Improved investments in sustainable and resilient landscapes

32 investment operations informed worth $6.8 billion in development finance

$5.8 billion IBRD/IDA

$551 million government counterpart funding

$514 million other financing

Improved policy environment supporting sustainable landscape management

19 policies, plans, and regulations informed

PROGREEN's co-financed operations aim to

bring 4 million hectares under sustainable forest management

benefitting 4 million people in targeted landscapes

2

Regional and Country Programs

PROGREEN supports regional and country programs through investments and knowledge activities. Country program investments are provided in the form of PROGREEN recipient-executed grants that co-finance activities within existing or planned World Bank operations, supported by bank-executed analytics, technical assistance, and consultations. Country knowledge activities are bank-executed and include analytical products, policy dialogue, technical assistance, and capacity building to support countries in strengthening their policies, practices, and actions for improved sustainable landscape management.

2.1   SUB-SAHARAN AFRICA

Sub-Saharan Africa has the lowest average income per person in the world, the fastest population growth, and the largest number of fragile and conflict-affected countries. The region also has the highest vulnerability to climate change, despite having contributed to it the least.

Although facing complex environmental challenges, African countries and their people have risen to the challenge in the fight against climate and biodiversity crises. AFR100—the African Forest Landscape Restoration Initiative—is one such example. This country-led effort aims to restore 100 million hectares of land in Africa by 2030. So far, 33 countries have signed up, including almost all PROGREEN countries in Sub-Saharan Africa.

For example, the PROGREEN co-financed project in Ghana targets the Northern Savannah Zone, a priority for landscape restoration under Ghana's AFR100 commitment of 2,000,000 hectares by 2030. Ghana's coordinating and implementing agencies for the AFR100 are the same as those implementing the PROGREEN supported activities. The three main pillars for AFR100 include establishment of forest plantations, enrichment planting in degraded landscapes, and agroforestry, all of which PROGREEN supports.

Restoration activities in World Bank projects are not carried out in isolation but rather are part of an integrated landscape management approach that includes other measures to ensure resilience, biodiversity, and sustainable livelihoods outcomes. This is illustrated in the table below that shows AFR100 targets of African countries and corresponding targets for PROGREEN-supported World Bank projects.

	Country	AFR100 Restoration Target (in hectares by 2030)	PROGREEN-Supported WBG Project Target
1	Burkina Faso	5,000,000	1,000,000 ha (land area under SLM practices)
2	Ethiopia	15,000,000	39,700 ha under Re-/Afforestation, 419,000 hectares under SLM practices and 68,000 hectares under productivity enhancing practices
3	Ghana	2,000,000	2,947,667 ha (land area under SLM practices), including 1,076,414 ha under SFM, and 2,000 ha of mine areas restored
4	Congo, Rep.	2,000,000	1,176,000 ha (land area under SLM practices)
5	Rwanda	2,000,000	37,136 ha of landscapes under SM, and 10,700 ha of land area benefiting from reduced risks of flooding

2.1.1 WESTERN AND CENTRAL AFRICA

West and Central Africa boasts a diverse array of landscapes, including expansive savannas, rainforests, the semi-arid Sahel region, vast Sahara Desert expanses, and wetlands. This shapes the region's biodiversity, livelihoods, and cultural heritage.

However, Western and Central Africa suffers from a nexus of environmental challenges, conflict, and poverty, which is evident across the Sahel region. In Burkina Faso, Chad, Mali, Mauritania, and Niger, a changing climate has disrupted traditional pastoral migration routes, leading to clashes between herders and farmers. The region is going through a period of acute fragility, with conflicts in Mali and Burkina Faso, as well as violence in Chad and Niger. This is compounded by shifting demographics, with the population of the Sahel currently projected to double every 22 years.

In **Ghana**, a PROGREEN-funded program is working to strengthen integrated natural resource management and increase benefits to communities in savanna and cocoa-forest landscapes. The Ghana Landscape Restoration and Small-Scale Mining Project is enabling participatory landscape management; promoting policies and practices to reduce destructive small-scale mining and promote more sustainable crop and forest management; and improving knowledge management. It also allocates funds towards knowledge generation. PROGREEN funds also support improving crop and forest management practices, with a geographic focus on the Western Wildlife Corridor.

During the year under review, reconnaissance surveys for sub-basin planning were completed in 118 districts in Ghana. Based on the survey findings, 10 districts and

COUNTRY PROGRAM INVESTMENTS

Table 1.   Summary of activities in West and Central Africa

Country Project Timeline	GHANA Ghana Landscape Restoration and Small-Scale Mining Project February 2022–September 2027
Implementing Agencies	Ghana Environmental Protection Agency; Ministry of Environment, Science, Technology and Innovation; Ministry of Food and Agriculture; Ministry of Lands and Natural Resources
Recipient-executed trust fund (RETF) sources (US$ millions)	International Bank for Reconstruction and Development/ International Development Association (IBRD/IDA): ....75 Global Environment Facility Trust Fund: ....12.76 Extractives Global Programmatic Support Trust Fund: ....0.60 Global Environment Facility Project Preparation Grant: ....0.27 PROGREEN RETF: 15
Country Project Timeline	SAHEL (Burkina Faso, Chad, Mali, Mauritania, Niger) Communal Climate Action and Landscape Management Project January 2023–June 2028
Implementing Agencies	Burkina Faso Ministry of Environment, Energy, Water and Sanitation
RETF sources (US$ millions)	IDA/IBRD:..113 PROGREEN RETF: 12
Country Project Timeline	REPUBLIC OF CONGO Climate-Resilient and Inclusive Livelihoods Project (ProClimat Congo) November 2023–May 2028
Implementing Agencies	Republic of Congo Ministry of Planning, Statistics, and Regional Integration
RETF sources (US$ millions)	IDA/IBRD:...70 PROGREEN RETF: 12

four sub-basins were selected for piloting ecologically focused land-use planning, including five districts (Sene West, Kwahu Afram Plains South, Kwahu South, Kwahu West, and Bosome Freho) where PROGREEN-funded nature-based solutions (NbS) will be implemented. The project has also supported the development of 353 community watershed management plans in the Northern Savannah Zone and cocoa forests. The community watershed plans were developed through extensive participatory engagement with communities, which also serves to help community members identify activities that will be funded by the project. Over 15,000 farmers were trained and an additional 20,331 farmers have been screened and verified

GHANA - Cocoa Plantation   ▼ NIGER - Fisherman in Niger river

to receive technical and financial support for implementing sustainable landscape management practices.

With PROGREEN funds, the Ghana Wildlife Division has installed EarthRanger technology at Mole National Park to obtain real-time data for improved wildlife monitoring and park management. The project also supported the establishment of 14 Protected Area Management Units to foster participatory resource management in fringe communities. The country's Forest Services Division has trained and provided resources for 466 community fire volunteers to protect fire-prone forest resources, including investments such as riparian revegetation, the establishment of woodlots, watershed planting, the establishment of green firebreaks, and restoration under the modified taungya system within nine forest reserves. (Taungya is a system that involves interplanting food crops with desirable tree crops.) These activities are undertaken with community support and effort, with women-led nurseries supplying some species of tree seedlings. Additionally, the preparation of various sectoral guidelines and regulations is advancing well in Ghana, with several stakeholder consultation workshops held so far.

The World Bank-implemented technical assistance has produced a Country Forest Note for Ghana, a Policy Brief on the country's woodfuels sector, a Note on wildfire monitoring and management options in the Northern Savannah Zone, an Overview of agroforestry-based value chains and food systems in Northern Ghana, and a note on technology options for wildlife monitoring in the Northern Savannah Zone.

The **Sahel regional program** funds investment and knowledge activities across several countries to improve collaborative ecosystem and landscape management in the region. PROGREEN is funding the Communal Climate Action and Landscape Management project in Burkina Faso to strengthen sustainable landscape management and improve income generation in targeted forest areas. In parallel, the World Bank implements a regional knowledge exchange and technical assistance activity across G5 Sahel countries—Burkina Faso, Chad, Mali, Mauritania, and Niger—to strengthen knowledge, share communication and monitoring tools on resilient landscapes, and to promote investments.

The country-led Burkina Faso project is at an early stage. Its objectives over the next few years include reducing net greenhouse gas emissions and ensuring increased monetary and non-monetary benefits from natural resources in targeted forest and adjacent communities. The project supports efforts to increase the area under sustainable land management practices and get more producers to adopt improved practices across targeted value chains while ensuring that more women producers benefit from these improved practices.

The regional knowledge component of this program aims to support the World Bank's dialogue with the Burkina Faso government through refined proposals for improving landscape-related policy, fostering multi-sectoral approaches, and understanding land restoration opportunities.

During the year under review, the regional team disseminated important findings on opportunities to deploy forest-smart mining principles and practices. A public expenditure review of the agro-sylvo-pastoral sector highlighted the impacts—and sometimes distorting incentives—of public expenditure through agricultural input subsidies, hydro-agricultural and irrigation schemes, agricultural financing on forestry and natural resources. These results will support the design and implementation of the upcoming National Agro-Sylvo-Pastoral Investment Program, which brings together the ministries in charge of agriculture, animal resources, water, and the environment.

The G5 Sahel knowledge platform team plans to support regional monitoring by: compiling notes on good practices and enabling knowledge exchanges on improved landscape management practices; identifying a digital tool for monitoring and carbon accounting; and developing and refining tools for promoting and implementing small-scale storage solutions—including rainwater harvesting in degraded areas of the Sahel—at the field level.

In **Chad**, the regional dialogue aims to improve policy and planning for multi-sectoral approaches and studying land-restoration opportunities. A guidance note was produced on the relevance of disruptive technologies such as satellites and drones for monitoring ecosystems, wildlife, water, and land degradation, and a capacity-building plan was developed to support the integration of these disruptive technologies. Other deliverables included an overview of disruptive technologies and a report on stakeholders' readiness.

In **Mauritania**, the focus is on working with the relevant ministries and institutions around the concept of integrated landscape management. A landscape management manual was developed to map different types of landscapes and their management approaches.

In the **Republic of Congo**, a PROGREEN country program investment aims to strengthen ecosystem and landscape management and enable improved livelihoods in targeted communities. While the government-led investment activity is not yet effective, its objectives include bringing protected areas under improved management for conservation and sustainable use; increasing the land area under sustainable and resilient agricultural practices; improving infrastructure availability in targeted communities; reducing greenhouse gas emissions; and ensuring improved livelihoods for beneficiaries.

The knowledge activity component of this program is also at an early stage. In FY23, the team worked to develop a project implementation manual and commissioned two studies: one study will focus on identifying landscapes to be targeted for improved landscape management and propose an institutional model to enable cross-sectoral coordination, while the second study will aim to identify agricultural approaches (including climate-smart agriculture and agroecology) that could be appropriate for

the targeted landscapes. In addition to these two studies, in FY24 the project team will work on a research study focused on ecosystem services for agriculture.

COUNTRY KNOWLEDGE ACTIVITIES

Activities completed in FY23

In **Nigeria**, PROGREEN funded a knowledge activity to enable climate-resilient landscape management practices as a part of an integrated catchment management (ICM) approach. The activity aimed to compile existing information about watershed and landscape management in Northern Nigeria; develop decision-support resources such as interactive data dashboards, story maps, portals, and web applications; and adapt these resources to the Nigerian context to guide investments around landscape planning. The project team also: organized training on these resources to improve planning of investments related to soil and water conservation and ecological restoration; developed policy recommendations regarding solar-powered irrigation; conducted research on energy-use patterns in rural Nigeria to inform future interventions; and published and disseminated (through workshops and blogs) two reports. The first report was on biodiversity in woodlots and sustainable biochar or charcoal interventions, while the second focused on the potential and challenges surrounding solar-powered irrigation compared to diesel-powered irrigation.

These PROGREEN-supported knowledge products helped to create a foundation for the World Bank investment project Agro-Climatic Resilience in Semi-Arid Landscapes both during the design and implementation phases. This work has helped to improve multi-sectoral landscape planning and management in Nigeria, especially by helping local counterparts gain insights on global best practices. In the coming years, through this project and other potential investments, it is expected that Nigeria will continue building on the knowledge generated through this project to strengthen institutional capacity on the role of technology in multi-sectoral planning and data development, so enabling future watershed/landscape planning and investments.

Ongoing activities

A knowledge activity in the **Central African Republic** is working to update the country's forest code and conduct a stakeholder mapping exercise. During FY23, the team consulted with key technical stakeholders, including representatives from the government, industry, donors, nongovernmental organizations, communities, and regional authorities. The project builds on existing work in the region with local communities who live and work near forests and will contribute towards ensuring that community voices are reflected in the country's updated forest code. During FY24, the team plans to complete a document review, conduct at least 10

SENEGAL - Thiafoura, Baobab tree

stakeholder meetings in five communities, prepare a draft forest code, and initiate stakeholder mapping.

A new cross-sectoral knowledge activity was approved in FY23 to improve soil health for agricultural productivity and landscape resilience in **West Africa**. It aims to generate new data on soil biophysics, identify measures to improve soil fertility, and understand the capacity of farmers to adopt improved soil health practices.

Similarly, in **Senegal**, a newly approved PROGREEN knowledge activity is working to improve the national government's awareness and understanding of: the impact of community forest management on landscapes; on the potential of cookstoves as a measure to tackle a key driver of forest degradation; and on the mitigation impact of better forest management.

2.1.2 EASTERN AND SOUTHERN AFRICA

COUNTRY PROGRAM INVESTMENTS

Table 2.   Summary of activities in Eastern and Southern Africa

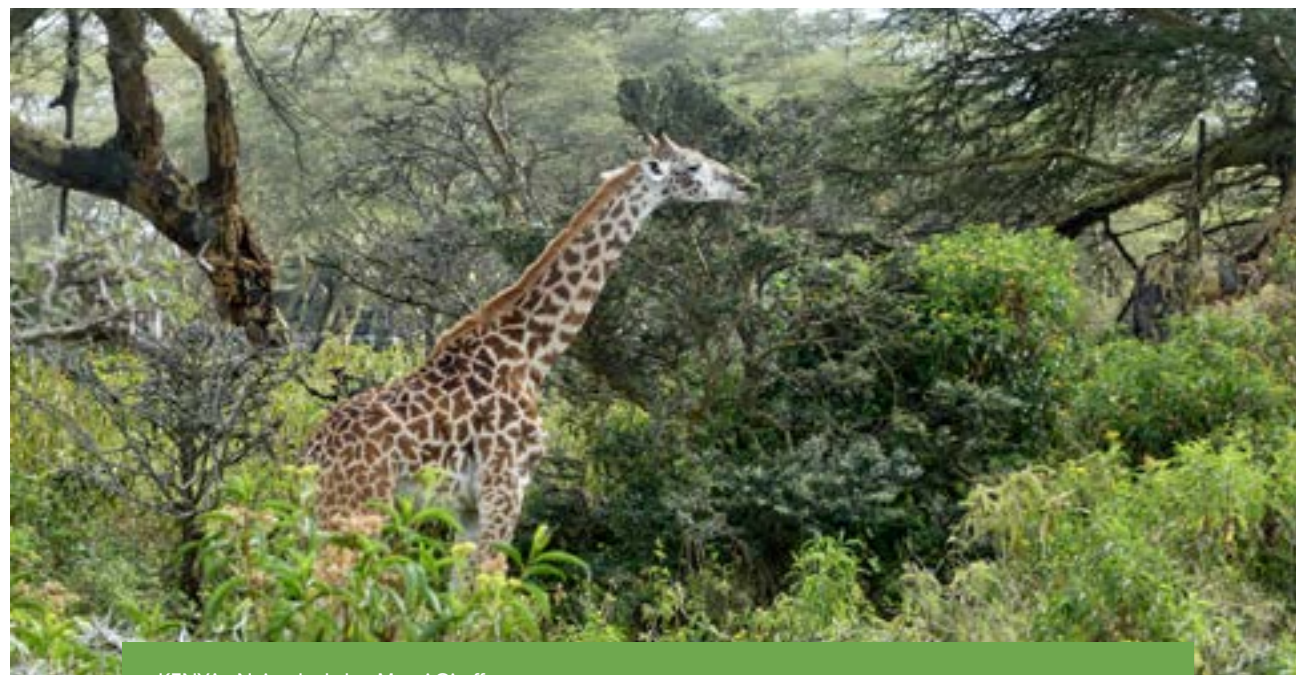|	
Country	ETHIOPIA
Project	Second Ethiopia Resilient Landscapes and Livelihoods Project
Timeline	March 2021–April 2026
Implementing Agencies	Ethiopia Ministry of Agriculture
RETF sources (US$ millions)	Green Climate Fund: .... 165.3 PROGREEN RETF: 13
Country	RWANDA
Project	Volcanoes Community Resilience Project
Timeline	December 2023 (expected)–December 2028
Implementing Agencies	Rwanda Development Board; Rwanda Environment Management Authority; Rwanda Water Resources Board; Ministry of Environment
RETF sources (US$ millions)	IDA/IBRD:..50 European Investment Bank: .... 111 PROGREEN RETF: 12

In **Ethiopia**, PROGREEN co-finances the Sustainable Land Management Program, working with the government to improve climate resilience, land productivity, and carbon storage while increasing access to diversified livelihood activities in selected rural watersheds.

The project team has made considerable progress despite continued conflict in different regions of the country delaying the implementation of several activities. Major achievements include establishing seven *woreda* (district) steering committees and technical committees, 42 *kebele* (ward) watershed teams, 42 community watershed teams, and 42 grievance redressal mechanisms. Multi-year development plans have been approved for seven major watersheds in Gambela (southwest Ethiopia) and the Southern Nations, Nationalities, and Peoples' region. Covering an area of 105,000 hectares, these plans focus on participatory forest management and buffer zone development. One central nursery has been established in each of these watersheds and more than 540,000 tree, shrub, and fruit species have been produced. The three regional project coordination units conducted training on practical aspects of soil and water conservation, reaching 473 *woreda* experts and 1,510 community members. During FY23, 256 hectares of degraded hillside areas in Ethiopia received interventions such as area closure, forest delineations, and nursery site establishment.

Alongside the government-led investment, the Work Bank team is providing technical assistance by: supporting the development of a vision and strategy for enhancing the southwest Ethiopian landscape; conducting research on the potential of ecotourism; improving the management of green corridors between protected areas; and strengthening the monitoring of interventions working towards ecosystem resilience.

A PROGREEN country program investment was approved for **Rwanda** in FY23, building on an existing PROGREEN knowledge activity. The objectives of the Volcanoes Community Resilience Project are to reduce the risk of flooding, strengthen land management, and improve livelihoods of people the volcanoes region of Rwanda. PROGREEN will support components relating to landscape restoration, catchment management, project management, knowledge management, and capacity building. In particular, the focus will be on increasing the number of people in targeted landscapes who benefit from improved livelihoods by bringing 425 hectares of terrestrial land area and 10,850 hectares of production system land under improved management. To achieve this, the project will enable more households to adopt sustainable, resilient, and climate-smart land management practices; prepare an ecological restoration plan for this region; reduce greenhouse gas emissions in targeted landscapes; and restore an additional 277 hectares of wetlands while bringing 710 hectares of wetland buffer zone under improved management.

The knowledge activity component of this country program investment will commence in January 2024. Discussions were organized with stakeholders including the Virunga Transboundary Commission and the Center of Excellence in Biodiversity and Natural Resource Management to improve collaboration through the implementation of the activity.

KENYA - Naivasha Lake, Masai Giraffe

COUNTRY KNOWLEDGE ACTIVITIES

Activities completed in FY23

Burundi's PROGREEN-funded knowledge activity ran from July 2021 to December 2022 and closed in FY23. The activity identified drivers of fragility in *colline* (hill) landscapes as well as avenues to scale up landscape restoration and climate resilience. This project focused on three objectives: diagnosing the major drivers of fragility at the landscape level in Burundi's *colline* landscapes; informing a multi-sector investment plan to address these drivers; and mobilizing resources for climate resilience.

A joint report by the World Bank and the Government of Burundi on climate fragility was published, along with two technical reports (a report on multi-risk hotspot mapping and an overview of land degradation). The joint report on climate fragility, "Diagnosing Drivers of Climate and Environmental Fragility in Burundi's Colline Landscapes: Towards a Multi-Sector Investment Plan to Scale up Climate Resilience", focuses extensively on understanding how climate and conflict affect vulnerable groups. It included the outcomes of a fragility risk mapping exercise, which found that 98 percent of Burundians are socioeconomically vulnerable to climate change impacts; 41 percent are highly exposed to multiple climate and conflict hazards; and nearly 99 percent lack the required coping ability to withstand climate change impacts such as droughts, floods, and landslides. In addition to these knowledge products, three interactive online platforms (an e-book, a story map, and a digital knowledge platform) were developed to engage civil society, governments, and other stakeholders. Four sample *colline*-level climate action plans were also developed and will be scaled up as part of a new nationwide operation.

This engagement has informed the design of a new World Bank operation that focuses on developing targeted measures to scale up the restoration of degraded landscapes in Burundi along with strengthening community and institutional resilience.

In **Zimbabwe**, a knowledge activity promoted nature-smart and sustainable land management practices for enhanced biodiversity and climate resilience in production landscapes. Between March 2021 and September 2022, the country team completed three major activities.

First, it provided an overview of the ecological and socioeconomic characteristics of the Mazowe catchment, recommending interventions that could ensure the continuous delivery of the catchment's ecosystem services. The report, "Mapping and Valuing Ecosystem Services for Sustainable Landscape Management in Zimbabwe", recommended strengthening community-supported agriculture to improve productivity and resilience; investing in sustainable landscape management to restore ecosystem health; and designing and piloting climate-smart agriculture for ecosystem services.

Second, through stakeholder engagement, the country team is now a member of the National Agriculture Policy Framework working group on resilience. The team worked collaboratively with development partners including the Swiss Agency for Development and Cooperation; the Swedish International Development Cooperation Agency; the Foreign, Commonwealth and Development Office (FCDO) of the United Kingdom; and the European Union.

Third, the country team enabled the dissemination of digital climate advisory services for increased productivity and enhanced resilience to about 20,000 farmers. With further support from the FCDO, digital climate advisory services coverage was extended to 90,000 additional farmers in the Mwenezi and Rushinga districts. This project also enhanced the technical capacity of Zimbabwe's Department of Agricultural, Technical and Extension Services to disseminate information electronically by developing three tools: a Global Program on Sustainability module for identifying the location of farmers' plots for weather forecasts; a geospatial module for web visualization of farmlands and land uses; and an SMS module for advisory dissemination.

Building on the success of this activity, in FY23 PROGREEN approved a new knowledge activity for Zimbabwe. This activity aims to nationally disseminate the findings of the Zimbabwe Country Climate and Development Report (CCDR), including the findings on agriculture's contribution to land degradation; identify opportunities to reduce degradation through climate-smart agriculture; and pilot participatory natural resource planning to balance the objectives of agriculture and mining with the provision of ecosystem services.

Ongoing activities

In **Kenya**, PROGREEN supports the Water and Sanitation Services Improvement Project, which evaluates stakeholders' incentives and capacity and develops new financing mechanisms and tools for improved landscape management and NbS in priority ecosystems. The project's objectives include: mapping stakeholders' capacity to invest in national land and watershed restoration and NbS; understanding stakeholder incentives for sustainable land planning and landscape restoration; and developing a roadmap for improved technology to enable the management and monitoring of landscapes.

In FY23, the project team published a note outlining the natural storage capacity of Kenya's two main water towers (the Aberdare mountain range and Mount Kenya) and identifying opportunities to enhance storage capacity and reduce soil degradation and erosion while promoting local livelihoods. A workshop and a technical meeting were organized to develop an approach to implementing the Water and Sanitation Services Improvement Project, a joint project by the World Bank and the Government of Kenya in collaboration with counterpart agencies including Kenya's NETFUND (National Environment Trust Fund) and the World Bank's Water Global Practice. NETFUND has established a technical working group with relevant national

and local-level agencies. The World Bank team is supporting NETFUND's efforts to define the roles of local stakeholders such as county agencies, communities, and individuals so that they can effectively participate in and support landscape restoration and watershed management.

In **Lesotho**, PROGREEN funding enabled improved ICM practices. Work focused on three main pillars: strengthening governance and incentive structures; developing green and resilient road infrastructure; and building partnerships and a knowledge base.

To strengthen governance and incentive structures, a study on networks and the institutional framework helped to identify relevant stakeholders, existing cooperation, and capacity needs pertaining to ICM. The study enabled greater understanding of the role of the national ICM Coordination Unit and the dynamics of cooperation among stakeholders. A report was published outlining these findings.

MADAGASCAR - Nosy Iranja

RWANDA - Akagera National Park

Activities pertaining to green and resilient road infrastructure sought to improve the Roads Directorate and ICM Coordination Unit's understanding of the climate change risks and vulnerabilities that Lesotho's road infrastructure poses on catchments, as well as possible adaptation and risk mitigation measures. The activity culminated in the publishing of a report with an environmental vulnerability assessment of road transport in identified catchment areas.

The work on partnerships and knowledge focused on identifying and training a selection of ICM champions on adopting an ecosystem services approach to land management. This training has led to additional engagements with the World Bank's Biodiversity, Ecosystems, and Landscape Assessment (BELA) initiative, which helps countries design resilient investments through ecosystem service assessments. This work complements ongoing efforts by Lesotho's Ministry of Water to develop natural capital accounts.

In **Madagascar**, a PROGREEN knowledge activity is identifying opportunities to reduce biodiversity threats and manage the demand for water in agricultural landscapes through an integrated landscape approach. Over the past year, the team conducted initial research to measure biodiversity threats and water demand in productive agricultural landscapes. The results contributed to the Country Environmental Analysis and enabled the development of an ecosystem index to measure ecosystem resilience.

The knowledge activity also supported the implementation of five World Bank investment operations, including by advising the National Parks management agency on evaluating the economic contributions of ecotourism and applying LEWIE-lite techniques to improve tourism revenues to benefit local economies. This work also informed the development of landscape management plans of the Alaotra-Mangoro landscape, and the Ankarafantsika, Ranomafana, and Andapa National Parks. Research findings were presented at several consultations and workshops, at the national and local levels. An ArcGIS StoryMap was developed in collaboration

with another research project to identify possible biodiversity management alternatives for a large-scale investment project.

In **Mozambique**, a new knowledge activity has been approved to facilitate the implementation of measures to build resilience in Mozambique's food production and reduce deforestation with an emphasis on sustainable, integrated land management, and the adoption of climate-smart agriculture approaches. The project aims to achieve this objective by: supporting coordination to launch a regional initiative to protect the Miombo Forest; providing an overview of the drivers of deforestation in the Zambezia province; and assessing the potential for climate-smart agriculture to develop a climate-resilient and forest-smart food system.

In **Rwanda**, a PROGREEN-funded project is working to identify, design, and evaluate incentive mechanisms for improved landscape management and NbS in the Congo-Nile Ridge landscape. This work will include developing management plans for the target landscape and studying incentives and mechanisms to improve financing for sustainable landscape management and NbS. During the year under review, the World Bank team organized initial stakeholder consultations to develop an approach to the project. In FY24 the team will focus on stakeholder mapping and engagement; developing recommendations to update the 10-year management plan for the Gishwati-Mukura National Park; and developing a roadmap for identifying, designing, and evaluating policy and financial instruments for landscape management and NbS.

In FY23, a new project was approved to generate data on South Sudan's forests and wildlife sectors to inform government policies and World Bank operations in the country. The project will assess existing forest resources and development potential, including protected areas and wildlife, by updating existing remote-sensing data and resource maps. Co-financing from PROBLUE will improve knowledge about fisheries and wetlands-based livelihoods in the country.

2.2 MIDDLE EAST AND NORTH AFRICA

Water scarcity is the dominant vulnerability when considering the impacts of climate change and nature loss in the Middle East and North Africa region. Eighty-four percent of land in the region qualifies as desert, while 3.5 percent is cropland. Water bodies comprise only 0.3 percent and forests a mere 0.2 percent of the region's land. Indeed, the Middle East and North Africa is the world's most water-stressed region and is estimated to require an additional 25 billion cubic meters of water a year by 2050. Adverse health and productivity, desertification, and migration are associated these environmental conditions.

PROGREEN's support in the Middle East and North Africa region focuses on sustainable forest and fire management in Algeria and Lebanon and oasis landscape management in Morocco, Tunisia, and Egypt.

COUNTRY PROGRAM INVESTMENTS

Table 3.   Summary of activities in Middle East and North Africa

Country	MOROCCO
Project	Morocco Climate Operation/Support to the Nationally-Determined Contribution (NDC)
Timeline	September 2023–June 2028
Implementing Agencies	Caisse Nationale de Sécurité Sociale ; Agence pour le Développement Agricole ; Ministère de la Transition Energétique et du Développement Durable; l'Agence Nationale des Eaux et Forêts; Ministère de l'Agriculture, de la Pêche Maritime, du Développement Rural et des Eaux et Forêts; Direction Générale de la Météorologie; Ministry of Economy and Finance; Ministère de l'Équipement et de l'Eau; Agence Nationale de Développement des Zones Oasiennes et de l'Arganier
RETF sources (US$ millions)	IDA/IBRD:...350 PROGREEN RETF (additional financing):..12

In **Morocco**, PROGREEN plans to support the US$350 million Morocco Climate Operation/Support to the Nationally-Determined Contribution (NDC) Payment for Results (PforR) program, which has the objective of strengthening institutional capacity to implement Morocco's NDC commitments and enhance the climate resilience of targeted vulnerable groups and ecosystems. PROGREEN support will focus on Pillar 2 of the program, "Enhancing Resilience and Inclusion in Vulnerable Rural Areas", with a focus on oasis rehabilitation. This includes support for vulnerable farmers and agricultural workers; innovation in agroecological approaches; the

rehabilitation of oasis landscapes (with a focus on the valley of Aoufouss); reforestation for watershed protection; and forest-fire management.

PROGREEN will develop innovative oasis landscapes protection and restoration activities in the Aoufouss region, to be scaled up in other parts of the country. The program includes piloting innovative payments for ecosystem services (PES) and NbS for green jobs and rural resilience, targeting vulnerable communities and households, and the institutional strengthening of key agencies such as the Agence Nationale de Développement des Zones Oasiennes et de l'Arganier (National Agency for Development of Oasis and Argan Areas).

MOROCCO - Oasis, High Atlas

COUNTRY KNOWLEDGE ACTIVITIES

Ongoing activities

In **Algeria**, PROGREEN support is helping to strengthen sustainable landscapes planning and management with a view to strengthening the country's forest-fire management system (which is part of its climate and disaster risk management system). Although forests and trees cover less than 1 percent of Algeria's land mass, forest fires are one of the three biggest threats to lives, property, and economic

activity. Forest fires in Algeria are on the rise and are becoming increasingly intense, exacerbated by hotter temperatures and other climate-induced drivers. Between 2010 and 2019, Algeria recorded nearly 3,000 fires, burning an area equivalent to about 30,000 soccer fields each year.

This engagement focuses on providing the Government of Algeria with an accurate assessment of the status of the national forest and direction on how to integrate sustainable landscape and forest fire management. The activities were designed to help mitigate and adapt to climate change while addressing forest fire risks.

Almost all activities have been successfully completed since the start of the project in December 2021. In FY23, the PROGREEN team and the National Delegation for Major Risks (part of Algeria's Ministry of Interior, Local Authorities and Regional Planning) initiated a range of technical assistance-related activities. By the end of FY23, six analytical products on sustainable forest management had been produced to inform decision-making. The technical assistance also created opportunities to share knowledge and hosted online training sessions on: the experiences of the Forest Fire Defense Service and the National Forestry Office in the French Mediterranean region; the classification of causes of forest fires; and the use of mapping, remote sensing, and data-management tools.

Government of Algeria counterparts have finalized a note on sustainable forest management to combat forest fires, which will be jointly published by the World Bank, the General Directorate of Forests, and the National Delegation for Major Risks in early FY24. This forest note will highlight the role of forest ecosystems in climate change mitigation and adaptation and underscore the way healthy forest ecosystems can build resilience to the impacts of climate change.

Across **Morocco, Tunisia, and Egypt**, PROGREEN supports a World Bank-executed knowledge-sharing platform that aims to provide decision-makers with information, evidence, and economic valuation on the fiscal and employment benefits of investing in sustainable oasis landscapes management.

A million people live in oasis landscapes in Tunisia. Increasing pressures on natural resources in oases pose threats to economic growth, especially in key sectors such as agriculture and tourism. Oasis landscapes are facing threats that reduce or impede ecosystem functioning and essential ecosystem services. These threats arise from a combination of climate change, agricultural expansion, unsustainable agriculture practices, overexploitation and a rapid decline of water resources, loss of biodiversity, knowledge gaps, weak planning processes for landscape management, weak institutional capacities to implement landscape management, and low stakeholder participation. This World Bank-executed grant aims to inform nature-based recovery in the oasis and ecotourism sectors, as well as increase knowledge-sharing and strengthen dialogue across Maghreb countries.

In May 2023, a regional workshop brought together stakeholders from Morocco, Tunisia, and Egypt to chart a path to improving the management and sustainability of historical oases. A series of reports focusing on carbon sequestration and the potential for green jobs in Tunisia's oasis landscapes has since been prepared and presented to stakeholders—including the Ministry of Environment, various public entities, the private sectors, and civil society—for final consultation.

To strengthen the capacity of oasis stakeholders across the three countries, PROGREEN supports a capacity- and awareness-raising program for national and local institutions, practitioners, technicians and policymakers, community leaders, civil society organizations, and women's groups. As part of this program, a regional consultation workshop hosted in Tunisia in May 2023 provided a venue for discussing the landscape approach and integrated local planning, landscape labeling, product certification, and value chain development.

In **Lebanon**, PROGREEN helps the Government of Lebanon prepare strategies to improve forest fire management as part of sustainable forest landscape management. Thirteen percent of Lebanon is covered by forests, more than 50 percent of which is privately owned. Despite having the most vegetation out of all Middle East and North Africa countries, land degradation has been a serious environmental problem in Lebanon, resulting in losses of about US$132 million each year.

With PROGREEN's support, Lebanon's Ministry of Environment, Ministry of Agriculture and the Disaster Risk Management Unit of the Office of the Prime Minister published a forest note, "Reducing Wildfire Risk through Sustainable Forest Management", in October 2023. This forest note focuses on forest and tree resources, forest governance, institutions and stakeholders, challenges (with focus on forest fires) and areas for improvement.

To support the development of the forest note, a capacity needs assessment and stakeholder analysis were also completed to identify gaps in public awareness around the National Strategy for Forest Fire Management. Policy notes on sustainable forest management and forest-fire management were also developed for specific legislative applications.

In addition to the above publications, a data-and-needs assessment was completed to support the development of a forest-fire information management system. The assessment results and a roadmap for improvement were shared with government counterparts at a workshop in June 2023. While many stakeholders already use GIS (geographic information systems) to analyze trends, frequent electricity and internet disruptions in Tunisia can cause system outages. Data improvement would help sustainable forest management in Lebanon, but without resolving wider cross-sectoral development issues such as electricity and internet outages, the forest sector will not be able to routinely and systematically use data and GIS tools.

2.3 SOUTH ASIA

South Asia is one of the most biodiverse regions in the world, home to almost 15.5 percent of the world's plant species and 12 percent of the world's animals. Its ecosystems range from low-lying coastal wetlands and semi-arid areas to evergreen forests and temperate-alpine regions. At the same time, it faces myriad challenges related to landscapes, ecosystems, climate change, and biodiversity.

In **Nepal**, forest landscapes and ecosystems face threats from climate change, economic activities that drive deforestation, grazing, and illegal firewood collection, and forest fires. In the Ganges-Brahmaputra-Meghna river basin of India, tropical forests are declining due to overharvesting and flooding caused by land-use changes and upstream deforestation. The forest landscapes of the Chittagong Hill Tracts ecoregion in Bangladesh are also under pressure from degradation, agricultural land-use change, and lack of coordination between government agencies and local communities. In Pakistan, intense monsoon rainfalls lead to super floods, worsened by land degradation, deforestation, soil erosion, and overgrazing.

Despite these challenges, South Asian countries are committed to a green, resilient, and inclusive growth and development model that involves strengthening the systemic resilience of rural landscapes to adapt to climate change, support livelihoods, and ensure food security. PROGREEN supports these objectives through investments, knowledge production and transfer, technical assistance, and policy dialogue in Nepal, India, Bangladesh, Pakistan, and Sri Lanka. These activities are described in greater detail below.

PROGREEN supports integrated forest landscape management in Nepal by co-financing the Forests for Prosperity Project. The project aims to improve sustainable forest management by increasing benefits from forests and reducing greenhouse gas emissions in selected municipalities in Nepal's Madhesh and Lumbini provinces. In its initial years, the project suffered delays due to the COVID-19 pandemic and changes in government personnel. However, project activities are now well under way, with the recipient-executed portion of PROGREEN's support on track to be processed as supplemental financing for the Forests for Prosperity Project in late FY24.

PROGREEN co-financing will help scale up and expand the Forests for Prosperity Project. New activities that will be covered are:

- Governance-related activities, including improved coordination among different implementing agencies
- Forest fire management and prevention
- Support for the national forest inventory
- Value chain development for products from community forests
- Capacity development for local government and municipalities

- The introduction of environmental management activities to address pressure from agriculture on forested landscapes. Such activities might include land-saving technologies, measures to control soil erosion, activities to improve feeding systems and the application of the One Health approach, and climate-smart agriculture through a matching grant approach.

- Technical assistance on development loan packages and business-development services for forest-based SMEs.

COUNTRY PROGRAM INVESTMENTS

Table 4. Summary of activities in South Asia

Country **Project** **Timeline**	NEPAL Forests for Prosperity Project July 2020–September 2025
Implementing Agencies	Nepal Ministry of Forests and Environment
RETF sources (US$ millions)	Strategic Climate Fund: ....24 PROGREEN RETF (additional financing):...12
Country **Project** **Timeline**	INDIA Transformational Restoration for Ecological and Economic Development October 2024–June 2029
Implementing Agencies	(Upcoming)
RETF sources (US$ millions)	IDA/IBRD:..400 PROGREEN RETF: 7
Country **Project** **Timeline**	INDIA Enhancing Landscape and Ecosystem Management Project November 2024 (expected)–January 2029
Implementing Agencies	Government of Tripura, Government of Nagaland, Ministry of Development of North Eastern Region
RETF sources (US$ millions)	IDA/IBRD:..242 PROGREEN RETF: 2.4

The following activities were reported in Nepal in FY23:

- The PROGREEN Landscape Governance Assessment Tool was applied to target landscapes in conjunction with the federal and provincial partners. The assessment provided a baseline for the status of governance in these landscapes and helped to identify pathways to strengthen landscapes governance going forward.

- The W+ Standard for women's empowerment was introduced in Nepal's Lumbini and Madhesh provinces. Training sessions on the W+ Standard were delivered and a women's exchange visit was held.

- Multiple provincial and national consultations were conducted to validate findings on the capacity needs of implementing agencies and other stakeholders in the forest landscapes program. In response, knowledge exchanges, capacity building workshops, and consultations focused attention and learning on customary and forest area tenure, water, agriculture and forest nexus, and integrated landscape approaches.

In **India**, a new investment operation was approved that builds on the work of the PROGREEN-funded knowledge activity, "Strengthening the World Bank's Programmatic Engagement in Terrestrial Landscapes in India". The new investment operation, "Transformational Restoration for Ecological and Economic Development", aims to reduce land degradation, build climate resilience, and conserve wildlife at priority landscapes within the Ganges-Brahmaputra-Meghna river basin. PROGREEN is contributing to this project by providing inputs on the design and operationalization of a PES scheme, implemented in concert with a large PforR program. Investment pilots focusing on landscape restoration will consider ecologically at-risk areas. Activities will include PES monitoring, reporting and verification; multi-year community-based watershed planning; capacity building of forest departments and district level officials and communities; and forest management, afforestation, and reforestation. Along with on-the-ground investments, the World Bank will assess the feasibility of a PES scheme for watershed protection, carbon sequestration, and/or biodiversity protection in India; estimate conservation-aligned livelihood opportunities in the buffer zones of protected areas; and options for climate and nature financing instruments to mobilize supplementary resources for watershed and landscape restoration.

Still in India, PROGREEN is supporting knowledge activities to strengthen engagement on management of terrestrial landscapes and resilience of farmers. In FY23, PROGREEN financed analytical work on improving private sector engagement in the forestry sector and developing pathways for value chains and high-value forest products (such as agar and bamboo) in Northeast India. The country team developed an action plan for sustainable landscape management that is informing two new investment operations, the Enhancing Landscape and Ecosystem

Management (ELEMENT) and Transformational Restoration for Ecological and Economic Development (TREE-D) projects. The work is also informing upstream investment planning through inputs to India's Country and Climate Development Report, expected to be published in FY24.

Also in FY23, PROGREEN initiated analytical work to support the Himachal Pradesh Horticulture Development Project in India. The activity aims to strengthen dialogue and counterpart engagement with the agricultural sector to improve the resilience of farmed environments in the state of Himachal Pradesh. PROGREEN support focuses on: developing evidence-based policy and policy tools for agricultural and horticultural sectors; evaluating the environmental impacts of farming; producing data on rice and livestock production; understanding the costs and benefits of agri-environmental measures; and mapping the feasibility of reverse-auction program design.

COUNTRY KNOWLEDGE ACTIVITIES

Activities completed in FY23

In FY23, PROGREEN completed its knowledge program in Sri Lanka, which aimed to inform the upstream planning and green design of transportation infrastructure, and to inform forest landscape strategies to minimize forest fragmentation

and degradation. PROGREEN supported technical assistance that advanced and facilitated policy dialogue between environment and infrastructure agencies; strengthened institutional collaborative arrangements between environmental and transport agencies; and informed key policies and lending programs. The main outcomes included improved coordination between relevant stakeholders; environmental and climate vulnerability assessments; and the development of a collaboration mechanism and technical guidelines for addressing biodiversity conservation and climate resilience issues in Sri Lanka's transport sector. The planned activities were implemented in full and have informed Sri Lanka's Transport Connectivity and Asset Management Project and Inclusive Connectivity and Development Project, which together account for more than US$625 million in financing. The activities have also informed the country's code of conduct for integrating forest landscapes and hazard resilience approach to transport infrastructure planning and implementation in Sri Lanka. The landscape approach promoted by the activity was communicated through two World Bank blog posts: "Green, Resilient, and Inclusive Development in Sri Lanka" and "Sri Lanka Can Achieve a Greener and More Prosperous Future."

Ongoing activities

In **Bangladesh**, PROGREEN is supporting the government and local communities to sustainably manage target landscapes in the Chittagong Hill Tracts with the aim of restoring ecosystem services while increasing socioeconomic benefits. PROGREEN

INDIA - Yamuna River

activities are informing the Sustainable Forests and Livelihoods Project, which works with the Bangladesh Forest Department to restore degraded forest ecosystems and conserve biodiversity. The main activities are landscape-level planning exercises in key targeted landscapes. The resulting landscape management plan includes assessments of the institutional and policy framework, community outreach, and analyses of land-use options.

In FY23, PROGREEN supported the development of a Landscape Management Plan for Reinkhyong Reserved Forest in close consultation with local communities and authorities, including regional and district councils, and the Bangladesh Forest Department. Three policy briefs were also shared (on sustainable landscape management; community engagement; and sustainable financing of the forestry sector). PROGREEN further contributed to a methodology for ecosystem valuation for natural capital accounting. A strategic planning system for the coastal greenbelt zones in Bangladesh is also in progress. The development of the three workstreams (natural capital accounting, the Systematic Country Diagnostic/Country Partnership Framework, and NbS) during the year involved 10 workshops, one training, and 25 meetings with almost 250 stakeholders.

In **Pakistan**, PROGREEN is supporting analytical work to address the lack of evidence-based restoration policy and support financing decisions. PROGREEN is supporting an ecosystem assessment and landscape restoration framework that involves mapping restoration opportunities, economic modeling, stakeholder prioritization, and finance analysis. The work focuses on rangelands and forests, including mangroves, to identify the most important ecosystem services, drivers of degradation, and options for better management. These activities—which are informing the national Ten Billion Trees Tsunami initiative to restore and enhance more than a million hectares of forests across the country—include coordination among key agencies such as the Ministry of Climate Change and Environmental Coordination, provincial departments of forests, and the country's Planning Commission.

By the end of FY23, an ecosystem services assessment and a cost-benefit analysis of opportunities for restoration in Pakistan were near completion. Government and civil society consultations are ongoing, after which a landscape restoration strategy will be developed. These outputs will be mainstreamed into high-level government strategy and policy. So far, these outputs have informed Pakistan's Post-Disaster Needs Assessment and the Resilient Recovery, Rehabilitation, and Reconstruction Framework in response to the Pakistan floods of 2022, as well as the National Adaptation Plan. They are also informing the design of PES initiatives under the World Bank's Sindh Flood Emergency Rehabilitation Project and watershed restoration priority areas under the upcoming Improving Water Management and Irrigation Systems in Punjab project.

2.4 EAST ASIA AND THE PACIFIC

Natural resources are significant economic drivers in the East Asia and the Pacific region, providing communities with jobs, food, economic growth, and resilience. However, over-exploitation of natural resources has resulted in deforestation, environmental degradation, and biodiversity loss in many countries.

The Lower Mekong subregion is home to critically important ecoregions and rich biodiversity, but the forest landscapes in the region are becoming more fragmented and degraded, in part due to the dependence of nearly 80 percent of the rural population on agriculture and wood fuel for cooking. Another key challenge in the region is the issue of land rights and security of tenure, with weak or conflicting legal frameworks and inconsistent implementation perpetuating marginalization, vulnerability, and poverty.

PROGREEN supports countries to address these challenges and improve the management of protected areas and forest fires using integrated landscape approaches. Countries supported with knowledge activities supported by PROGREEN include Indonesia, Vietnam, Lao People's Democratic Republic (PDR), China, the Philippines, Thailand, and Cambodia.

LAOS - Vang Vieng

COUNTRY KNOWLEDGE ACTIVITIES

Ongoing activities

In the Lower Mekong subregion, PROGREEN supports **Lao PDR, Thailand, Vietnam, and Cambodia** to transition towards green growth and participatory, integrated approaches for forest landscape management. The supported activities are advancing dialogue on policy solutions for regional economic development, cross-border landscape management, the promotion of innovative technologies, and regional cooperation on critical value chains such as ecotourism and forest plantations.

On tenure security, PROGREEN is supporting the development of country action plans that enhance the recognition and formalize land rights in the forest areas of **Indonesia, Lao PDR, and the Philippines**. In Lao PDR, the country action plan will likely focus on implementing national laws that allow for the issuance of land-use certificates and rights for different purposes in state forests. In Indonesia, the country action plan will likely focus on scaling up activities under a World Bank operation on land administration and spatial planning that is under preparation. In the Philippines, the country action plan will probably inform procedural mechanisms concerning overlapping tenure claims and methods for securing tenure rights of non-agrarian reform beneficiaries and Indigenous Peoples occupying forest lands. A regional conference on the recognition and formalization of land rights in forest areas will be held in the Philippines in February 2024, once the action plans for these three countries have been finalized.

In addition to the country action plans, PROGREEN is supporting **the Philippines** with land tenure assessments; reports on collective titles overlapping with ancestral domains and lands; recommendations for legal and regulatory frameworks; and enhancements to forest land-use plan guides to clarify tenure rights in forest landscapes. This analytical work is being conducted in connection with the World Bank Support to Parcelization of Lands for Individual Titling (SPLIT) Project. So, even though PROGREEN is not currently co-financing large investment projects in the region, the analytics and knowledge products are influencing and adding value to investment projects.

In **China**, PROGREEN is helping to deepen knowledge of integrated landscape management approaches that draw on effective and participatory ecosystem conservation and enhance sustainable livelihoods in Chinese protected areas. A technical report on global best practices for enhancing the effectiveness of China's protected area governance has been produced, identifying gaps and making recommendations for improved planning and management. Additionally, guidance reports for reconciling conservation and development conflicts at the national and local level, restoring China's protected areas, and benefit-sharing mechanisms for protected area management have been drafted. These products are informing two upcoming World Bank lending operations: the Yellow River Basin Ecological Protection and Environmental Pollution Control Program and the Sustainable

Ecosystem Restoration and Biodiversity Conservation Project. The reports will be finalized based on stakeholder input. Advocacy with national policy makers and experts will be carried out through biodiversity platforms.

In **Thailand**, PROGREEN support aims to reduce forest fires in nine provinces in Northern Thailand by introducing participatory policy approaches, community-based fire management practices, and disruptive technologies to effectively reduce forest fires in high-risk areas. Highland farmers in the targeted forests rely on maize production and scavenged forest products as their main income streams. PROGREEN activities initiated during the year under review include an assessment of cost-effective practices and value chains, and developing a wildfire risk map and a management information system. The team engaged with key stakeholders through a project launch workshop hosted by the Department of National Parks, Wildlife and Plant Conservation, and a regional launch workshop with governors of the nine northern provinces in May 2023. Site visits to understand current forest fire monitoring systems and to develop the risk map were also undertaken.

THAILAND - Mangrove forest, Phuket

2.5 EUROPE AND CENTRAL ASIA

The Central Asia region continues to face growing challenges due to intensifying climate and biodiversity crises. Drought, flooding, heat waves, and forest fires have become more frequent. Other environmental pressures include mountainous landscape degradation due to deforestation and soil erosion; changing water balances linked to the drying of the Aral sea; and resource-intensive production with increasing urban pollution.

Climate change exacerbates these challenges by negatively impacting water-energy-land systems. Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan are all highly vulnerable to climate change impacts. Land degradation is particularly prevalent in border areas, increasing vulnerability to acute regional externalities. These border areas also demonstrate high poverty and unemployment. Sandstorms from the Aralkum desert (formed by the shrinking Aral sea) have led to soil degradation, desertification, and are causing poor health and the loss of livelihoods for surrounding communities.

The terrestrial ecosystems of Central Asia provide important ecological services for economic growth and play a leading role in sustaining the wellbeing of rural communities. However, unfavorable natural conditions, combined with past policy failures (that encouraged land conversion to commercial agriculture, and intensification instead of efficient and sustainable agricultural practices) have led to land degradation, erosion, and loss of vegetation cover. Consequently, livelihoods and food security have eroded, and emissions from land use change and landscape degradation have intensified. Across the Central Asian countries, the number of climate migrants is projected to reach between 1.6 and 2.4 million by 2050.

COUNTRY PROGRAM INVESTMENTS

Table 5.　Summary of activities in Central Asia

Country Projects	KAZAKHSTAN Kazakhstan Resilient Landscapes Restoration Project PROGREEN Kazakhstan Resilient Landscapes Restoration Project
Timeline	July 2021–September 2025
Implementing Agencies	Ministry of Ecology, Geology, and Natural Resources; Forestry and Wildlife Committee
RETF sources (US$ millions)	GEF Trust Fund: ....4.34 PROGREEN (additional finance): 2

Country Project Timeline	UZBEKISTAN RESILAND CA+ Program: Uzbekistan Resilient Landscapes Restoration Project February 2024–September 2028
Implementing Agencies	Uzbekistan Forestry Agency
RETF sources (US$ millions)	IDA/IBRD: ....142 Korea World Bank Partnership Facility (KWBP) Trust Fund: ....3 PROGREEN: 8

Country Project Timeline	KYRGYZ REPUBLIC RESILAND CA+ Program: Kyrgyz Republic Resilient Landscape Restoration Project November 2024 (expected)–January 2029
Implementing Agencies	Ministry of Emergency Situations
RETF sources (US$ millions)	IDA/IBRD: ....45 KWBP Trust Fund: ....2.4 PROGREEN: 5

The PROGREEN **Central Asia** program was designed to help countries transition to a new plateau of sustainability by providing incentives, training, and knowledge to encourage action by governments, communities, and the private sector, which has a role to play in investing in landscapes. The program is currently implementing technical assistance and capacity-building activities by supporting the Central Asia Climate and Environment (CLIENT) program. This program covers several Central Asian countries including Kazakhstan, the Kyrgyz Republic, Uzbekistan, Tajikistan, and Turkmenistan. PROGREEN is also co-financing projects in Uzbekistan, Kazakhstan, and Kyrgyz Republic as part of the Central Asia RESILAND Resilient Landscapes Restoration Program. The CLIENT and RESILAND programs work in tandem, and PROGREEN's support will benefit local stakeholders by informing policymaking, guiding investments, and promoting sustainable practices.

The CLIENT program promotes the adoption of policies and approaches that support green and resilient growth in Central Asian countries by strengthening countries' capacity to estimate the economic value of resilient drylands and mountains and implement climate-resilient integrated landscape management. During FY23, PROGREEN supported the CLIENT program to: produce findings on sustainable rangeland management in Kazakhstan and water-agriculture-forests in Uzbekistan; draft action plans on urban tree management; and draft reports on topics ranging from Uzbekistan's green economy to the monitoring, reporting, and verification of emissions in agriculture and land use, land-use change, and forestry

KYRGYZ REPUBLIC, Song-Kul Lake

(LULUCF) sectors across the region. The CLIENT team also: held webinars, presentations, and side events, (including at COP27, the UN Water Conference, and the United Nations Forum on Forests); led workshops on urban landscape restoration in Kazakhstan and natural resources and climate for youth in Tajikistan; and facilitated regional dialogue. Following these activities, the Minister of Finance of Uzbekistan has prioritized resilient landscapes for the green transition, and Almaty, Tashkent, and other cities in Central Asia are prioritizing urban forests to combat pollution. Similarly, the focus on youth and education has spurred collaboration with the Education Global Practice within the World Bank, and ministries of education are now considering adding climate change landscape restoration to their curricula.

In **Kazakhstan**, PROGREEN supported the Kazakhstan Resilient Landscapes Restoration Project to increase the resilience of carbon sinks (in line with Kazakhstan's carbon neutrality commitments) and support the president's commitment to plant two billion trees by 2025. The project was approved in June 2023.

Communities adjacent to protected areas and transboundary corridors in the targeted landscapes are being provided with sustainable livelihood options such as private timber plantations and orchards, and farmers are benefiting from the piloting of agroforestry practices.

In Uzbekistan, PROGREEN co-finances the Uzbekistan Resilient Landscapes Restoration Project, which supports Uzbekistan's commitments under the Paris Agreement, including on land degradation neutrality and greenhouse gas mitigation. The project also aligns with Uzbekistan's goals to restore degraded land under the Bonn Challenge and Astana Resolution and contributes to the UN Decade on Ecosystem Restoration initiative. The project was approved in June 2022, but due to a government reshuffle and a new implementing agency, the signing of financing agreements was delayed until April 2023. The project came into effect in October 2023.

Project activities in Uzbekistan are directly addressing challenges faced by rural communities by restoring landscapes and creating opportunities for new jobs and entrepreneurship. Schools are being involved in community mobilization and engaged on forest landscape restoration and protected area conservation practices. The project integrates gender considerations into activities and promotes empowerment of women by, for example, enhancing access to local financial services; diversifying income by creating forest and non-forest job opportunities; establishing women-owned nature-based businesses; and providing training for livelihoods activities relating to sustainable landscape management and land-use planning.

In **Kyrgyz Republic**, PROGREEN approved US$6 million in co-financing for the Kyrgyz Republic Resilient Landscape Restoration Project, which aims to promote sustainable landscape management in select locations and collaboration with other Central Asian countries on transboundary landscape restoration. In FY23, the project initiated analytical studies on mudflow risk mitigation in the Kara Darya river basin. These studies will recommend solutions to protect upstream and downstream communities that are vulnerable to mudflows and land degradation, loss of livelihoods, and small businesses. The studies will likely inform the development of a national NbS manual and guidelines to expand the use of NbS in tackling mudflows and mitigating flash floods.

PROGREEN is also providing analytical support to the Resilient Agri-food Clusters Development Project in the Kyrgyz Republic, where a series of consultations with public and private sector stakeholders has been carried out to prepare a climate assessment on potential agroecological technologies and practices. Beyond the US$45 million International Development Association (IDA) credit and US$5 million PROGREEN grant, in March 2023 the World Bank secured a US$2.4 million grant from the KWBP trust fund for the project. These additional resources will be used to develop a data-driven and user-oriented information and communication technology tool for disaster risk management in the country's degraded landscapes. This tool will inform project-financed systems for monitoring mudflow, floods, and glaciers.

2.6   LATIN AMERICA AND THE CARIBBEAN

The Latin America and Caribbean region contains a diverse range of landscapes. This is particularly true of South America, which is home to the pampas grasslands of Argentina and Uruguay; the towering Andes mountains that line the west of the continent; and the expansive, biodiverse Amazon rainforest of Brazil, Colombia, and Peru. Moving north, Central America is home to volcanic highlands, elevated plateaus and valleys, and cloud forests. The region also encompasses the Caribbean islands, which are home to a range of coastal, mountainous, volcanic, and rainforest landscapes.

PROGREEN's approach in the region is to work with and complement the Amazon Sustainable Landscapes program, a GEF-funded, World Bank-led regional program working to build conservation and sustainable development in the Amazon.

COUNTRY PROGRAM INVESTMENTS

Table 6.   Summary of activities in Latin America

Country	ARGENTINA
Project	Sustainable Recovery of Landscapes and Livelihoods in Argentina Project
Timeline	August 2022–May 2027
Implementing Agencies	Administración de Parques Nacionales
RETF sources (US$ millions)	IDA/IBRD:..45 PROGREEN:...12
Country	ECUADOR
Project	Harnessing the Potential of Forests and Biodiversity for Sustainable Development in Ecuador
Timeline	November 2024 (expected)–December 2029
Implementing Agencies	Ministry of Environment, Water, and Environmental Transition
RETF sources (US$ millions)	IDA/IBRD:..40 PROGREEN:...13.6

In **Argentina**, PROGREEN funds the Sustainable Recovery of Landscapes and Livelihoods in Argentina project to enable resilient ecosystems and sustainable livelihoods for local communities in selected conservation and production landscapes across the country.

Working across the forestry, agriculture, and tourism sectors in the Gran Chaco (a semiarid region) and Yungas ecoregions, this activity seeks to develop and scale up solutions for the improved management of natural landscapes, with a focus on protected areas. The project aims to enable economic wellbeing through improved or ecologically sustainable sources of income, while preserving the ecological integrity of identified protected areas. Key strategies include creating new sources of income, improving value chains of forest products, ecotourism, and similar low-impact productive activities, while increasing public and private finance directed towards the management of projected areas and their buffer zones.

During FY23, stakeholder participation and coordination councils were launched to engage with key stakeholders at the national and local levels to promote equitable and participatory landscape management. Applications for community-driven development subprojects in four areas were received in November 2022, with 17 subprojects in the formulation phase by end June 2023. The goal of these subprojects is to generate monetary and non-monetary benefits for local communities by developing resilient nature-based livelihoods.

The World Bank-implemented technical assistance component published a quantitative assessment of rural poverty and sustainable landscape management practices in the Gran Chaco and Yungas region, as well as a study of economic incentives for sustainable landscape management that included an overview of regulatory frameworks for landscape conservation in these regions. Findings were presented to key stakeholders.

ARGENTINA - Chaco region

In **Ecuador**, PROGREEN is co-financing the Harnessing the Potential of Forests and Biodiversity for Sustainable Development in Ecuador project, which aims to improve the management and resilience of ecosystems and related livelihoods of local communities in selected conservation and production landscapes. Implementation of the recipient-led project has been delayed because of ongoing political challenges. The Ministry of Environment, Water, and Environmental Transition remains committed to facilitating preparations for the project, which focuses on sustainable production systems in areas adjacent to protected areas; best practices for biodiversity; post-harvest management; and marketing.

Based on criteria developed with country counterparts, the World Bank-implemented activities identified five landscapes for project implementation: Cotacachi-Río Mira, Chongón-Colonche, Cuyabeno-Yasuni, Sangay-Kutukú, and Podocarpus-Nangaritza. World Bank analytics improved understanding of the socioeconomic and ecological relevance of major agricultural products in these landscapes and identified those with potential to enhance local livelihoods while advancing environmental objectives. Policies and regulations that could be updated were also identified.

COUNTRY KNOWLEDGE ACTIVITIES

Ongoing activities

In **Bolivia**, a PROGREEN-funded knowledge activity aims to improve the enabling conditions for ecosystem services restoration, sustainable landscape management, and resilient food systems in the Chiquitania ecoregion. This involves: examining how land regulations can inadvertently lead to the transformation of natural ecosystems to agriculture lands; developing tools to allow for the integrated management of natural landscapes, with a focus on supporting local-level planning; improving understanding of how fiscal incentives can promote agro-ecological approaches; and supporting capacity-building at the community level to promote agro-ecological approaches. During FY23, this work has generated knowledge on forest governance, land-use planning, and sustainable agricultural and livestock production for the socioeconomic wellbeing of families and communities and the ecological resilience of the Chiquitania ecoregion.

The team completed two reports on forest governance and land-use planning (with a focus on ecosystem services) and financial incentives to promote agroecology. These publications were discussed at a workshop that convened local and national government officials, academia, the private sector, nongovernmental organizations, and development partners such as WWF, the Japan International Cooperation Agency, Fundación Tierra, and FAO (the Food and Agriculture Organization of the United Nations). This workshop led to the formation of working groups to continue discussions on forest governance, land-use planning, and alternative livelihoods in

the Chiquitania. The national government also asked the World Bank to prepare an investment program on reforestation.

In **Costa Rica**, a PROGREEN-funded knowledge activity aims to strengthen the enabling conditions to scale up low-carbon measures, sustainable food production, and forest conservation in coffee and livestock production areas. The activity, Informing the Operationalization of Costa Rica's Agenda Agroambiental, will: identify climate-smart and low-carbon measures to improve the productivity of farming practices and lower the carbon footprint of agro-processing practices; explore options to improve spatial monitoring and databases in productive landscapes; and outline fiscal measures to promote low-carbon and ecosystem-friendly agricultural practices. In FY23, the project team: published a report on strengthening the environmental, socioeconomic, and financial business case for scaling up nationally appropriate mitigation actions (NAMAs) for the coffee and livestock production sectors; developed a roadmap and preparatory inputs for a national adaptation plan for the rural agricultural sector; and developed and selected three NAMA pilot initiatives (for bananas, rice, and sugarcane).

To improve monitoring of the current PES program and enable the inclusion of a broader range of ecosystem services, the World Bank team mapped out the range of current spatial monitoring systems and databases and identified other indicators that would help to reach a larger number of beneficiaries. This mapping exercise demonstrated how spatial data can promote incentives to preserve biodiversity and territorial planning.

A government report published in September 2022 references a PROGREEN-funded publication that identifies current policy challenges to agricultural decarbonization (which include fossil fuel subsidies; lack of access to finance; low levels of research; and low levels of development and technological know-how) and recommends fiscal instruments and policy shifts to meet decarbonization and adaption targets. This work also informed the design of a development policy loan, specifically the part relating to the decarbonization of the agricultural sector.

In **Dominica**, PROGREEN is supporting the Dominica Integrated Forest Sector Reform program, which aims to help the country manage its forestry sector in an integrated and sustainable manner. Activities include: a policy review of the forest sector; the development of recommendations for a revised forest law; and developing policy and guidance notes on protected area management (including revenue generation, improving demand for nature-based tourism, and enabling forest-smart agriculture). Building on the previous year's work on revising Dominica's National Forest Policy, the first revision since 1949, PROGREEN advanced drafts of four policy and operational guidance notes to develop practical approaches for sustainable forest management. These notes focused on: protected area planning; fee structures to maximize revenue and the investment needed to enable the sustainable management of national parks and protected areas; biodiversity and climate

finance mechanisms; options to increase tourism and nature-based tourism; and improving the economic viability of forest and agricultural approaches while ensuring sustainability.

The Kalinago community was closely involved with the development of these policy and operational guidance notes. This work has enabled the community to estimate, for the first time, the economic contributions of timber and non-timber forest products to their local economy. At the decision-making level, the policy notes informed strategic dialogue among key ministries, including the Ministry of Environment, Rural Modernisation, Kalinago Upliftment, and Constituency Empowerment; the Ministry of Tourism; the Ministry of Finance, Economic Development, Climate Resilience, and Social Security; and the Ministry of Agriculture, Fisheries, Blue and Green Economy. The notes also made recommendations for planned activities under the World Bank's Leveraging Eco-tourism for Biodiversity Protection in Dominica project.

GUATEMALA - Chicanutz, Alta Verapaz

In **Guatemala**, the PROGREEN-funded Guatemala Green Landscapes and Forests for Growth, Jobs, and Resilience Project, part of the Green, resilient, and inclusive natural resource management in Central America programmatic ASA, is working to inform national policies on the economic contributions of forest and landscapes across sectors. Specifically, it seeks to: compile forest economics data and so improve understanding about the contribution of forests to the national economy and international commitments; mainstream the forestry and resilient ecosystem agenda in major sectors; evaluate current incentive mechanisms for forest and ecosystem management; and engage in outreach to disseminate the major findings of the project among key stakeholders.

The work has resulted in a review of major issues relating to the forest sector (including the need to improve data and knowledge). Future knowledge products will inform dialogue with government agencies on key issues. In FY24, the project will focus on analyzing the economics of the forest sector (with an emphasis on water-related ecosystem services and forest-related supply chains) and quantitatively evaluating the effectiveness of incentive mechanisms for forest or ecosystem management.

In **Honduras**, the PROGREEN-funded Prioritizing Forest and Landscapes: Technical Assistance to Assess Opportunities for Growth, Poverty Alleviation and Increased Resilience is working to strengthen the economic case improved landscape management in the country. To this end, during FY23 the project: compiled forest economics data to better understand the contribution of forests to the national economy (including to job creation and multiplier effects); outlined the potential of mitigation and adaptation activities in the LULUCF sector for economic recovery; and generated data and evidence on the role of forests in the national economy and their potential contributions to post-COVID-19 recovery and the achievement of NDC commitments. The resulting outputs highlighted the importance of prioritizing forest and landscapes to foster inclusive development, as evidenced in the updated Systematic Country Diagnostic and the final draft of the Honduras CCDR. The CCDR indicates the crucial role that sustainable management of forests and landscapes plays in efforts to reduce GHG emissions and increase resilience. It also recommends prioritizing policy-informed management of forest ecosystems.

The compilation of forest economics data to better understand the contribution of forests to the national economy was carried out in collaboration with various government agencies, including the National Forest Institute (ICF); the Ministry of Natural Resources and the Environment; and the Ministry of Finance. The work defined indicators, collected data, and identified opportunities for improvements that resulted in a high-level presentation of key messages with the ICF to prioritize next steps in the collaboration.

In **Panama**, the PROGREEN knowledge activity Designing Financial Instruments and Incentives Schemes for Integrated Landscape Management is working to enhance the capacity of the national government to design integrated landscape management policies and programs in rural regions. Specifically, it aims to: strengthen the

capacity to identify and develop financial instruments that can combine economic growth with the conservation of ecosystems (such as PES and environmentally and socially sustainable bonds); support the development of innovative policy and financial instruments to enable inclusive economic opportunities; and support knowledge-sharing about sustainable rural development.

In FY23, a document outlining options for developing a PES program was produced to inform the upcoming revision of the country's Forest Law. This work also strengthened the technical capacities of the Ministry of Agricultural Development of Panama (MIDA) and the Ministry of Environment to implement the National Restoration System, which involves monitoring the restoration activities needed to comply with NDC commitments in the land sector. An overview of finance mechanisms to improve private capital for nature was also developed, along with a user guide to help stakeholders understand and select appropriate financial mechanisms.

Technical support to MIDA promoted economic inclusion by operationalizing the Family Farmer Law, which aims to enable historically marginalized groups (including Indigenous Peoples and people of African descent) to practice sustainable ecological stewardship. An overview of best practices and lessons learnt was prepared to inform a strategy for the rollout of the Family Farmers Single Registry. A manual and training programs were also developed to help MIDA develop and implement a Family Farming National Fund.

Regional and national-level workshops on PES and the Ministry of Environment's National Restoration System sought to promote South-South knowledge exchanges and facilitate dialogue and coordination among relevant government agencies and other stakeholders.

The **Peru** Resilient Landscapes Management knowledge activity supports policy dialogue on the legal and institutional reforms needed to promote sustainable forest and landscape management and forest restoration within and outside natural protected areas in Peru, with a focus on the Amazon biome. It will identify policy and institutional reforms needed for: the development of commercial forest plantations; the development of ecotourism in protected areas; and forest restoration and financing.

The proposed activities had to be adjusted in response to changes in the administration and the priorities of counterpart agencies. However, the overall development objectives remain the same. At the request of the Servicio Nacional Forestal y de Fauna Silvestre (National Forest and Wildlife Service), analytical work on commercial forest plantations and forest restoration financing are being merged into an analysis on net-zero deforestation. The other counterpart agency, Servicio Nacional de Áreas Naturales Protegidas por el Estado (National Service of Natural Areas Protected by the State), requested that work on protected area-based ecotourism focus on the investments required in protected areas to advance socioeconomic

PERU - Small Producer of oil palm, SanMartin

development. The activity will advance dialogue and improve technical knowledge and awareness about these topics through workshops.

During FY24, the team will: finalize a policy matrix on net-zero deforestation; complete a study on the socioeconomic costs and benefits of increasing and consolidating financing for the national protected area system; and develop a case study to better understand how to improve local benefits in protected areas, using one protected area as an example.

In **Guyana**, a PROGREEN knowledge activity aims to improve food security and access to global markets through sustainable landscape management and the development of deforestation-free agricultural value chains. The initial objectives of examining agricultural policy reform options to improve productivity and reduce emissions, and developing a policy framework for ecosystem services were revised based on the change in the priorities of the Government of Guyana towards investing in food security. The revised objectives include developing a technical note on deforestation-free agricultural value chains, examining alternate production systems and their impacts on ecosystem services, employing geospatial mapping to minimize the negative impacts of land-use change, and facilitating regional knowledge sharing on climate-smart agriculture, sustainable land management, and deforestation-free traceability.

3

Global Programs

3.1   FLAGSHIP INITIATIVES

Flagship initiatives advance knowledge on major global or multi-country systemic issues related to sustaining or restoring forest and agricultural landscapes. They fill a significant knowledge or policy gap; prioritize needs defined through implementation activities and assessments; and advance resource mobilization toward improved land-scape outcomes. Flagship initiatives advance the global policy dialogue by sharing new analyses and knowledge with decision-makers and diverse stakeholder communities through global dissemination and strategic knowledge events.

NATURE-BASED SOLUTIONS AND IMPROVED FINANCING FOR FOREST AND LANDSCAPE RESTORATION

Objective:
To support the UN Decade on Ecosystem Restoration by providing guidance on how to increase financing and economic incentives for restoration and create enabling socio-economic and governance conditions.

Background:
See the Finance Task Force for the UN Decade on Ecosystem Restoration webpage for more information.

Overview:

Supported by PROGREEN, the World Bank chairs the Finance Task Force for the UN Decade on Ecosystem Restoration. Launched in FY22, the Finance Task Force catalyzes action around ecosystem restoration by developing data, knowledge products, tools, and partnerships with a view to unlock the capital needed to scale up investments. The Finance Task Force convenes 14 members representing private sector companies and banks, multilateral institutions, nongovernmental organizations, and bilateral cooperation agencies working on ecosystem restoration. With the World Bank staffing the secretariat, the Finance Task Force convenes regularly to share experiences and lessons learned from restoration work; collate feedback on ongoing work and analysis; and identify opportunities to collaborate with UN Decade partners and other stakeholders.

Progress in FY23:

In FY23, the Finance Task Force developed analytical products and organized a series of knowledge-sharing events like meetings, workshops, and webinars that contributed to guiding ecosystem restoration financing and identifying investment opportunities for both the public and private sectors.

The Task Force's first analytical product, "Scaling up Ecosystem Restoration Finance: A Stocktake Report", was published in November 2022. It outlined challenges and opportunities for scaling up restoration investments, presenting a roadmap with four pillars: governance and policy, data and knowledge tools, markets and investments,

RWANDA - Landscape restoration

and financial sector regulation. The report's findings were disseminated through a blog and events, including a panel discussion at the Global Landscapes Forum (GLF) Climate in November 2022 and a session at COP15 in December 2022.

Further dissemination took place at the GLF Luxembourg in March 2023. The Task Force established a working group focused on restoration cost and benefit data, leading to a workshop and technical roundtable on the need to develop datasets and tools. In collaboration with the World Bank's Global Program on Nature-Based Solutions and the UN Decade Monitoring Task Force, the PROGREEN-supported secretariat launched an analytical activity with Duke University on forest restoration cost-effectiveness in low- and middle-income countries. Preliminary results were presented in May 2023.

Next steps:

In FY24 and beyond, the Finance Task Force Secretariat is finalizing reports on private sector involvement in financing restoration across various activities and ecosystems, including the restoration potential and cost-effectiveness report published in 2023. These reports will be valuable for engaging internal and external stakeholders. Workshops with country teams may be organized to validate findings and support scaling of investment in restoration. Dissemination plans include participating in upcoming global engagements and events; engaging with private actors, local stakeholders, and communities; and hosting training events.

NATURE-BASED SOLUTIONS AND AGRICULTURAL INCENTIVES

Objective:

To support governments repurpose their public agricultural policies, and support measures that promote sustainable and resilient growth while reducing the environmental footprint of the agricultural sector.

Background:

Agricultural Incentives webpage

Overview:

Agricultural practices and expansion contribute to deforestation and ecosystem degradation, partly due to policies and subsidies that distort agricultural markets and farmer incentives. At a local level, repurposing agricultural subsidies is expected to increase efficiency, improve resilience, and enhance positive environmental impacts, so boosting global environmental benefits and contributing towards multiple Sustainable Development Goals. By supporting this cross-sectoral activity, PROGREEN gains entry points and analytics to better understand the larger economic forces and incentives affecting landscape outcomes and sustainability at national

COLOMBIA - Coffee Association, Nariño

policy level. These findings and tools will contribute to country-level policy and development dialogue and will help design future agriculture and policy operations.

Progress in FY23:
Under this flagship, PROGREEN is supporting:

- Technical assistance to review and repurpose Colombia's agri-food policies
- A review of NbS
- A toolkit for practitioners on repurposing agricultural policies and support programs.

With PROGREEN's support, the country team completed a case study that analyzed challenges and opportunities to Colombia's sustainable productivity growth. The study supported the Ministry of Agriculture and Rural Development in reforming its agricultural policy framework. As a result, the country is taking steps to address the challenges its agricultural sector faces. These steps include piloting alternative mechanisms for delivering input subsidies, with a focus on improved targeting and environmental conditionality. The government is also boosting public investment in research and development, extension services, and rural infrastructure.

A literature review of the economics of existing NbS, coupled with the lessons from implementation efforts, provided valuable guidance and insight on feasible options that can be considered to promote NbS. It also identified NbS that may

need financial incentives in the context of heterogeneous farm profiles. The review, which analyzed 2,000 scientific papers on the economics of NbS in Africa and examined an expanded global database of 10,000 papers, revealed diverse economic outcomes for different NbS, highlighting the need for balanced policymaking to achieve sustainable agriculture.

In collaboration with the FAO, a Toolkit for Practitioners was created, which will be disseminated and published later in FY24. The toolkit offers guidance on policy analysis and support for identifying reform areas that align with health, economic, and environmental goals.

Next steps:

In FY24 and beyond, the deep dive and NbS literature review will be useful resources in designing Agriculture and Food operations. The country team is collaborating with Country Teams to use the resources developed under this activity to help design upcoming projects in Colombia, Malawi, Ghana, Madagascar, Mozambique, and Bangladesh. The toolkit will provide critical guidance on building capacity to policymakers and analysts. It will also serve as a resource for tracking and evaluating agricultural policies and support programs.

NATURE-BASED TOURISM AND ITS CONTRIBUTION TO LOCAL ECONOMIES

Objective:
To increase the positive impact of nature-based tourism and bolster solutions that protect natural assets through knowledge generation, capacity building, and global outreach.

Background:
Tourism Flagship webpage

Overview:
PROGREEN is expanding and deepening its work to measure the impact of protected area tourism on local economies. A pilot methodology is being standardized and distributed with partners, clients, and World Bank teams, who will also receive implementation training to help integrate the economic value of protected areas into policy making. The work will also assess and develop simplified valuation methodologies to use in data- and cost-constrained environments.

Progress in FY23:
During the year under review, good progress was made in strengthening nature-based tourism operations and knowledge, including the development of the LEWIE-lite methodology tool that is now accessible on a dashboard. The tool was successfully

piloted in Uganda, and another pilot phase was started in Madagascar in July 2023. Notably, three country analytic reports on the economic impact of protected area tourism on local communities were published for Brazil, Nepal, and Zambia.

An intranet site dedicated to nature-based tourism was established, which now serves as a valuable repository for knowledge resources, such as a comprehensive portfolio review that helps identify areas for further development. A set of webinars was also organized, including one in July 2022 that was co-hosted with the Global Wildlife Program (GWP) on strengthening benefit sharing from tourism with local communities, which attracted 168 participants. In January 2023, a webinar on determining the feasibility of developing NbS in investment projects was joined by 80 country team staff and a government delegation from Zambia.

Finally, the team provided technical contribution to the nature-based tourism chapter of the South Africa CCDR to advance nature-based tourism efforts and their positive impacts on local communities and biodiversity.

Next steps:
In FY24, key activities include the release of the LEWIE-lite methodology note and training materials in December 2023, followed by LEWIE-lite trainings in 2024 for World Bank and GWP country project teams. Another product of FY24 is a report showcasing the contributions of NbS to conservation. Technical support will be provided to country teams, including São Tomé and Principe, Fiji, and Pakistan. Impact stories from countries like Kazakhstan, Malawi, and Sri Lanka will be shared. A climate-resilient tourism infrastructure guidance note will be released in FY24. An NbS workshop with the GWP is in the planning stages, and all materials will be accessible on the intranet site on an ongoing basis.

IMPROVING GOVERNANCE OF FOREST LANDSCAPES

Objective:
To develop an assessment approach for measuring the quality of landscape governance and to help identify pathways and needed reforms to improve landscape governance.

Background:
Governance of Forest Landscapes Flagship webpage

Overview:
Forest landscapes are vital for sustainable production, climate mitigation, and resilience. Good forest landscape governance is vital, as it has a significant impact on forest resource management and economic potential. Yet, addressing governance issues requires a whole-of-government approach that includes all relevant

BRAZIL - Amazon rainforest

stakeholders in the landscape. As such, PROGREEN has developed an assessment approach to measure the quality of landscape governance and identify problems and needed reforms. The approach involves applying PROGREEN's Landscape Governance Assessment Tool (LGAT) and Decision Support System to help identify practical pathways for improving landscape governance across several dimensions.

Progress in FY23:
In FY23, the LGAT was piloted in three PROGREEN countries—Argentina, Ghana, and Uzbekistan—to test and demonstrate its applicability in different landscapes and contexts. The tool was also applied in four landscapes in Nepal, including a watershed area and a highway corridor. The application of the tool in each of the pilot countries involved stakeholder workshops with an average of 25-30 participants from government, civil society, academia, and community-based organizations. The application of the tool in the pilot countries has yielded baseline values for their landscape governance indexes and has identified priority reforms that can be taken up by World Bank projects, government institutions, or donors. Country reports and policy notes are currently being finalized and their findings are being presented to World Bank teams and national-level counterparts.

Next steps:
In FY24, a User's Guide will be disseminated to internal and external audiences to promote wider use of the guide and addressing governance challenges. Outreach activities will initially focus on application of the LGAT in PROGREEN recipient-executed activities (country program investments). The demand from other World Bank projects will also be addressed, including expressed demand from landscape programs in the Amazon region, Pakistan, and the Democratic Republic of Congo.

3.2 CROSS-CUTTING THEMES

The PROGREEN Global Program integrates three cross-cutting themes across its country and global knowledge activities: gender and vulnerability; mobilizing and greening finance; and climate change. The Global Program also seeks to improve uptake on these issues through analysis, guidance, training, and collaboration.

PROGREEN has recently introduced a new cross-cutting theme on biodiversity and nature, in response to the growing global awareness and commitment to protect and restore the planet's natural capital. This theme covers several ongoing and new initiatives under PROGREEN, such as supporting NbS; balancing food demand with protecting nature; and identifying and tracking finance in support of biodiversity and/or ecosystem services. By incorporating this theme, PROGREEN aims to raise the profile of biodiversity and nature as key drivers of green growth and sustainable landscape solutions.

3.2.1 GENDER AND VULNERABILITY PROGRAM

PROGREEN's Gender and Vulnerable Peoples' Program seeks to enhance the consideration of women, vulnerable groups, Indigenous Peoples, and rural communities in interventions and projects; increase their voice and representation in resource allocation decisions; and empower them with tools and actions in landscape initiatives. This work will also enhance partnerships and capacity for scaling up transformative actions within and beyond PROGREEN.

The gender component of this program is built on lessons from the Program on Forests analytics and activities, which show that women play a vital role in commodity value chains, agricultural landscapes, and forest sectors, but that they also face many challenges and inequalities. The Gender and Vulnerable Peoples' Program recognizes the importance of gender issues for achieving sustainable outcomes in food and land use systems and prioritizes gender as an entry point. Similar principles apply to the role and engagement of vulnerable groups, Indigenous Peoples, and rural communities in managing forests, landscapes, and nature. In FY23, the program increased its emphasis on Indigenous Peoples' and local communities' issues and developed two new activities in collaboration with the Social Sustainability and Inclusion Global Practice. The program has several activities grouped under a coordination function:

- Creating targeted guidance based on demand-driven assessments for countries, practitioners, and commodity value chains
- Developing adaptable training resources, including videos and e-learning
- Exploring innovative communication strategies, including website content, newsletters, blogs, and global event participation.

In Focus

Box 2
STRENGTHENING COLLABORATION ACROSS TRUST FUND PROGRAMS

FY23 saw the Environment, Natural Resources, and Blue Economy (ENB) Global Practice and other environment and nature trust funds identify and strengthen opportunities for collaboration. This included a renewed focus on the green finance agenda and the analytics behind the Changing Wealth of Nations 2024 publication. PROGREEN also pursued opportunities for stronger collaboration with other World Bank global practices and sectoral trust funds of the World Bank. This included:

- Partnering with the Agriculture and Food Global Practice and its Food Systems 2030 multi-donor trust fund to scale up support for the repurposing agenda, a flagship study on decarbonizing the air and recarbonizing the land, and another report on biodiversity and agriculture.

- Supporting the Climate Change Group and its BioCarbon Fund Initiative for Sustainable Forest Landscapes (ISFL) and climate funds. PROGREEN partnered with ISFL to develop an e-learning course on integrated landscape management, which launched in October 2023 at the Global Landscapes Forum (GLF), Nairobi. It is expected to be further developed and promoted alongside FAO's work on the Participatory Informed Landscape Approach under the Global Environment Facility-financed Food Systems, Land Use and Restoration (FOLUR) program.

- Plans to deepen its engagement with Indigenous Peoples' and local communities' issues in concert with the World Bank's Social Sustainability and Inclusion Global Practice and the Climate Change Group, through the Enhancing Access to Benefits while Lowering Emissions multi-donor trust fund.

INDIA, Varandha Gha Road, Bhambatmal, Maharashtra

GENDER PROGRAM COORDINATION, COLLABORATION, AND TECHNICAL ASSISTANCE

Objective:
To strengthen capacity of country project teams to develop gender responsive initiatives; to engage across the World Bank and partners to promote gender awareness and inclusion; and to develop guidance and tools that help to advance these objectives.

Overview:
A Senior Gender Specialist leads this work and coordinates and advises on the several components of the Gender and Vulnerability Program, including planning, communication, outreach, and knowledge management. The Senior Gender Specialist also identifies capacity needs and opportunities for inclusion and connects teams with relevant knowledge and resources. Guidance documents or training concepts on gender and vulnerable peoples based on country project needs and global engagement opportunities will be developed. The activity strengthens PROGREEN's collaboration with a global network of practitioners, researchers, and investors (both private and public sector) focused on gender, vulnerability, and green issues. This includes close collaboration with the Global Environment Facility-financed Food Systems, Land Use and Restoration (FOLUR) Impact Program and FACS (Food and Agricultural Commodity Systems) Gender Community of Practice, which has related objectives and a global reach. The activity contributes to M&E reporting by designing and tracking efficient and effective gender and vulnerability indicators.

Progress in FY23:
In FY23, PROGREEN made substantial progress in enhancing the capabilities of country teams to devise and test innovative strategies that empower women in rural communities, which included activities such as global outreach through blogs and stories. Notably, a PROGREEN webinar on the Women's Empowerment Standard (W+) was held on February 2, 2023. A discussion paper on "Scaling Gender and Climate Investment Opportunities", involving PROGREEN, IFAD (International Fund for Agricultural Development), and WOCAN (Women Organizing for Change in Agriculture and Natural Resource Management), was published. This paper emphasized the commitment to advance gender equality and climate-related initiatives. The Senior Gender Specialist contributed to strengthened dialogue around creating collaborative opportunities to develop, scale up, and disseminate guidance and training on gender and vulnerability issues. This will involve working jointly with the FOLUR Impact Program and its partners, while also deepening joint activities with other trust funded programs, such as Enhancing Access to Benefits while Lowering Emissions (EnABLE), Dedicated Grant Mechanism, Climate Funds and PROBLUE, among others. The Senior Gender Specialist also aided the conceptualization and operationalization of three main activities in FY23, described below.

GENDER CERTIFICATION CAPACITY FOR LANDSCAPE PROJECTS

Objective:
To strengthen the knowledge and capacity of project teams and country counterparts to include activities within integrated landscape projects and programs that empower women; that are measurable and measured; and that lead to direct benefits for women and vulnerable community members.

Overview:
To strengthen capacity of country project teams, PROGREEN has partnered with a women-led international network, WOCAN, to conduct trainings and pilot applications. The partnership provided essential technical assistance to country teams on gender-responsive programming in agricultural and forest landscape initiatives. This initiative builds awareness and provides task teams with targeted support on opportunities and existing mechanisms.

Progress in FY23:
In FY23, the team held participatory webinars with PROGREEN project team members aimed at raising awareness around gender and women's empowerment outcomes and building capacities for their measurement. The webinars generated increased interest for in-country capacity building to implement a women's empowerment certification initiative in the integrated landscape programs of several PROGREEN countries.

Knowledge products, resources, and options for project activities that empower and benefit women and include applicable certification mechanisms were developed and disseminated. Case studies and pilot applications on women's empowerment implementation and certification—which include applying and using the W+ certification standard—were developed. The results of these country case studies will provide practical training and knowledge materials to support replication in wider applications.

In FY23, the first capacity-building initiatives were concentrated in Nepal, where a series of workshops equipped project team members with expertise in the W+ approach. This initiative increased awareness among national policy makers and trained local stakeholders involved in the Forests for Prosperity Project and the national REDD+ program. As a result, targeted project activities that will benefit and empower women have been integrated, which increase the program's impact. Key stakeholders, including the Reducing Emissions from Deforestation and Forest Degradation (REDD) Implementing Committee and Forest Department offices in two provinces, gained insights on women's empowerment and outcome-oriented indicators. Moreover, 22 women from the Nepal Forests for Prosperity Project have been introduced to activities that may be integrated in PROGREEN and related

projects. Twenty-two women leaders benefited from a practitioner sharing visit, encouraging ongoing idea-sharing. Notably, 16 local project implementers are now skilled in applying the W+ approach.

Next steps:

In FY24 and beyond, the team will continue to promote gender and women's empowerment through targeted events such as webinars and training materials. Case studies or pilot applications will be developed as needed in collaboration with country teams. These country engagements will serve as practical training and expandable knowledge resources, disseminated through targeted training and awareness programs, especially for task team members involved in gender and M&E.

PERU - Artisanal fishing, Ucayali river

PARTNERSHIP TO STRENGTHEN INDIGENOUS PEOPLES VOICE AND PARTICIPATION IN NATURE AND CLIMATE FINANCE

Objectives:

To support Indigenous Peoples' capacity to access and manage NbS and climate finance. This will include several inter-related activity components that address challenges in delivering finance, inclusion, and services to Indigenous Peoples' communities in client countries—building on experience from over a decade of engagement and financing with Indigenous Peoples in climate and forestry.

Overview:

This activity is a joint initiative of the World Bank's Climate Change Group; Environment, Natural Resources, and Blue Economy Global Practice; and Social Sustainability and Inclusion Global Practice. Indigenous Peoples are critical partners in global efforts for climate mitigation and NbS. There is a growing global consensus on the need to recognize Indigenous Peoples' role and direct participation in nature and climate finance. Indigenous Peoples across the world face information asymmetries and lack access to resources critical to participation in decision-making spaces. Recognition of their land tenure exists in only 10 percent of the lands they occupy. Without the proper enabling conditions to close these gaps, they will continue to face challenges with participating in, influencing, or benefiting from decisions concerning the resources under their stewardship. The World Bank has been designing direct financing mechanisms for Indigenous Peoples and local communities in climate and forestry projects since 2009, trailblazing and testing diverse financing models through trust funds (including the Forest Climate Partnership Framework, Dedicated Grant Mechanism, and EnABLE) designed to inform and leverage broader national policy and investment programs.

This innovative partnership includes the following key components:

- Accelerating and expanding climate and NbS finance to Indigenous Peoples. The partnership will provide stock taking, administrative innovation, support, and guidance on the World Bank's Environmental and Social Framework's social standards in Forest Climate Partnership Framework and the BioCarbon Fund Initiative for Sustainable Forest Landscapes (ISFL). This will support the development of operational tools for country teams; provide upstream analytics on Indigenous Peoples issues for CCDRs; identify broader portfolio opportunities for Indigenous Peoples in nature and climate lending projects; and identify opportunities for Indigenous Peoples' inclusion within the World Bank's new climate trust fund, Scaling Climate Action by Lowering Emissions.

PROGREEN- and PROBLUE-financed activities will be monitored regarding Indigenous Peoples' and local communities' engagements, issues, and opportunities, which will provide parameters to screen new grant activities and enhance

Indigenous Peoples' benefits and participation. This will also improve national coordination when formulating proposals between Social Sustainability and Inclusion; Environment, Natural Resources and Blue Economy; and Agriculture and Food Global Practices.

• Assessment of good practices, challenges, and lessons learned from direct financing mechanisms for Indigenous Peoples and local communities. These mechanisms include Dedicated Grant Mechanism, Forest Carbon Partnership Facility (FCPF), and EnABLE. This assessment will inform new mechanisms under design, including the next phase of the Dedicated Grant Mechanism under the Climate Investment Funds, as well as plans to scale up World Bank financing in this space.

Capacity building for Indigenous Partners in Climate and NbS. This will include:

KENYA - Planting seeds, Mau forest

• Mapping and capacity assessments of Indigenous Peoples and local communities partner organizations

• A stock-take of existing and prior efforts for Indigenous Peoples and local communities capacity building in these areas to identify gaps, lessons, and good practices

• Preparation and delivery of tailored training programs in project management and NbS and climate finance. Enhanced strategic dialogue with Indigenous Peoples will serve as a cross-cutting platform to support all three focus areas.

Progress and next steps:
In FY23, PROGREEN engaged with other groups within the World Bank to shape this activity to build capacity and coordination on Indigenous Peoples' and local communities' issues and finance global practices within the World Bank and with external partners. This is a cross-trust fund supported effort, involving multiple global practices of the World Bank, that will be initiated in FY24 and carried forward, depending on funding availability.

BUILDING BACK BETTER: ENHANCING INDIGENOUS PEOPLES RESILIENCE TO CLIMATE CHANGE

Objective:
To inform policy dialogue and operational lending around drivers for Indigenous Peoples resilience.

Overview:
Through the response to the COVID-19 pandemic, Indigenous Peoples have gained more attention through support for cash transfers, productive recovery, and communication campaigns. Additionally, the World Bank has been supporting climate finance and providing direct financing to empower Indigenous Peoples and local communities through the Dedicated Grant Mechanism, the FCPFC's Indigenous Peoples and local communities Capacity Building Fund, and most recently, through the EnABLE. Recent studies have highlighted the importance of understanding the key drivers of resilience for Indigenous Peoples and local communities in response to shocks—as they may differ from mainstream society—and recognizing their diverse values and right to self-determination.

This effort aims to inform development, where "building back better" focuses on a range of drivers that matter for Indigenous economies, given their unique ways of life, aspirations, and long-developed strategies of adaptation and resilience. The effort will contribute to an Operational Guidance Note and related tools to

help inform and support ongoing and future World Bank engagement. It will also attempt to provide a "how-to" tool to promote the implementation of the World Bank's Green, Resilient and Inclusive Development (GRID) Strategy. This will involve a review of literature on Indigenous Peoples' economies and resilience, including relevant international human rights standards, and an analysis of a selection of communities that have demonstrated exemplary levels of resilience in the face of impacts from climate change and COVID-19. It will also assess the enabling legal and institutional frameworks that had an impact (positive or negative) on the various drivers of resilience.

Progress and next steps:
Set to begin in FY24, the proposed work includes key informant interviews with Indigenous Peoples' leaders in various communities, as well as Indigenous Peoples' thought leaders and others working on these issues, including institutions such as IFAD, Conservation International, and FAO. The Operational Guidance Note will reflect drivers critical for food security, resilience, and adaptability, and the capacity to maintain economic, cultural, social, and physical wellbeing. The Guidance Note will be developed through a participatory process through workshops and consultations with Indigenous Peoples as key informants. It will then be validated through participatory regional roundtables with Indigenous Peoples' leaders and relevant government officials. PROGREEN will support wider participation and delivery of workshops in West and East Africa.

GENDER DIMENSIONS OF LAND RESTORATION AND POVERTY REDUCTION IN ETHIOPIA

Objective:
To econometrically examine the gender-labor dimensions of land restoration activities in Ethiopia, and their effects on reductions in poverty in the country, using LSMS-ISA (Living Standards Measurement Study - Integrated Surveys on Agriculture) panel data collected by the World Bank.

Overview:
This activity provides rigorous evidence that female labor is a key driver of poverty reduction outcomes from land restoration activities in Ethiopia. As land restoration on small plots is usually labor intensive, public support for these activities needs to consider ways to minimize the burden of this labor requirement to ensure that the welfare benefits from restoration continue to flow to both agricultural and non-agricultural households.

This activity will be an input into the World Bank's Sustainable Development Vice Presidency Flagship report, World Natural Capital: Stepping Stone, to be released in FY24. This flagship report examines natural capital degradation and exclusion

as barriers to green, resilient, and inclusion development. It will highlight linkages between natural capital degradation and poverty and inequality; identify drivers; and create a typology of policy responses to inform World Bank operational teams and policy makers.

Progress in FY23:
Using LSMS-ISA panel data, the team used an econometric analysis to examine the gender-labor dimensions of land restoration activities in Ethiopia and their effects on reductions in poverty in the country. The analysis found that female agricultural labor in Ethiopia has been more important for expansion of land restoration activities on smallholder farms than male agricultural labor. Having access to female labor increases both the likelihood that agricultural households will implement land restoration and the area of farmland under land restoration activities. The analysis also found that land restoration activities reduce poverty among agricultural households and that the share of poor non-agricultural households in a community falls as land-restoration activities on farmland expand.

Next steps in FY24:
draft paper has been finalized as a contribution to the Sustainable Development Vice President-level compendium. The team will have a dedicated communications strategy for its release and will it be showcased as another collaboration between PROGREEN and the Global Program on Sustainability.

3.2.2 MOBILIZING AND GREENING FINANCE

This cross-cutting theme aims to increase and "green" financial flows by providing upstream analytics, advice, tools, and technical assistance, and by collaborating and investing with the private sector in sustainable land management and activities that promote restoration of ecosystem services. PROGREEN works with the Global Program on Sustainability, PROBLUE, and other World Bank global practices to create a favorable environment for green investment, showcase the benefits of nature-based products and services, and leverage private sector investment throughout the project cycle and value chain.

In addition to the work of the Finance Task Force for Ecosystem Restoration, described above in Section 3.1 (Flagship Initiatives), PROGREEN has a number of other initiatives that aim to advance the use of environmental and social sustainability instruments in financial transactions, by providing technical assistance and guidance in specific innovation cases, in collaboration with the Finance, Competitiveness and Innovation Global Practice. PROGREEN continues to collaborate with the Food Systems, Land Use and Restoration program, building on its private sector strategy and networks through major commodity roundtables.

In Focus

Box 3

RWANDA: MOBILIZING FINANCING TO SCALE NATURE AND CLIMATE ACTION

Rwanda is one of the fastest-growing economies in Africa. This small landlocked country in Central Africa is effectively building on years of donor-supported technical assistance to mobilize new investments to help achieve its objectives to become a developed, climate-resilient, and low-carbon economy by 2050. Rwanda is pioneering policy, debt, and non-debt instruments to scale its investments to achieve ambitious nature and climate objectives. In collaboration with development partners, Rwanda is prioritizing and mainstreaming nature-positive investments.

PROGREEN adds value by helping countries integrate financial resources and innovative mechanisms. Rwanda benefited from PROGREEN-financed analytical work and investments. For example, the US$12 million PROGREEN recipient-executed trust fund grant and US$2 million PROGREEN Bank-executed trust fund were critical to secure the US$50 million Volcanoes Community Resilience Project IDA credit and unlock co-financing of €100 million from European Investment Bank loan, US$19 million from the private sector (Wilderness and African Wildlife Foundation), US$35 million from Climate Investment Funds (CIF) (50 percent loan/50 percent grant), and additional co-financing expected from the Nordic Development Fund. This multi-agency programmatic approach to reduce the risk of flooding, strengthen watershed management, and improve livelihoods is serving as a model for Rwanda's strategic investments to enhance its climate resilience, generate jobs, and protect its mountain rainforests, gallery forests, savanna woodland, wetlands, aquatic forests, and agroecosystems. PROGREEN and CIF resources have also supported technical assistance, innovative finance, and mainstreaming of nature into operations which include the following:

- The "Options Analysis" technical report provided an assessment of Rwanda's climate and nature financing gap and offered a menu of financing strategies the country could consider, including sustainability-linked bonds, Wildlife Conservation Bond, and expanding voluntary carbon market opportunities. All these instruments are currently under preparation or implementation. The development of this report also included cross-agency and donor engagement. The International Monetary Fund and other donors have used this report to inform their programs, including the US$319 million Resilience and Sustainability Facility.

- The US$250M Development Policy Financing (Credit) Boosting Green Finance, Investment and Trade in Rwanda Programmatic Development Policy Financing, which is supported and co-financed by KfW, features a national climate finance strategy to support decarbonizing the economy and strengthening resilience to climate change-related risks. It also includes a prior action on a law governing national parks and nature reserves to enable the inflow of private investment for nature conservation. This builds on Volcanoes Community Resilience Project engagement and government prioritization on nature.

Rwanda provides an example of how integration of PROGREEN resources enables larger investments and strategies. This model will also inform the design of the World Bank's Global Carbon Project on Forests for Development, Climate, and Biodiversity and the Livable Planet Fund (Global Public Goods Fund).

ENHANCE DELIVERY AND SCALE OF NATURE FINANCE PILOT INITIATIVES

Objective:

To pilot and scale up key financial instruments and share guidance and best practices for their use in countries to support NbS for their development and climate goals.

Overview:

Nature investments face a huge financing gap of US$711 billion per year. Many countries lack access to market-based or concessional financing, fiscal space, and incentives to fund nature-positive investments. The private sector and capital markets also do not account for nature risks or have tools and instruments to reward nature-positive performance. This activity is part of a broader effort by the World Bank and trust fund partners to help countries manage nature risks and scale up nature-positive investments from the private sector. Country teams work with various development partners—including the Global Environment Facility, PROGREEN, and PROBLUE—to mobilize finance for nature and climate efforts. There is ongoing engagement through technical assistance and investment operations to increase metrics, standards, capacity, and financing. This activity seeks to synergize with and learn from the several efforts to pilot test initiatives and the innovations being developed jointly across World Bank global practices and Treasury, the International Finance Corporation, and other development partners.

These activities will not only pilot test key financial instruments in specific countries, but also develop and disseminate guidance and best practices that aim to make these instruments more practical and replicable. Country level pilot tests will explore how to more widely and effectively use financial instruments such as wildlife conservation and sustainability-linked bonds, carbon and biodiversity credits, and other innovations.

Progress in FY23:

Technical assistance and guidance efforts built on existing country entry points with the aim to strengthen the innovative financing approach and expedite delivery milestones. Early actions and instruments under development and testing included Rwanda Wildlife Conservation Bond (under conceptualization); Boosting Green Finance, Investment and Trade in Rwanda; Cabo Verde Resilient Tourism and Blue Economy Development; and Cabo Verde: First Fiscal Space and Sustainable Growth DPF.

Next steps in FY24:

These technical assistance and guidance efforts continue in FY24, expanding on Kenya and Nigeria. Demand for the technical assistance services will be assessed through regional meetings and presentations and outreach-based success stories. This activity will coordinate with PROGREEN green finance activities, uniting teams to learn lessons, plan outreach events, and consolidate efforts to assess demand and develop guidance. For specific country cases, the work will involve consultations, project documents, and technical and strategic insights during missions and/or related activities, including reports and presentations. Ongoing efforts will include monitoring and learning from the South African Wildlife Conservation Bond Operation.

DEVELOPMENT OF SOVEREIGN SUSTAINABILITY-LINKED BOND AS AN ASSET CLASS (P170336)

Objective:

To incorporate green and sustainable factors into global financial markets. Within this broad framing, PROGREEN is supporting the development and deployment of sovereign sustainability-linked financing (bonds and funds) as an asset class through the standardization of indicators and instruments.

Overview:

The world currently has a substantial problem with high levels of debt. In 2021, the total global debt surpassed US$300 trillion, with 80 percent of new debt burden coming from emerging markets, where total debt is now approaching US$100 trillion. This debt burden has the potential to compromise food and energy security, as well as increase socioeconomic and political unrest. Today's sovereign debt markets do not adequately account for the sustainability risks that increasingly have a material impact on countries' economic growth and resilience. Vulnerable nations are excluded from accessing the affordable capital and investment that is urgently needed to create sustainable economic growth and adequate fiscal space, which in turn leads to a downward spiral of debt defaults, debt restructuring, and further nature degradation. Sustainability-linked bond issues can help tackle the issues associated with sovereign debt by:

- Directly rewarding positive nature and climate outcomes with educed debt repayment costs
- Encouraging investments that reduce risks through improved resilience and economic productivity, lowering the cost of repayments across a country's entire debt portfolio
- Supporting broader sustainable development outcomes, directly through growth and productivity effects and indirectly by creating financial flexibility to support increased public spending
- Reducing the need for ex-post debt structuring by advancing smarter risk sharing between debtors and creditors.

To better deploy and scale up this financial instrument—and direct more capital toward nature-positive investments—standardization is needed around the setting of key performance indicators (KPIs), reporting, monitoring, and the design of the

CAPE VERDE - Maio

instruments themselves. With a view to further collaborate with the Global Program on Sustainability, this PROGREEN activity supports the development of sovereign environmental, social, and governance policies and practices, and sustainability-linked bonds (SLBs), including:

• Developing a sovereign environmental, social, and governance reporting framework with the public sector reporting body, IPSASB (International Public Sector Accounting Standards Board)

• Further developing a Sovereign SLB KPI Framework and developing Sovereign SLB Principles in conjunction with International Capital Market Association

• Further developing work on model-based KPI target setting

• Designing a Sovereign SLB instrument at individual issuance and fund level

• Establishing a sustainability-linked Sovereign Debt Hub.

Key indicators attached to these performance-related debt instruments could link to a wide range of landscape conservation and restoring challenges. For example, the Uruguay Sovereign SLB Framework, under which one of the first sovereign SLBs was recently issued, includes a KPI on nature forest cover.

Progress in FY23:
The World Bank team is developing and advancing the use of SLBs that link interest payments to achievement of key environmental and social goods. The team has made significant progress with amending the International Capital Markets Sustainability-Linked Bond Principles to recognize sovereign issuers and adding new metrics for

sovereigns to the KPI registry, including nature and biodiversity indicators related to forestry. The team also continued to develop Feasibility-AmBitiousness (FAB) framework—a tool for measuring the ambition and feasibility of sovereign KPIs. Moreover, the team is developing innovative structures for SLBs, such as proposals for a sovereign SLB fund and support for a credit-enhanced SLB by the national development bank in Rwanda into a World Bank lending operation. The team's work on SLBs supports policies that benefit local communities, especially in protecting forest areas and improving agriculture outcomes.

Next steps in FY24:
The team will continue to work with the Development Bank of Rwanda on SLB credit-enhanced issuance, a way of financing sustainable projects with lower interest rates and higher credit ratings. Furthermore, the team will continue to develop and refine the FAB KPI framework, a set of indicators that measure the environmental and social impact of sustainable projects. The aim is to promote the adoption of this framework by market players, such as second-party opinion providers, who verify the sustainability credentials of the projects. The team will also provide technical assistance and guidance to selected country teams based as needed.

STRENGTHENING THE BUSINESS CASE FOR RESTORATION FOCUSED NATURE-BASED SOLUTION THROUGH EXPANDING THE SCOPE AND GRANULARITY OF GLOBAL COST AND BENEFIT DATA

Objective:
To consolidate modeled and project-level NbS cost and benefit data and make it available in an easy-to-use, rapid valuation tool.

Overview:
Better data on the costs and benefits of investments in NbS, like ecosystem restoration, are key to achieving targets and goals set forth by the Paris Agreement and GBF. Every dollar invested in restoration activities provides an estimated US$7-30 return in economic benefits.

Consolidating modeled and project-level cost and benefit data and making it available in an easy-to-use, rapid valuation tool can benefit actors from across sectors. It allows them to prioritize investments in NbS based on its returns and can help identify opportunities to blend sources of financing to maximize the provision of ecosystem services. The UN Decade on Ecosystem Restoration Finance Task Force's Scaling Up Ecosystem Restoration Finance: A Stocktake Report identified this demand for data from public and private decision makers.

In Focus

Box 4

COLLABORATION WITH NBS INVEST TO BENEFIT LEAST DEVELOPED COUNTRIES

The world's Least Developed Countries (LDCs) are disproportionately impacted by climate change, and they need innovative, cross-sectoral solutions to protect and sustain development gains. Nature-based solutions (NbS) are cost-effective approaches to climate adaptation, nature protection, and protection of vulnerable communities by addressing critical issues such as food and water security. NbS can simultaneously address multiple development challenges (climate change adaptation and mitigation, biodiversity conservation) by providing an ecological approach to protecting people and livelihoods, optimizing infrastructure, and safeguarding the natural environment. Yet, three times the current investment in NbS is required by 2030 (US\$484 billion per year) to limit climate impacts, land degradation, and biodiversity loss.

The Kunming-Montreal Global Biodiversity Framework (GBF) calls for the application of NbS to reach its goals. As of 2023, all LDCs have included some type of NbS in their national policies. Yet they face challenges, including gaps in technical know-how and institutional capacity to apply NbS in project design and implementation.

NbS Invest is a US\$10 million project funded by the Global Environment Facility through its Least Developed Countries Fund and implemented by the World Bank. It aims to accelerate NbS in least developed countries by providing knowledge, capacity building, and technical assistance aimed to leverage larger

World Bank investments in key target countries. The project will highlight the benefits of NbS and mainstream the concept into the climate and development agendas of LDCs, where there is room to grow recognition and practical application of NbS in project designs.

PROGREEN can advance NbS Invest's agenda and impact by sharing knowledge and training products to build technical and institutional capacity; raising awareness and policy recognition at high levels of government; and increasing capacity in LDCs. This is well aligned with PROGREEN's multi-pronged effort to strengthen the business case for restoration and the use of NbS with supporting evidence (data, analyses, lessons learned, and practical success stories).

The NbS Invest project can provide technical and financial support to the International Development Association (IDA) pipeline to identify and design NbS opportunities in projects in the priority sectors: environment, water, urban, agriculture, transport, and energy. NbS Invest can draw on and disseminate PROGREEN's knowledge products and training resources to accelerate knowledge exchange for technical staff, government officials, and other relevant partners and stakeholders, so increasing financial flows and investments in target countries. NbS invest is collaborating with PROGREEN, PROBLUE, and GPNBS (Global Program on Nature-Based Solutions for Climate Resilience) to disseminate knowledge, enhance capacity, and share best practices.

INDIA - Sigur Wildlife Corridor

The primary focus of this grant involves creating an interactive and comprehensive cost and benefit database for ecosystem restoration, which will be executed through a competitive consortium contract.

Progress in FY23:
In February 2023, the team conducted a workshop in collaboration with the Finance Task Force to gain consensus and expert insights on the database's design. Using insights from the workshop, the team is developing a survey to gather feedback from targeted data users regarding the identified priorities. In late FY23, the team advanced the procurement process to select a firm to develop the global cost and benefit database, leveraging existing meta-databases containing CAPEX and OPEX data.

Next steps:
In the first quarter (Q1) of FY24, the team selected a firm to establish the database). Collaborating with World Bank experts, the selected firm will devise a survey for key users to gauge demand for restoration and cost and benefit data. The team will assist in user identification and survey distribution. The firm and World Bank team will synthesize responses into a brief report outlining data and tool priorities. Additionally, the team will collaborate with the firm to develop an overview of existing ecosystem restoration and datasets, mapping them to different typologies and exploring integration potential. The firm will then establish a dynamic global database for NbS and restoration costs across key ecosystems, building on and integrating existing databases. Deliverables include a detailed report of existing cost and benefit datasets, how they map to different typologies of ecosystem restoration and NbS, and the potential for integration across datasets.

- Designed and applied the Economic Analysis Tool to assess the economic viability of an investment at a specific site over a set number of years, accounting for the various climate change-related hazards identified by the Hazard Assessment Tool. The team has made significant improvements to the tool based on extensive feedback from the Climate Change Group and other World Bank teams

- Through piloting the climate resilience approach, identified the need to geospatially represent the various biophysical characteristics of project sites, coupled with the climate change-related hazards identified for these planned sites. The team has thus pursued the development of a geospatial tool that integrates global geographic information system datasets, climate hazards, and suitability models to optimize intervention site selection. Proof of concept was delivered in Q1 FY24.

Next steps:

In FY24 and beyond, the team expects to collaboratively continue testing and refining the suite of tools throughout the implementation stages of the projects in Kazakhstan, Uzbekistan, Tajikistan, and Laos. PROGREEN will extend its reach and engage with new teams in India, Nepal, Turkey, and Argentina. In addition, the team aims to put forward a concept and pathway for developing the geospatial platform that integrates site-suitability modeling to help optimize site selection in projects.

INTEGRATED WILDFIRE MANAGEMENT IN TERRESTRIAL SYSTEMS INITIATIVE

Objective:

To strengthen the World Bank's understanding of issues related to wildfires and provide advisory and operational support to teams working on integrated fire management.

Overview:

Wildfires are an escalating global problem, and increasing climate extremes and uncertainties are making conventional fire management approaches less effective. This initiative is exploring ways that countries can mitigate future disasters by developing new strategies, land management policies and practices, and science and technology.

Progress in FY23:

This wildfire initiative is supporting several country teams in different regions on key aspects of fire management. For example, in Algeria and Lebanon, needs assessments have been carried out to understand the exact requirements for planning wildfire management. A series of seminars, workshops, and presentations were conducted for ministries, local area firefighting departments, and crews. Similarly, in Thailand, engagement will soon start with provincial authorities, forest communities, and farmers to better understand the factors influencing the use of fires for

clearing agriculture land and the collection of forest products. The team is also providing advisory services to the country team in India, where a project in Uttarakhand will assist communities manage wildfires and implement a carbon credit scheme for the management of forest resources.

Next steps:
In FY24 and beyond, the team expects to respond to increasing demand for technical and operational support from World Bank tasks teams and other stakeholders, as fire events are becoming more frequent and intense globally. In addition to countries mentioned above, the team proposes the following activities and collaborations:

- Engagement with country teams and other stakeholders to provide technical support on wildfire management issues, particularly in East and South Asia

- Engaging with external partners where the fire team will engage with multiple organizations on various aspects of wildfire management. One example of an ongoing collaboration is with the Global Wildfire Information System. The team also plans to participate in upcoming wildfire conferences to showcase the work

- Developing a website presence to feature information on country projects, teams, and outputs.

DECARBONIZATION OF THE AIR AND RECARBONIZATION OF LANDSCAPES THROUGH AGRI-FOOD SYSTEM TRANSFORMATION

Objective:
To increase World Bank and client understanding of the global pathways for decarbonizing the air and recarbonizing landscapes through agri-food system transformation, and to develop tools needed to spur action at the country level.

Overview:
This activity is a multi-year, corporate Flagship Programmatic Advice and Analytics (PASA) with four pillars:

- Development of a global strategy and roadmap
- Production of global tools
- Development of country-level tools, specifically Food System Climate Action Plans
- Capacity building and dissemination.

PROGREEN support will focus on the third pillar by developing and testing a blueprint for the new analytical instrument, Food System Climate Action Plans (FSCAPs), in a few countries. The proposed work aims to analyze the pathways for addressing climate vulnerability and building resilience of country-level food systems.

FSCAPs will identify countries' sources and solutions of emissions and vulnerability in the agri-food sector and will provide information and recommendations for cost-effective actions. FSCAPs will also consult with various stakeholders and use rich upstream sources, such as Climate-Smart Agriculture Investment Plans, Climate-Smart Agriculture Profiles, CCDRs, World Bank analytics, as well as national strategies and policies. FSCAPs will also inform investment planning frameworks and country commitments, such as Country Partnership Frameworks NDCs, and Paris Alignment documents.

Progress in FY23:
The activity was conceived and approved in FY23 and is underway in FY24.

Next steps in FY24:
The team first developed a blueprint for FSCAPs, consisting of a standardized template and methodology for dissemination in the second quarter (Q2) of FY24. They have started selecting and piloting the FSCAP methodology in up to two countries, which will result in one or two in-depth reports on country level low-carbon and resilient food system development pathways by Q1 of FY25. Based on the country case studies, the blueprint will be updated and refined. In FY25, the team plan to organize outreach and dissemination events to present the results of the piloting exercise to a wider audience at international events.

UPSTREAM ANALYTICAL INPUTS: COUNTRY CLIMATE AND DEVELOPMENT REPORTS AND GEOSPATIAL ANALYTICS

Objective:
To analyze global geospatial natural resource and poverty datasets to build country-specific inputs to inform planning and investment documents.

Overview:
PROGREEN, together with PROBLUE and the Global Program on Sustainability, help countries integrate climate change, natural resource degradation, and poverty issues into their development planning and finance processes. PROGREEN supports spatial analytics of natural resource degradation, vulnerability, and poverty issues through the Knowledge, Information and Data Services Helpdesk. This highly efficient support is targeted by a team of geospatial and database management experts who provide geospatial analytics and visualization support; e-packaging of data and knowledge resources into interactive dashboards; e-books; and story maps. The analytical work and technical assistance also contribute to the Sustainable Development Vice Presidency-level review process for ensuring consistent quality coverage of natural resource degradation, vulnerability, and climate change issues into the World Bank's CCDRs and other key analytics.

Progress in FY23 and next steps:
This concept for this activity was developed in FY23 and work commenced in FY24.

3.2.4 BIODIVERSITY AND NATURE INITIATIVES: SCALING TOOLS, ANALYTICS AND FINANCING

This new cross-cutting theme aims to raise the profile of biodiversity and nature in PROGREEN's work and reorganizes several ongoing and new global initiatives under PROGREEN to align with the recent global declarations and momentum around nature finance.

CHANGING WEALTH OF NATIONS 2.0 CONTRIBUTION TO PROGREEN THROUGH FORESTRY MODELING AND ANALYTICS

Objectives:
To improve the measurement of nations' wealth, especially in terms of renewable natural capital, and to study the role that comprehensive wealth and natural capital play in ensuring growth, sustainability, and resilience to shocks and stressors such as climate change.

Overview:
PROGREEN adds value to the larger Changing Wealth of Nations (CWON) 2.0 effort to enhance measurement of natural resource wealth by developing global values for crucial forest ecosystem services. The PROGREEN grant supports creating new biophysical and monetary estimates for carbon retention services and updating monetary estimates for non-wood forest ecosystem services. Progress is substantial and close to completion.

Progress in FY23:
Global estimates for carbon storage have been calculated for all terrestrial vegetation from 2001 to 2020 via a global model that uses the 2006 Intergovernmental Panel on Climate Change default values for above- and below-ground biomass and the best available global data. The spatial data is currently being integrated into the World Bank maps database so that task teams can easily access and use it. The estimates have also been aggregated by land-use class and country and will be integrated into the CWON database—a public World Bank data portal offering. The technical report is being finalized after an extensive review process by both internal and external experts. PROGREEN support also produced Social Cost of Carbon estimates, which will contribute to the technical report and, ultimately, to the CWON 2.0 publication. Global estimates for non-wood forest ecosystem services for 1995–2020 have also been developed. The approach builds on the model used for the CWON 2021, but with more refined machine learning approaches.

The literature review was updated, and the database of values was significantly expanded, improving overall estimation and quality in the technical report.

Next steps:
In FY24 and beyond, the team will disseminate the technical reports that were finalized in Q1 FY24. The CWON dissemination and outreach strategy included the sector-specific launch and outreach events that were held for general and expert audiences in Q2. It also covers both events around the launch of the CWON 2024 report (planned for March and April 2024). Targeted outreach to technical audiences will be facilitated by external collaborators, the Basque Center for Climate Change and IUCN. Technical reports will be accompanied by simpler outreach and awareness documents, including a two pager for each asset and, possibly, regional briefs.

THE BIODIVERSITY, ECOSYSTEMS, AND LANDSCAPE ASSESSMENT INITIATIVE

Objective:
To promote the use of ecosystem services-informed landscape management planning in select countries.

Overview:
The BELA approach demonstrates how ecosystems play a critical role in supporting countries' economic goals and their resilience to climate change. This activity engages World Bank teams and clients to take an integrated, watershed- or landscape-scale approach to targelewiting investments in infrastructure, agriculture, environment, and other development goals. The activity is expected to enhance the effectiveness and long-term sustainability of investments in biodiversity conservation, agriculture, water resources, forestry, nature-based tourism, and infrastructure in selected countries. The activity is also expected to strengthen countries' resilience to climate change.

Progress in FY23:
In FY23, the BELA initiative provided technical assistance and support in eight countries: Democratic Republic of the Congo, Ethiopia, Lesotho, Malawi, Madagascar, Pakistan, Uzbekistan, and Zimbabwe. It contributed to national sustainable development processes, such as supporting Malawi in its first ever CCDR to integrate nature into macroeconomic modeling and informing the selection of project focal areas in the Democratic Republic of Congo for a new US$300 million Forest and Savanna Restoration Investment Program.

Capacity-building efforts through this activity has led to cross-sector commitments and management plans. BELA collaborated with partners to mainstream its approach into World Bank operations and reports. Although BELA had many successes, the team also faced implementation challenges. The main challenges

included insufficient technical expertise to execute the approach and the intricacies of setting up administrative structures for ecosystem service assessments. BELA addressed this by exploring external partnerships and offering training.

Next steps:
In FY24 and beyond, the BELA initiative will continue providing technical assistance in countries including the Democratic Republic of the Congo, Pakistan, Ethiopia, Madagascar, and several yet-to-be-determined countries in Central Asia. The focus will be on integrating nature into CCDRs, identifying restoration hotspots, and creating an investment prioritization tool for Ethiopia's strategic investment framework. The initiative will emphasize knowledge dissemination through case studies and capacity-building materials, aiming to promote the BELA approach within the World Bank. Capacity-building efforts will include organizing webinars, training events, and a library of resources.

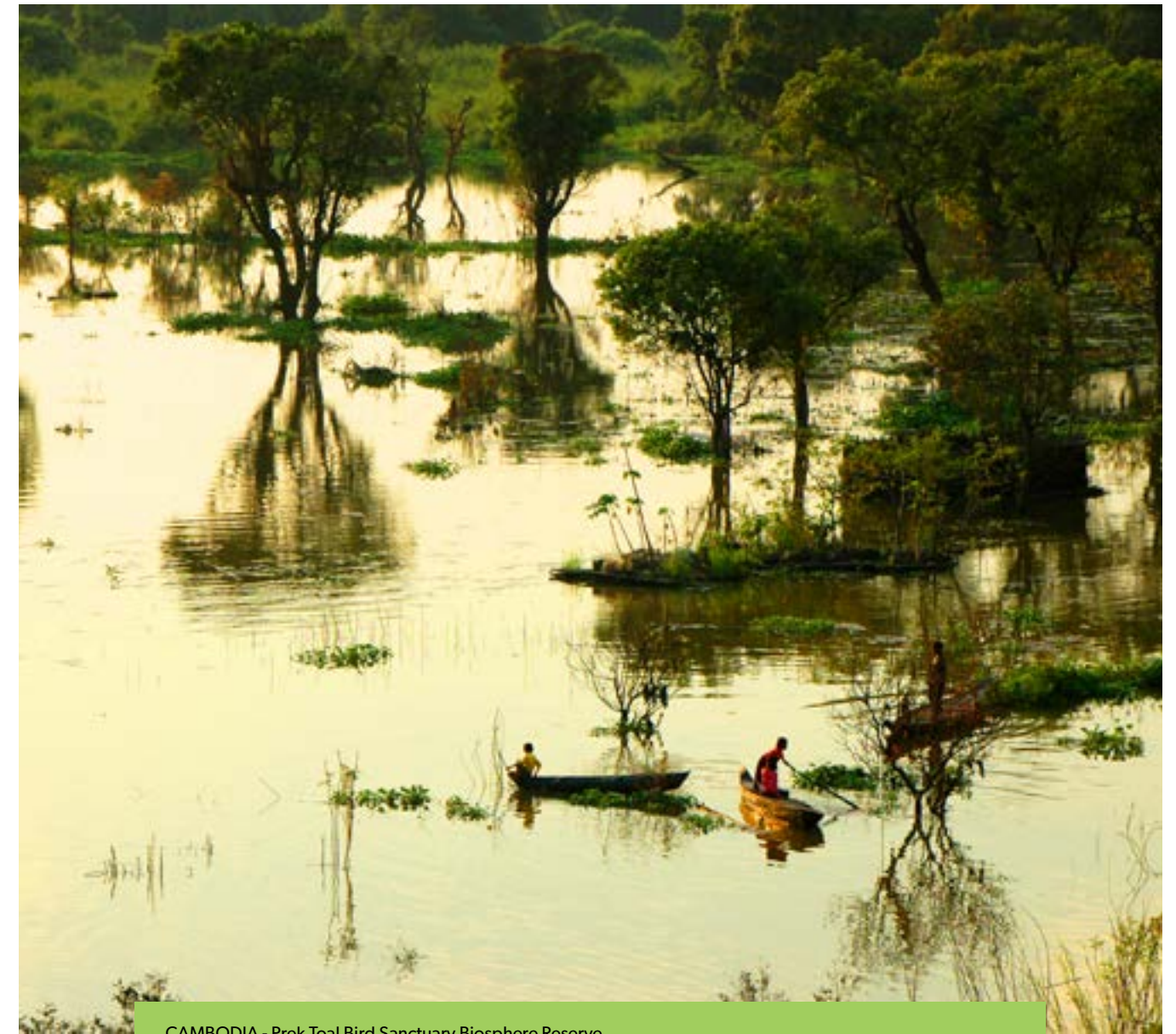# NATURE FINANCE METHODOLOGY IN SUPPORT OF THE GLOBAL BIODIVERSITY FRAMEWORK

Objective:
To contribute to the World Bank methodology for identifying and tracking finance in support of ecosystem services and/or biodiversity, thereby contributing to the nature-positive goal embodied in the GBF.

Overview:
This activity supports a corporate commitment emerging from the twentieth replenishment of the International Development Association (IDA20), and a parallel commitment in the Joint Multilateral Development Bank (MDB) Statement on Nature, People and Planet. It is conducted in collaboration with a cross-global practice working group, which includes: ENB; Agriculture and Food; Water; Urban, Disaster Risk Management, Resilience and Land; Transportation; Operations Policy and Country Services; as well as the International Finance Corporate and Multilateral Investment Guarantee Agency. The work is led by the ENB Global Practice's Biodiversity team with corporate support from environmental specialists and technical consultants. This activity works to establish a Nature Finance Framework conceptualizing the range of World Bank investments that contribute to halting and reversing the loss of biodiversity and ecosystem services. It also aims to develop a technical methodology to apply the Nature Finance Framework consistently through the World Bank portfolio. In parallel, World Bank contributions to a joint MDB technical working group on nature aim to create a common understanding of what nature-positive finance is among MDBs and to facilitate consistent reporting of their contributions to the realization of the GBF's ambitions. By establishing a technically sound methodology for the institution aligned with broader MDB discussions, this work will help track client efforts to support implementation of the GBF.

PROGREEN adds value by providing analytical and technical expertise to the design of the methodology and guiding principles and to the mainstreaming of the GBF

CAMBODIA - Prek Toal Bird Sanctuary Biosphere Reserve

priorities in the World Bank's work. This small, but strategic, support engages PROGREEN with several key global practices and trust funds in an innovative area for increasing the attention on biodiversity across economic sectors and some of the World Bank's largest lending areas.

Progress in FY23:
In FY23, PROGREEN supported the work led by the World Bank to develop a Nature Finance Framework and its accompanying technical methodology to identify and track nature finance through a series of workshops and continuous dialogue across the institution. This included the development of a taxonomy for eligible nature finance activities and a methodology to identify what part of nature finance could be considered as a nature-positive investment. This work was developed alongside and consistent with broader MDB discussions on common principles for tracking nature-positive finance.

Next steps:

The conceptual Nature Finance Framework and technical methodology was presented at the IDA20 Mid-Term Review. Subsequent development of the methodology and steps to prepare for its operationalization will take place over the remainder of the IDA20 period, with the methodology expected to be applied to World Bank projects in 2025.

SUPPORT TO AGRICULTURAL BIODIVERSITY CORPORATE FLAGSHIP

Objective:

To, through the PASA on Biodiversity in Agriculture, help countries understand the impact of agriculture on biodiversity and ecosystem services and provide them the knowledge, policy tools, and investment options to protect nature while meeting demand for food.

Overview:

The PASA, funded by PROGREEN, Food Systems 2030, and Global Water Security & Sanitation Partnership trust funds, in addition to the Global Environment Facility and World Bank Budget, will help countries repurpose their agricultural policies and expenditure to reduce the impact of agriculture on nature and achieve the GBF targets. A main output will be to produce a flagship report with recommendations for countries. PROGREEN, the Food Systems, Land Use and Restoration program, and Food Systems 2030 will support the implementation of these recommendations. The PASA will expand the scope of previous PROGREEN-supported work on climate-smart agriculture analytics and repurposing agricultural policy and expenditure to include a broader set of nature-positive objectives in line with the GBF. Strategically, this activity engages PROGREEN with several key global practices and trust funds in an innovative new area that focuses on increasing the attention on nature and biodiversity in some of the World Bank's and clients' largest lending areas.

Progress in FY23:

The concept note was approved on May 31, 2023. Terms of Reference for a study on sustainable management approaches to mitigate agriculture-driven nature loss were prepared and the contract will be awarded in early FY24. A briefing note providing initial insights from the PASA was prepared in November 2023.

Next steps:

The contract for the above study is due to be awarded before the end of September 2023. An initial briefing note providing initial insights from the PASA is to be prepared by the end of November 2023.

3.3 CAPACITY BUILDING AND KNOWLEDGE MANAGEMENT

PROGREEN's Knowledge and Learning Program strengthens collaboration across World Bank programs and trust funds (FCPF, BioCarbon Fund, EnAble, SCALE), development partners, and Global Environment Facility-financed programs such as the FOLUR Impact Program and the NbS Invest project. During FY23, the program curated a range of knowledge exchanges, seminars, and task team meetings to showcase results and innovations. The PROGREEN knowledge series recordings and products are coordinated with and often integrated into the ENB webinar weekly series and communities of practice learning initiatives. While global flagships and emerging initiatives serve as the foundation of PROGREEN's Learning Framework, the country teams also developed an increasing stock of learning products throughout FY23 that can be further developed and disseminated in FY24.
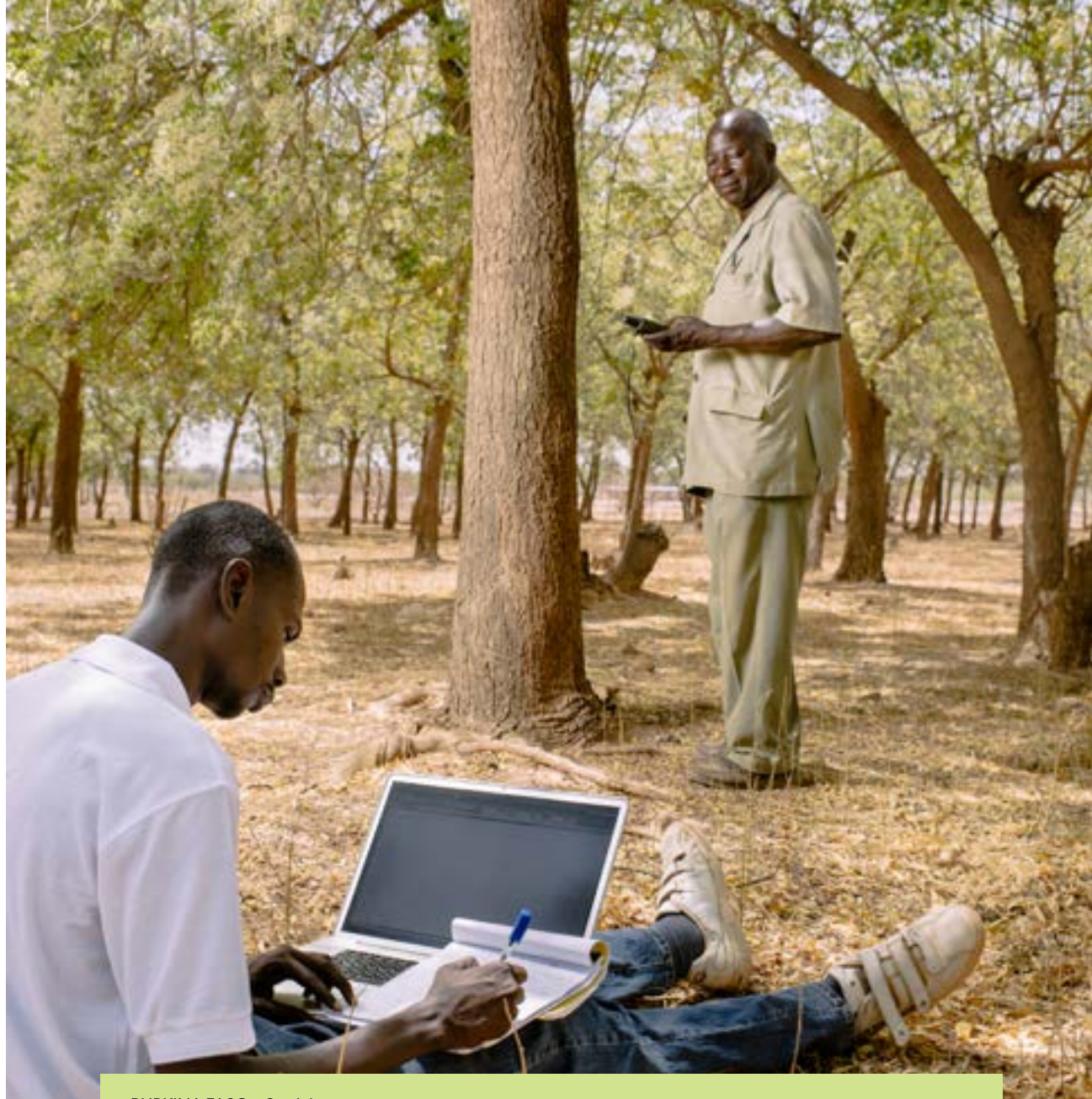
In October 2022, the PMT organized a technical meeting in parallel with the Partnership Council that focused on learning and issues of interest outside the formal decision-making environment. This two-day virtual event allowed the country teams and knowledge activity leads to share updates directly and engage more deeply with PROGREEN's development partners.

In June 2023, PROGREEN collaborated with PROBLUE and the Global Program on Sustainability to develop and deliver the joint technical meeting and site visit with development partners in Ghana. This was a key opportunity to showcase the technical activities and achievements of the multi-trust fund support in an advanced country program and to discuss and prioritize opportunities for deepening collaboration.

Next steps:

In FY24, PROGREEN continues to deliver capacity building and knowledge development through activities like:

- Launching the Integrated Land Use e-course with the ISFL at GLF Africa in Nairobi in October 2023, which is an online learning course of 9 modules in 2 phases. PROGREEN is in discussion with FOLUR and FAO on using this as an entry point for the Participatory Informed Landscape Approach (PILA) learning materials that they are developing for broader outreach.

- Organizing and delivering a learning session on green finance at GLF Africa which featured the work of the Finance Task Force for the UN Decade on Ecosystem Restoration. This work will likely be featured again at the GLF Luxembourg event on green finance, normally held in February/March.

- Organizing task team learning events with a thematic and geographic approach.

BURKINA FASO - Studying trees

- Enhancing collaboration on producing and disseminating knowledge related to Indigenous Peoples and local communities with the World Bank's Social Sustainability and Inclusion Global Practice, EnABLE, and Dedicated Grant Mechanism, as described under Global Programs (p. 40)

- Continue PROGREEN's monthly Knowledge Series that target wider audiences and showcase country products and development partner offerings. This begun with a webinar in November on wood-based construction for housing and job creation in Uruguay, which featured work initiated by Finland's development assistance.

- Further learning events through the year will focus on the Governance tool (see Global Program p. 37), the Gender Certification and W+ Standard (see Global Program, p. 38), and a workshop focusing on countries working on wildfire risk management.

Table 7.   Knowledge Events FY23 (second and third quarter)

Event	Date
Taking Steps to Empower Women in PROGREEN and FOLUR Landscapes: REDD+ meets W+ in Nepal	February
Ghana Woodfuels Sector: Issues and Opportunities	February
BELA: Helping Teams Design Resilient Investments through Ecosystem Service Assessments	March
GLF Luxembourg side event: How to Scale Finance for Ecosystem Restoration: Solutions from the Private Sector and Development Partners	March
Task Team Meetings: Payment for Ecosystem Services	March
PROGREEN: Indonesia's Environmental Ambitions on Land and Sea—A Chat with André Aquino	April
Analyzing Forest Restoration Potential, Costs, and Investment Opportunities	May
Joint Technical Meeting and Site Visit with Development Partners in Ghana	June

Table 8.   Knowledge Events FY24

Event	Date
BELA Integrating Nature into CCDRs	September
Brown Bag Lunch with Éliane Ubalijoro, CEO of CIFOR-ICRAF	September
Task Team Meeting—PROGREEN Insights: Engaging with the Private Sector & Greening Agricultural Commodity Sectors	October
GLF Nairobi—PROGREEN on Restoration: Insights from the Frontlines of the Nature Crisis in Sub-Saharan Africa	October
Wood-based Construction: Innovations and Applications in Developing Countries Webinar	November
Task Team Meeting—Governance Toolkit Launch	November
Building Climate Resilience in Landscape (TBC)	December
Gender Certification and W+ Standard	TBC
Workshop on countries working on wildfire risk management	TBC

3.4 COMMUNICATION AND OUTREACH

PROGREEN's communications and outreach help raise awareness and build support for sustainable landscape management and cross-sectoral collaboration at the national, regional, and global levels. As PROGREEN's activities increase delivery of results, the communications team is working to disseminate the knowledge and tools to promote wider application and scaled-up investment in sustainable landscape management practices and policies.

Following the pattern set in FY22, global outreach activities in FY23 focused on showcasing PROGREEN results at select global events such as the United Nations Framework Convention on Climate Change (COP27), the United Nations Convention on Biological Diversity (COP15), and the GLF events already mentioned.

The communications team also contributed substantially to the coordinated messaging and presentation of the Joint Trust Fund Technical Meeting in Ghana in June. The team collaborates with other World Bank programs and initiatives on landscapes management, including ISFL/BioCarbon Fund and FOLUR, coordinating contributions to joint events where possible. The communications team produced a range of stories and outreach pieces, including country stories on Nepal and Ethiopia, which emphasizes PROGREEN impacts at the local level. The team continues to work with partners, knowledge communities, and practitioners to advance the restoration and landscapes management agenda globally. In FY24, PROGREEN is producing a brochure to increase awareness about the World Bank and PROGREEN's engagement in activities aligned with the GBF (see Annex 2).

Website:
The website is a crucial tool in PROGREEN's communication strategy. Following the upgrade and reorganization of the website in FY22, PROGREEN continues to add new publications and update country activity descriptions and accomplishments, particularly those emerging from the country knowledge activities. Stories and reports are shared monthly, and these updates will become increasingly robust as country activities continue to deliver results and knowledge products.

Newsletter:
PROGREEN maintains an active newsletter and mailing list with over 3,000 subscribers from the donor community, partners, civil society, client governments, and general public. The quarterly newsletter features program updates and stories, upcoming events, new publications, and knowledge from the global forest and landscape management community. PROGREEN uses the mailing list for additional outreach and communications, including event announcements.

Social Media:
PROGREEN continues to promote content using the World Bank's Environment Twitter/X channel (@WBG_Environment), which has over 22.6 thousand followers. Content is also shared by the Digital Communications Associate of the ENB Global Practice at a weekly Web Editors meeting for all World Bank staff in charge of social media channels.

MALI - Katibuongo community

4
Monitoring
and Evaluation

PROGREEN is a results-focused program that aims **to maintain and improve ecosystem services in resilient production and conservation landscapes**. To measure how well the program is achieving its objective, PROGREEN uses a set of quantitative indicators that track progress at different stages. This chapter summarizes progress on these indicators as of June 30, 2023. The total disbursement of PROGREEN was US$26 million at the end of FY23. The results are shown per fiscal year and cumulatively.

Over time, the PROGREEN program management team and project teams have gained experience in tracking progress on the PROGREEN results indicators. Building on this experience, the team has improved the monitoring process to enhance the quality and accuracy of reported data. In FY23, the team enhanced the reporting templates, introduced an improved results-tracking database, and refined verification and validation methods. The team also prepared a Monitoring and Evaluation Plan and integrated updated World Bank guidance for results measurement into the monitoring system. These enhancements have led to PROGREEN's results data and reporting being updated. In FY24, a mid-term review will be carried out by an independent party. This review will assess the program's performance and help identify areas that work well and areas that need to be improved.

PROGREEN achieves results through three primary pathways of influence:

- **By producing knowledge products and developing local capacity**, so influencing understanding of key solutions to priority problems and enhancing the uptake of improved practices

- **By providing technical assistance, analysis, and advice** that contribute to the design and geographic targeting of investment operations or policies in the planning stage

- **By directing co-financing of investment operations** (implementation of activities).

The Results Framework, which is built on the program's theory of change, includes indicators relating to each of these pathways of influence. This section is structured around these pathways.

4.1 RESULTS ACHIEVED THROUGH KNOWLEDGE PRODUCTS AND CAPACITY BUILDING

PROGREEN invests significantly in strengthening capacities for sustainable and resilient landscape management through knowledge-building activities. These activities take the form of workshops, training and consultations around topical themes; the development and propagation of tools; and the production and broad dissemination of knowledge products. Table 9, which summarizes the capacity-building outputs delivered with PROGREEN support, shows that the level of effort and production has accelerated in the program's third year, with more knowledge activities reaching more countries, at a more advanced stage of development.

By June 30, 2023, PROGREEN had cumulatively supported 349 capacity-building activities including workshops, training sessions, policy dialogues, consultations, webinars, and numerous follow-on discussions with client institutions—since the program started in 2021. During FY23 in Ethiopia, for example, a workshop was organized with government entities to enhance their understanding of key habitats and biodiversity areas, participatory forest management, and the development and protection of buffer zones. This helped to inform priority locations for the community engagement to support the implementation of key interventions. Meanwhile, in Zimbabwe, a grant supported a training bootcamp for officials from the country's meteorological services department to access weather forecasts, generate advisories, and disseminate them to farmers. Many further consultations were organized with PROGREEN support, including in Bangladesh, where the process helped stakeholders reach consensus on a management plan that balances conservation and livelihoods.

PROGREEN cumulatively helped to deliver 39 tools for maintaining and improving the ecosystem services in targeted landscapes while supporting people's livelihoods. In Panama, for example, a user guide for assessing and identifying financing instruments to mobilize private capital for sustainable investments in natural landscapes was produced in FY23. And in the Philippines, a Rapid Land Tenure Assessment Questionnaire was developed and shared with communities to support improved forest land-use planning.

PROGREEN country activities delivered 144 knowledge products ranging from action plans, reports, policy notes and assessments to economic analyses and technical guidance documents since the program started in 2021. These knowledge products have informed dialogues, contributed evidence, and contributed to building consensus on the need for, and design of, policies and investment interventions towards more sustainable management of production and conservation landscapes. They have also helped practitioners and decision-makers

better understand and implement more integrated, responsive, and sustainable landscape management strategies and practices. As an example, in Chad (part of the Sahel regional program), a guidance note was produced during FY23 on the use of disruptive technologies for monitoring ecosystems, wildlife, water, and land degradation. Meanwhile, in Dominica, a guidance note was produced that focuses on increasing the economic viability of the forest and agricultural sectors through sustainable approaches.

Table 9. **Output indicators: capacity building**

Outputs		Delivered		
Indicator	2021	2022	2023	Total
Workshops, trainings, and consultations conducted (number)	16	129	204	349
Tools developed (number)	0	15	24	39
Knowledge products prepared (number)	5	28	111	144

4.2 RESULTS ACHIEVED THROUGH TECHNICAL ASSISTANCE, ANALYSIS, AND ADVICE

A key pathway for PROGREEN's upstream impact comes from providing infusing specialized knowledge into large World Bank investments and national policy dialogues. By combining capacity-building, policy-enabling activities and technical assistance with large investments, significant results can be achieved in support of biodiverse and resilient landscapes. For example, in Sri Lanka, PROGREEN helped the government strengthen its capacity to minimize the environmental impacts of road construction by developing assessment and siting guidelines. Customized training was delivered and institutional collaboration between relevant environmental and transport agencies was supported. As a result, the Inclusive Connectivity and Development Project in Sri Lanka (which draws on US$558 million in IBRD financing) now better addresses biodiversity conservation and climate resilience issues. This project also features a US$58 million component for mobilizing private investments through matching grants in agro-logistics.

Table 10 presents a quantitative assessment of PROGREEN's influence and impact on investment operations. It offers a snapshot of where PROGREEN activities influenced or improved the direction or quality of World Bank investments. With PROGREEN activities starting in 2021, the delivery and tracking of intermediate outcomes commenced in 2022. When PROGREEN-supported knowledge was used in the design

or implementation of an investment operation (for example, when PROGREEN knowledge affected the siting or sequencing of activities), the value of the entire operation was included in the calculation of the informed investment amount.

As of June 30, 2023, PROGREEN has influenced 38 investment operations valued at US$7.4 billion. Of this, US$6.3 billion came from IDA/IBRD financing, another US$589 million came from government resources, and more than US$514 million came from other financial resources. These other sources include commercial financing, multilateral and bilateral partners, and international climate and nature financing sources such as the GEF or the Green Climate Fund.

PROGREEN activities also play an important role in strengthening countries' policies, regulations, and national plans. To create a favorable policy environment for resilient and sustainable landscape management, the program supports knowledge-sharing and collaboration within and between ministries, nongovernmental organizations, civil society organizations, marginalized groups, and other stakeholders. This support is then combined with the delivery of policy notes and other knowledge products and engagement in policy dialogues, workshops, and regional or national discussion platforms. Bolivia provides a relevant example of this pathway to impact through a national planning process. The country's lowlands are increasingly exposed to pressure from an expanding agricultural frontier. PROGREEN supported analytics and evidence-gathering on land management and land-tenure tools, forest and landscape governance, and the economic benefits of environmental functions in the Chiquitano Dry Forest. Another knowledge activity examined financial incentive mechanisms to encourage agro-ecological approaches.

Table 10.   Intermediate outcome indicators: Improving investment and policies

Intermediate outcomes	Delivered		
Indicator	**2022**	**2023**	**Total**
World Bank investment operations informed (number)	15	23	38
Development financing informed (US$)	3.4 billion		
Of which: IDA/IBRD Client financing Other partners and sources	2.6 billion 376 million 401 million		
Policies, plans, and regulations informed (number)	9	16	25
Additional financing mobilized that contributes to maintaining or improving ecosystem services in resilient production and conservation landscapes (US$)	251,000	20,143,810	20,394,810

A workshop held in April 2023 brought together Bolivian stakeholders from municipalities, government departments, central government, academia, nongovernmental organizations, and the private sector to discuss the findings and implications. Based on this strategic convening and dissemination, the government formed working groups with key stakeholders to advance priorities and agree on practical steps to improve forest governance, land-use planning, and alternative livelihoods. The working groups drew on the knowledge products to inform the redesign of the government's reforestation program for the Chiquitania and Chaco eco-regions of Santa Cruz. The revised reforestation program design balances the need to preserve the long-term sustainability of the natural resource base with benefits for local residents. Through this pathway, 25 policies, plans, and regulations in Bolivia were influenced by PROGREEN as of June 2023. Furthermore, PROGREEN has helped to mobilize more than US$20 million in additional financing, which contributes to maintaining or improving ecosystem services in resilient production and conservation landscapes.

4.3   RESULTS ACHIEVED THROUGH CO-FINANCING OF INVESTMENT OPERATIONS

PROGREEN grants are "co-financed" with World Bank investment operations that promote ecosystems services in landscapes while strengthening people's livelihoods. As of June 30, 2023, the World Bank Board had approved seven operations with co-financing grants from PROGREEN. These operations support sustainable landscape management objectives in Argentina, Burkina Faso, the Democratic Republic of Congo, Ethiopia, Ghana, Kazakhstan, and Uzbekistan. Another seven investment operations with co-financing are in the preparation and negotiation process with government counterparts and are expected to go for Board approval in FY24, as described in Annex 1.

Co-financing of recipient-executed activities adds value through direct support for on-the-ground project implementation by national and local governments and local communities. As a result, a portion of the outcomes achieved by these projects can be directly attributed to PROGREEN. Table 11 presents the outcome indicators on which co-financed projects intend to report. It also shows the first set of outcomes delivered in Ghana, both for the project, as well as for the outcomes attributable to the PROGREEN portion. Under the Ghana project, more than 23,000 women and youth already benefit from landscape-based value chains, and 185,000 hectares of land have been brought under restoration. The other six co-financed projects are at the planning or early implementation stage and have not yet achieved reportable progress toward the outcome indicators. Together, the co-financed projects aim to bring 3.9 million hectares under sustainable forest management while increasing benefits for 4 million people in targeted landscapes.

SRI LANKA - Farmer checking climate information via SMS

Table 12 also offers insight into how many projects expect to report on each PROGREEN outcome indicator. Only indicators for which targets have been provided by one of more projects are included in the table. For each co-financed investment project, the relevant team integrates the most suitable and relevant indicators into the Results Framework. Where outcome indicators have not yet been adopted into co-financed projects, they are not included in this progress update. Project teams may also customize the indicator language if these tailored indicators track equivalent results as the indicators used by PROGREEN. This approach ensures that the indicators reflect the unique circumstances of each project while being aligned with the PROGREEN Results Framework. Most indicators show an increase in the targets after new FY23 activities were added. For a few indicators, targets were adjusted downwards in FY23 after baseline corrections.

Table 11. Program Indicators: Targets and results of PROGREEN co-financed investment projects

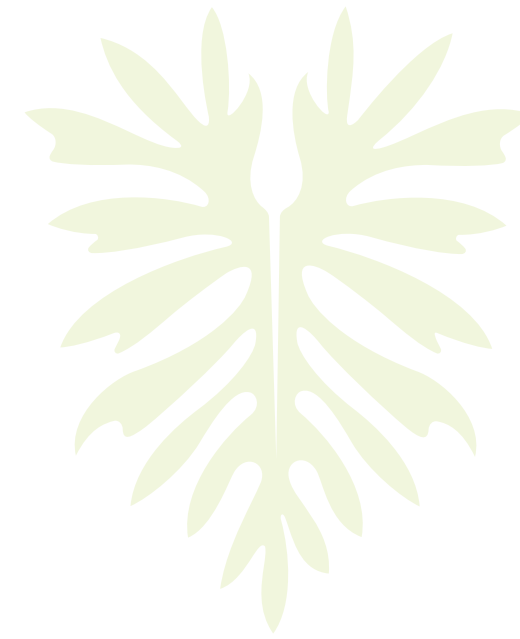| Program indicator	Expected results			Delivered results		
Indicator	Number of projects with targets for indicator	Overall project targets	PROGREEN portion	Number of projects that reported progress on indicator	Overall project results	PROGREEN portion
Area of production landscapes under sustainable use (hectares, ha)	2	62,136 ha	7,215 ha	0	–	–
Area of conservation landscapes under sustainable use (ha)	2	1.2 million ha	171,975 ha	0	–	–
GHG emissions reduced in targeted landscapes (tons of CO_2 equivalent)	5	18.7 million tCO_2e	2.5 million tCO2e	0	–	–
People in targeted landscapes with increased benefits (number)	7	4.0 million	734,258	1	36,342	6,905

Table 12. Pillar outcomes indicators: Targets and results of PROGREEN co-financed investment projects

Program indicator	Expected results			Delivered results		
Indicator	Number of projects with targets for indicator	Overall project targets	PROGREEN portion	Number of projects that reported progress on indicator	Overall project results	PROGREEN portion
Pillar 1: Strengthening forest and landscape management						
Area under sustainable forest management (hectares, ha)	7	3.9 million ha	30,956 ha	1	163,055 ha	44.840 ha
Share of land-users adopting new practices in targeted landscapes (percent)	3	10–50%	10–50%	0	–	–
Land area under restoration (ha)	4	3.0 million ha	132,693 ha	1	185,502 ha	1855 ha
Key habitats protected (number)	3	7	7	0	–	–
Countries with policy and institutional framework improved (number)	5	5	5	0	–	–
Women and youth with increased benefits from landscape-based value chains (number)	4	188,951	36,582	1	23,585	4,717
Landscapes with improved climate resilience (ha)	4	3.6 million ha	1.0 million ha	0	–	–
Pillar 2: Promoting sustainable agricultural landscape practices						
Area under agroecological food production (ha)	2	135,400 ha	21,650 ha	1	17,934 ha	2,869 ha
Farmers adopting agroecological agricultural practices (number)	4	258,188	38,175	1	35,356	6,718
Countries with policy and institutional framework improved (number)	4	4	4	0	–	–
Area of food production systems with improved climate resilience (ha)	1	25,000 ha	3,650 ha	1	3,747 ha	712 ha
Trees in production landscapes outside of forests (ha)	1	16,000 ha	3,000 ha	0	–	–
Area under payments for ecosystem services (PES) in production landscapes (ha)	1	10,000 ha	5,000 ha	0	–	–
Pillar 3: Supporting cross sectoral landscape solutions						
Key infrastructure climate-resilient (number)	1	19	13	0	–	–

5
Associated Trust Funds

Accelerating the Implementation of REDD+ in Africa Single-Donor Trust Fund

5.1 SUMMARY

The flexibility and just-in-time support that the Accelerating the Implementation of REDD+ in Africa (AccelREDD) trust fund provides continued to help the World Bank teams operationalize Emission Reduction Programs across the Africa region—not only on REDD+ but also for all agriculture, forestry, and other land use (AFOLU)-related emission reductions.

During FY23, capacity-building support related to safeguards, emission reduction measurement and benefit sharing was an important activity for grants in Burkina Faso, Ethiopia, and Ghana. In particular, an AccelREDD Grant was signed with the Government of Ethiopia to supplement the Emission Reductions Purchase Agreement (ERPA) and pre-pare the inclusion of enteric fermentation in the Emission Reduction Program by 2025. Critical analyses were also conducted to guide further activities and policy development within Burkina Faso and Ethiopia related to carbon credits and private sector investment opportunities, respectively. In the Republic of Congo, with the support of AccelREDD grant, all the effectiveness conditions for the Bank Emission Reduction Program were met, and the first Emission Reduction Monitoring Report was submitted.

Implementation has been slower in two countries with Recipient Executed Grants. In the Democratic Republic of Congo, the team is awaiting the publication of a Presidential Ordinance for the AccelREDD grant to become effective. In Madagascar, changes in the World Bank team and portfolio management have hindered the preparation of the grant, but considering the challenges related to the first payment of the REDD+ Emission Reduction Program, AccelREDD support remains highly relevant. The situation is expected to be resolved in both countries by the end of 2024.

5.2 COUNTRY PROGRAMS

BURKINA FASO

In Burkina Faso, the AccelREDD grant will support the generation of emission reductions from investments made in sustainable agricultural land management by the Burkina Faso component of the West Africa Food System Resilience Program, so maximizing revenues for participating farmers, helping to improve the resilience of food systems, and contributing to the implementation of Burkina Faso's National REDD+ Strategy. Specifically, the grant will mobilize technical assistance and capacity building for the ministries in charge of environment and agriculture to support the implementation and monitoring of emission-reducing activities in the West Africa Food System Resilience Program, in line with the sustainable agricultural land management methodology approved under the VERRA carbon standard. It will support the integration of the necessary elements into the design, implementation, and monitoring arrangements of the program that would make it eligible to generate emission reductions under the Burkina Faso Agricultural Carbon Project (BUFACAP). It will also provide technical assistance and capacity building to certify the emission reductions generated.

As part of the implementation of its National REDD+ Strategy, Burkina Faso is developing a jurisdictional REDD+ program, which will incorporate local-scale activities that generate emission reductions. The program aims to mobilize financing from various projects contributing to the implementation of REDD+ with a view to generate emission reductions and monetize them through international carbon markets. This is a first-of-its-kind initiative in Burkina Faso—and in the Sahel region in general. It aims to mobilize and reward projects that contribute to the implementation of the REDD+ Strategy in the regions of the jurisdiction, enhance their impact, and help ensure their sustainability through the revenues from carbon credits.

One of these initiatives is the BUFACAP, led by the ministry in charge of environment, which acts as an umbrella over multiple projects investing in sustainable agricultural land management and which certifies the emission reductions generated for monetization through the carbon market. Its ultimate objective is to: sustainably increase smallholders' agricultural productivity, income, and welfare; build resilience of agrarian landscapes to climate change; reduce forest loss and degradation; and increase net forest cover. The first initiative to be incorporated into BUFACAP is the West Africa Food System Resilience Program—a regional operation in Burkina Faso that is implemented by the ministry in charge of agriculture and financed by IDA and the Global Agriculture and Food Security Program (US$114 million; 2021-2026).

The technical work under this grant was effectively launched in September 2022, and a firm was recruited to provide technical assistance and capacity building to

the ministries in charge of environment and agriculture for the integration of the West Africa Food System Resilience Program into BUFACAP. During 2022, two coups d'état occurred in Burkina Faso (in January and September 2022, respectively) which led to the triggering of the World Bank's Operational Policy 7.30 and a pause in disbursements. The pause was eventually lifted in January 2023. As such, the program suffered significant delays in its launch, which also delayed the carbon finance-related activities. Work completed to date includes:

- **Capacity building to the ministry in charge of agriculture**. This included a study trip to Kenya in June 2023, to visit the Mt. Elgon sustainable agricultural land management project implemented by the nongovernmental organization, Vi Agroforestry. The study trip covered the full cycle of a carbon project, including: monitoring aspects; the monitoring, reporting, and verification system; the recruitment of farmers as per the legal agreements; and benefit sharing. The study trip was key in enabling participants to obtain a practical understanding of the components of a sustainable agricultural land management carbon project.

- **Analysis of eligibility criteria**. The firm conducted an analysis to determine the eligibility of the West Africa Food System Resilience Program in Burkina Faso to generate carbon credits according to the sustainable agricultural land management carbon accounting methodology of the VERRA carbon standard—the benchmark in the carbon market. While the project promotes a variety of sustainable agricultural land management practices, the analysis concluded that the program's business-as-usual approach is not eligible to generate carbon credits given that it plans to recuperate degraded lands through mechanical agriculture at a large scale (100 hectares minimum), which emits carbon. AccelREDD played an integral role in helping the program integrate manual/natural recovery of degraded lands through the promotion of sustainable agricultural land management practices to small producers (field size from 0.5 to 5 ha) with land security (land titles, customary titles, or alternative titles) into its approach. As the program approach was amended accordingly, the carbon project's design will be based on the areas using the non-mechanical approach.

- **Update of carbon-related documents**. The BUFACAP was designed based on methodology VM00017 of the VERRA carbon standard, which is now being decommissioned. Project documents are being updated to switch to methodology VM00042. The difference is that VM00017 is based solely on the modeling of carbon sequestration in the soil, while VM00042 requires the collection and analysis of soil samples to compare them with the modeling results, or a "model validation study". This is required only once upon approval of the project and not continuously throughout the monitoring process. The AccelREDD grant will support the costs related to this requirement, for which the terms of reference are currently being elaborated.

BURKINA FASO - Zandoma, Integrating practices to enhance agricultural resilience

The expectations for FY24 are:

- Confirming the integration of manual/natural recovery of degraded lands by promoting sustainable agricultural land management practices to small producers, in line with the sustainable agricultural land management carbon methodology, by the West Africa Food System Resilience Program project implementation unit. Once completed, the carbon project can be set up, including recruiting farmers and monitoring arrangements on farm.

- Updating the carbon-related documents based on methodology VM00042, including the collection and analysis of soil samples.

- Initiating the setup of BUFACAP's monitoring, reporting, and verification system, including: organizing data collection and monitoring arrangements; defining standard operating procedures; developing tools; and establishing a digital monitoring system.

DEMOCRATIC REPUBLIC OF CONGO

In the Democratic Republic of Congo, the original objective of the AccelREDD grant was to finance the Operationalization of the ERPA Support Project (OPERPA), which aims to improve the enabling environment for effective result-based payments under the Mai-Ndombe Emission Reduction Program. The project will fill the existing resource and capacity gaps and help the Emission Reduction Program move past ERPA signature and towards steady, sustainable operations. Core activities will include supporting key REDD+ stakeholders to address capacity gaps and strengthen the skills of targeted beneficiaries at national and provincial level,

DEMOCRATIC REPUBLIC OF CONGO - National rainforest strategy (REDD)

including communities. Most importantly, the achieving the project's development objective will help increase the success of the Emission Reduction Program to generate emission reductions; distribute payments to communities in alignment with the Benefit Sharing Plan (BSP); and ultimately enhance the carbon stocks in the Emission Reduction Program area.

The Democratic Republic of Congo has been engaging in and championing the REDD+ process since 2008 and has developed a large-scale REDD+ program for results-based payments in the Mai-Ndombe Province to deliver both significant climate and development outcomes. An ERPA between the World Bank and the Government of the Democratic Republic of Congo worth US$55 million was signed in September 2018, based on a net emission reduction target of 29 MtCO2e over the period 2018 to 2022. There are six effectiveness conditions that need to be met before the ERPA can be operationalized. As of July 2022, all six conditions, as well as a legal covenant, have been met—some due to the setup of the AccelREDD operation.

The project's grant agreement was signed in September 2022 but is still pending effectiveness as of the end of FY23. The Project Implementation Manual (first condition of effectiveness) was developed and approved by the World Bank. A Presidential Ordinance (second condition of effectiveness) was signed in February 2022 but has not yet been published in the Official Journal. With support from the World Bank's Kinshasa Office, the Task Team is engaging with the client (Ministry of Finance, Ministry of Environment, and the President's Office) to expedite the publication process, which is preventing the grant from being effective. In the meantime, the Project Implementation Unit (UC-PIF) with support from the task team have developed the project's Annual Work Plan and Budget, which will be approved as soon as the grant is effective. The recruitment for the international carbon finance specialist to be hosted within the UC-PIF was launched in August 2023. Therefore,

it is expected that implementation will start in FY24. Given the current momentum on carbon finance in the Democratic Republic of Congo, it will be critical to coordinate planning and activities with other projects supporting the Democratic Republic of Congo's carbon market, including World Bank-financed projects (ASAs on Congo Basin and Brazil-Indonesia-Democratic Republic of Congo Partnership, and the new US$300 million Forest and Savanna Restoration Investment Program) as well as projects supported by other partners like the USAID and CAFI (Central African Forest Initiative).

ETHIOPIA

In Ethiopia, the objective of the activity is to enhance investments and private sector participation—independently or in partnership with State Forest Enterprises and communities—in sustainable livestock and forest-based value chains. It will also address the ownership and title transfer right issue of the emission reductions generated, which is a key element for a well-functioning and inclusive emission reduction system.

The Oromia Forested Landscape Program—Emission Reductions Project is a jurisdictional results-based REDD+ payment system prepared under the BioCarbon Fund Initiative for Sustainable Forest Landscapes (ISFL). It aims to pay for emission reductions delivered through a comprehensive landscape management approach. It follows a phased approach. The first phase focuses on emission reductions from avoided deforestation and afforestation/reforestation activities. The second phase focuses on emission reductions from reduced forest degradation and the livestock sector (enteric fermentation).

While the Emission Reduction Program has made good progress—the first phase ERPA was signed on February 9, 2023—some challenges remain that require additional support. These include:

- **Emission reductions ownership (supported by bank-executed trust fund or BETF-financed activities):** The government has finalized the draft national forest regulation (NFR) that clarifies ownership and transfer of title for emission reduction from forests. The NFR still awaits approval by the Council of Ministers. Despite the progress made, additional support is required to ensure the alignment of the NFR with the ISFL requirements. There is also a need to clarify ownership and transfer of title for emission reductions generated by the livestock sector. These will be conditions for the disbursement of emission reduction payments in both phases.

- **Comprehensive Benefit Sharing Plan (supported by BETF-financed activities):** Preparation of the advanced comprehensive BSP integrating emission reduction benefits coming from both livestock and forest sectors has been

completed. The Plan still needs to go through an internal World Bank review, as well as Facility Management Team and ISFL Contributors' reviews. These will be followed by further updates by the government and approval by the World Bank. A final, cleared, comprehensive BSP will be a disbursement condition in phase two.

- **Livestock monitoring, reporting, and verification system—monitoring, reporting, and verification (RETF-financed activities):** Data collection required to fill gaps as per the data improvement plan for the development of tier 2 livestock GHG baseline is currently under way. Establishment of the livestock monitoring, reporting, and verification unit in the Ministry of Agriculture is ongoing. Additional and substantive capacity-building support of the unit will be required for strengthened and dependable emission reduction monitoring and reporting.

- **Leveraging private sector participation in production forestry (BETF-financed activities):** The production (plantation) forestry sector in Ethiopia is underperforming due to underinvestment, lack of private sector participation, and insufficient management by the State Forest Enterprises that manage the plantations on behalf of the Regional State Governments. Improving the business climate and increasing carbon payments to the sector could be one way to increase financing for climate-smart production systems in Ethiopia.

The key achievements in FY23 include:

Clarifying emission reduction ownership and transfer of title:

- The government finalized drafting the NFR in a consultative manner through several stages of reviews, including reviews by the World Bank task team

- The draft regulation was finalized by the government technical team incorporating feedback from stakeholders. It was subsequently submitted to the Council of Ministers for approval

- Provisional Emission Reduction Ownership and transfer of title Guarantee Letter was issued by the Government, as requested by the World Bank. This was done before proceeding to negotiations and signing of the first phase ERPA.

Preparing a draft comprehensive Benefit Sharing Plan:

- The advanced draft comprehensive BSP has been completed, is currently pending World Bank internal review and further reviews by the ISFL contributors

- The Government's internal review is already done, and a first level endorsement has been achieved.

ETHIOPIA - Forest Landscape Restoration

Establishing a livestock monitoring, reporting, and verification system and building capacity:

- A recipient-executed trust fund (RETF) grant valued at US$1.2 million was signed, and the first disbursement is based on approval of the work plan and procurement plan

- The Livestock and Fishery Sector Development Project Implementing Unit in the Ministry of Agriculture was designated as the entity hosting the Livestock monitoring, reporting, and verification unit

- Terms of reference were developed to hire a Livestock Monitoring, Reporting, and Verification Specialist to coordinate activities at the Livestock and Fishery Sector Development Project Implementing Unit. The specialist will be engaged imminently.

Preparing a prefeasibility study on private investment opportunities in jurisdictional level land-based emission reduction program in Ethiopia. It focused on three major areas: carbon market potential for landscape programs; Ethiopia's contextual legislative and regulatory situations; and nesting in large-scale jurisdictional schemes. The following three key recommendations were given:

- Improve existing legislation for carbon right and benefits, and investment framework

- Investing in carbon accounting and transaction framework

- Enable access for land for forestry and agricultural investments.

In FY24, clarity on emission reduction ownership and transfer of title for forestry is expected to be finalized. In the livestock sector, clarity on emission reduction ownership and transferability take longer, and work is also expected to be finalized during FY24. Moreover, the comprehensive BSP is expected to be delivered by FY24. The grant for the livestock monitoring, reporting, and verification capacity building support is expected to start disbursing shortly; it is a long-term undertaking and will continue until 2028.

In the plantation forestry sector, the next step is developing a shortlist of business models and practical "how-to" guidance for the advancement of private investments in emission reduction schemes. These activities are expected to continue until the end of the grant.

GHANA

In Ghana, the objectives of the Filling Ghana's Final Gaps to Accelerate Implementation of the Ghana Cocoa Forest REDD+ Program (GCFRP) operation are to: address effectiveness conditions; leverage private-sector Cocoa Forests Initiative commitments into real investment/engagement in Hotspot Intervention Areas (HIA); and take steps to operationalize core program systems more concretely at HIA and program-level.

REDD+ in Ghana has progressed significantly since 2008 when the country joined the FCPF REDD+ Readiness Programme. Ghana's National REDD+ Strategy was officially launched in 2016, and its R-Package was accepted in the same year. With cocoa expansion as one of the main drivers of deforestation in the High Forest Zone, the GCFRP was also accepted into the World Bank Carbon Fund in 2017, and early implementation within target HIAs began in 2018, in line with the National REDD+ Strategy. The GCFRP seeks to reduce carbon emissions from cocoa expansion into forests through the promotion of climate-smart cocoa production systems; community-based landscape governance mechanisms; monitoring; and cross-cutting actions with partners and stakeholders using best social and environmental practices.

The Government of Ghana signed an ERPA on June 11, 2019, for an estimated 10,000,000 tons of emission reductions to be generated for US$50 million in performance-based payments from the FCPF. The ERPA contains three effectiveness conditions that needed to be addressed before payment of emission reduction, including: submission of a final BSP; submission of sub-project arrangements (Framework Agreements); and submission of evidence demonstrating the Program Entity's ability to transfer title to the emission reductions without encumbrances.

In FY23, the government of Ghana fulfilled all the ERPA conditions of effectiveness, and it became effective as of April 2, 2020. Subsequently, Ghana received its first upfront advance payment in 2020 and implementation of the Emission Reductions Program is progressing steadily. The key achievements in FY23 include:

Building capacity on safeguards for government, private sector, and other consortia members, and operationalizing support to enable implementation:

- The National REDD+ Secretariat safeguards focal points have benefited from sustained capacity building on the World Bank's safeguards policies and operations. As a result, good progress has been made on safeguards implementation and monitoring.

- The National REDD+ Secretariat undertook safeguards monitoring exercises from September 12 to October 2, 2022, to assess and evaluate how safeguards issues were being integrated and addressed by stakeholders at the landscape level. The report has been approved by the World Bank, and the implementation has been satisfactory.

- Most of farmers are women, and they have actively participated and benefited from all the capacity building programs, including the trainings on the Fund Flow Mechanism manual.

- The National REDD+ Secretariat continued facilitating field engagements with the various community stakeholders, including the HIA functional units in five HIAs to deepen discussions on the carbon benefit-sharing arrangements/modalities. Linkages with the Feedback and Grievance Redress Mechanism and safeguards compliance were also established and highlighted during these meetings.

- The measures were put in place by the National REDD+ Secretariat to support private-sector partners in the HIAs and provide capacity building and awareness raising on the GCFRP and the BSP.
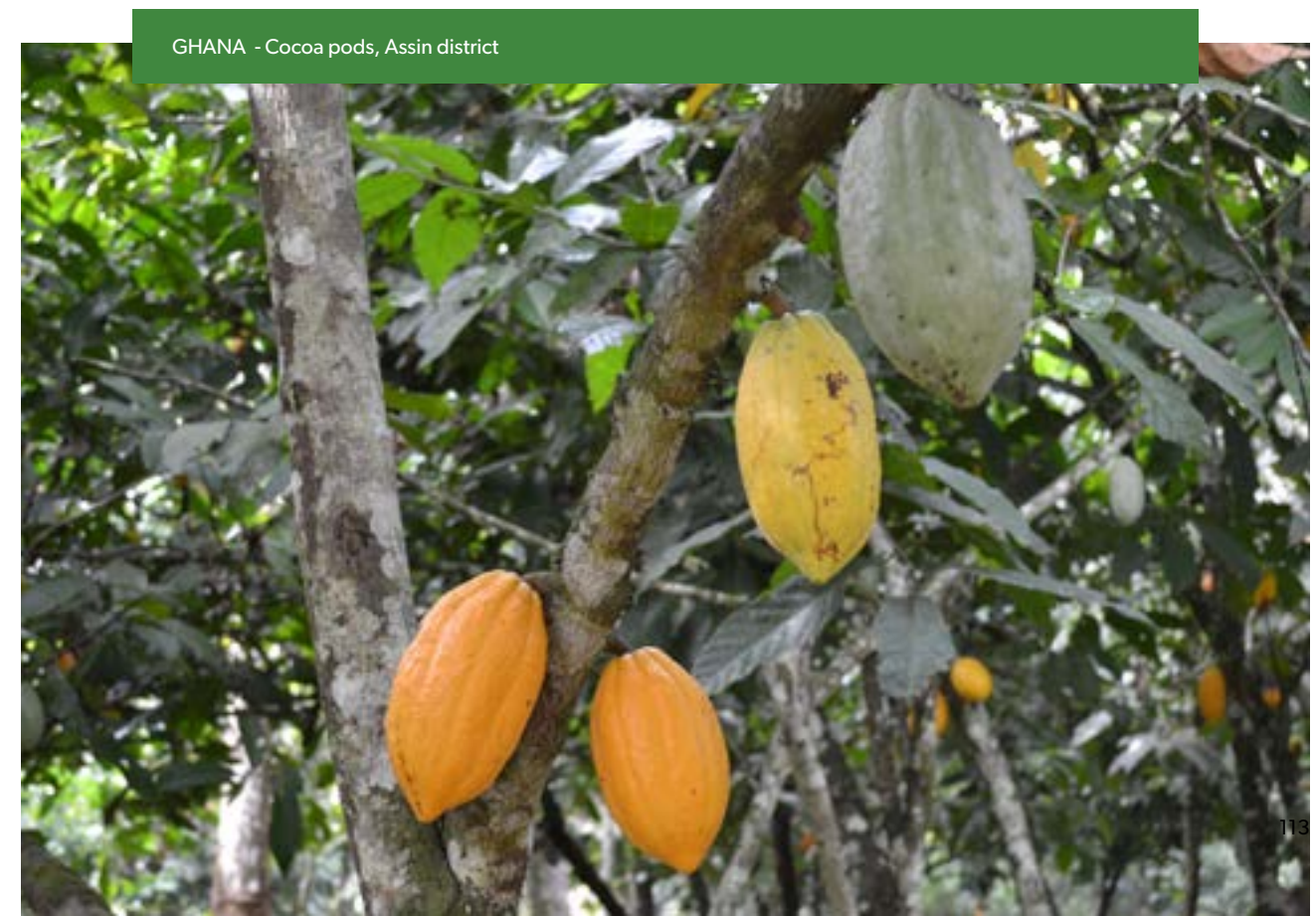
Supporting the development of governance structures and plans for five HIAs in alignment with private sector and civil society partners:

- In partnership with the government and with full support of private-sector chocolate companies and NGOs, the development of governance structures and implementation of activities moved forward from the start of the program in two of the HIAs—Juaboso-Bia and Kakum. However, not all the HIAs received such support. Therefore, AccelREDD has supported the development of HIAs through two main consultancies. One consultancy focused on the development of governance bodies and systems and the other focused on engagement with private-sector cocoa companies and other stakeholders to build partnerships and engagement in HIAs on climate-smart cocoa production.

- The M&E framework and manual was developed with technical support of the World Bank for tracking progress in HIA implementation and managing risks to emission reduction delivery by all key agencies.

- On-ground implementation is gaining momentum in five out of the six HIAs, with considerable progress with implementing activities, developing governance structures, and building capacity.

- The government has specifically advanced implementation of activities in three earmarked HIAs—Asunafo-Asutifi, Ahafo Ano-Atwima Mponua, and Sefwi-Wiawso Bibiani-Anhwiaso-Bekwai. The following general documents were produced to guide the development of governance structures: Criteria for selecting HIAs for development; Pathway for developing HIAs; Roadmap for developing HIA (specific to each landscape); HIA materials for awareness-building; and Lessons and experiences on HIA development and management.

- Trainings for HIA functional units on Benefits Sharing and FFM were held between January 17 and February 2, 2023. Overall, there were 32 participants from Ahafo Ano and Asunafo-Asutifi HIAs, 41 from Juabeso-Bia and Sefwi Wiawso-Anwiaso-Bekwai HIAs, and 22 from the Kakum HIA.

Operationalizing the BSP and ERPA payment from the First Reporting Period:

- Upon successful completion of the first validation and verification in September 2022, Ghana received its first emission reduction payment in the amount of US$4,862,280 in early 2023. It represents the reduction of 972,456 tons of carbon emissions. This made Ghana the second country in Africa (after Mozambique) to receive results-based payments.

GHANA - Cocoa pods, Assin district

- Communities and farmer groups within the program area that have transitioned to sustainable cocoa practices receive about US$3 million of the total emission reduction payment share through a benefit sharing arrangement agreed in consultation with the stakeholders within the landscapes.

- Up to 140,000 cocoa farmers are or will be receiving training on sustainable cocoa practices and alternative livelihoods options.

- The Second emission reduction monitoring report was submitted to the World Bank, and the quality and completeness check of the report was conducted, which confirmed the completeness of the carbon accounting section of the report. As a result, a second third-party verification has begun.

The AccelREDD grant is closed and fully disbursed. Yet, the capacity-building activities did not cover all the HIAs, and additional training would be needed to make sure the BSP is executed correctly. As these activities would be the natural continuation of the AccelREDD grant, are highly needed, and represent a very low amount (less than 5 percent) of the initial AccelREDD allocation, it was agreed to supplement Ghana's program with additional budget to carry those capacity building activities for HIAs on an exceptional basis.

MADAGASCAR

In Madagascar, following the first support from AccelREDD, which was highly successful and helped the government finalize the Emission Reduction Program, this second support aimed to provide resources to the government to execute strategic activities that were not adequately addressed through other sources and to accelerate implementation of activities in the area covered by the Emission Reduction Program to encourage rapid implementation on the ground and delivery of emission reductions.

Initially, the client requested support from the FCPF to get an advance to cover the operational costs for launching the Emission Reduction Program BSP. However, this advance was limited, which left some shortfalls in terms of operationalizing the BSP and ensuring adequate functioning costs until subsequent payment periods. The AccelREDD funds were supposed to help cover this initial period.

Unfortunately, due to operational constraints, the team was unable to process the Recipient Executed grant, as a project and the support was not provided. Madagascar has moved forward on almost all the conditions for the first payment, including the decrees for the financial management and the transfer of emission reduction titles through the Carbon Market Decree, which was another condition for implementation. However, the Recipient Executed grant has still not been processed. It is expected that a solution will be found in FY24. The Government of

Madagascar and the World Bank will continue to seek to process the grant as part of another World Bank Investment operation to directly support the implementation of the Emission Reduction Program. It is expected that the grant agreement can be negotiated with the government as part of a broader investment operation.

REPUBLIC OF CONGO

In the Republic of Congo, the first round of funding (Round 1 Funding) from the BETF "Technical Assistance for finalizing the building blocks of the Emission Reduction Program in Sangha and Likouala" aimed to finalize key building blocks underpinning the Emission Reduction Program, which required additional technical work and stakeholder consultations around the following areas: BSP; reference emission level; measuring, reporting, and verification system; and strengthening ERPD investments. Round 2 Funding sought to: accelerate the Emission Reduction Program in Sangha and Likouala's effectiveness; improve reference emission level; establish a monitoring, reporting, and verification system for enhanced performance accounting frameworks; ensure safeguards compliance; and support project management.

The major milestone achieved since the last AccelREDD report (for FY21/22) was for the Emission Reduction Program in Sangha and Likouala to meet its effectiveness conditions and to submit the first draft of its Emission Reduction Monitoring Report to the FCPF's Carbon Fund's Facility Management Team. The AccelREDD BETF funding allowed the team to support these processes by financing staff and consultant time, so providing additional support to the government and financing background studies that have now been completed and used to inform the Emission Reduction Monitoring Report. The first performance payment is expected to be made in early 2024. The AccelREDD funding has now been fully implemented, with the final amount disbursed in September/October 2023.

The program became effective on October 5, 2022, having met five of its six effectiveness conditions, with the remaining one (Subsidiary Agreement between the Ministry of Finances, Budget, and Public Portfolio and the commercial bank Société Générale Congo) having been waived by the World Bank as it was no longer considered relevant. Effectiveness was declared since the following conditions had been met (note that the first three conditions were already covered in the FY22/23 report but are listed here for the sake of completeness):

- The BSP was considered final for the sake of effectiveness by the World Bank.

- The Program Management Unit (PMU) became fully operational, with the program coordinator, two carbon specialists, two safeguards specialists, and the communications specialist having started their work, supported by the Project Implementation Unit of another World Bank project, especially on financial management and procurement.

- The Program Implementation Manual was confirmed to be adequate by the Facility Management Team.

- Sub-agreements on the transfer of the title to emission reductions were signed with four potential beneficiaries, namely with the (Vice-)Presidents of the Departmental Councils for Sangha and Likouala; with the forest company, IFO; and with the palm oil producer, Eco-oil. This was a result of stakeholder consultation workshops that were held in Sangha and Likouala in August 2022. The signed agreements are based on a template that was confirmed to be adequate through a Legal Opinion by the Attorney General, which was submitted to the World Bank.

- Safeguards compliance of two World Bank-supported projects during the first monitoring period (January 1, 2020, to April 22, 2021), namely the Forest and Economic Diversification Project (PFDE–P124085) and the Commercial Agriculture Development Project (PDAC–P159979), was confirmed. Communities that participated in emission-reducing activities under these projects may thus be eligible for the performance payments from Sangha and Likouala's Emission Reduction Program.

The PMU submitted the Emission Reduction Monitoring Report to the Bank on June 30, 2023, thus meeting the final deadline set by the Facility Management Team. The team provided comments on the report, and the PMU is working on integrating them to submit a new version by September 15, 2023.

In addition, the Emission Reduction Program in Sangha and Likouala has progressed on various other activities. The PMU developed a work plan and budget that are already under implementation. It conducted a field mission to Sangha and Likouala in April/May 2023 to conduct stakeholder consultations, present the program's Communications Plan, operationalize departmental REDD+ structures, and collecting data for the Emission Reduction Monitoring Report. The team has also advanced on upgrading the safeguards instruments and operationalizing the Grievance Redress Mechanism.

The World Bank task team, including the World Bank's Environmental and Social Safeguards Specialists, conducted a mission to the program area in April/May 2023 on the occasion of the launch of the Northern Congo Agroforestry Project. During this mission, the team held consultations also of relevance for the Emission Reduction Program in Sangha and Likouala.
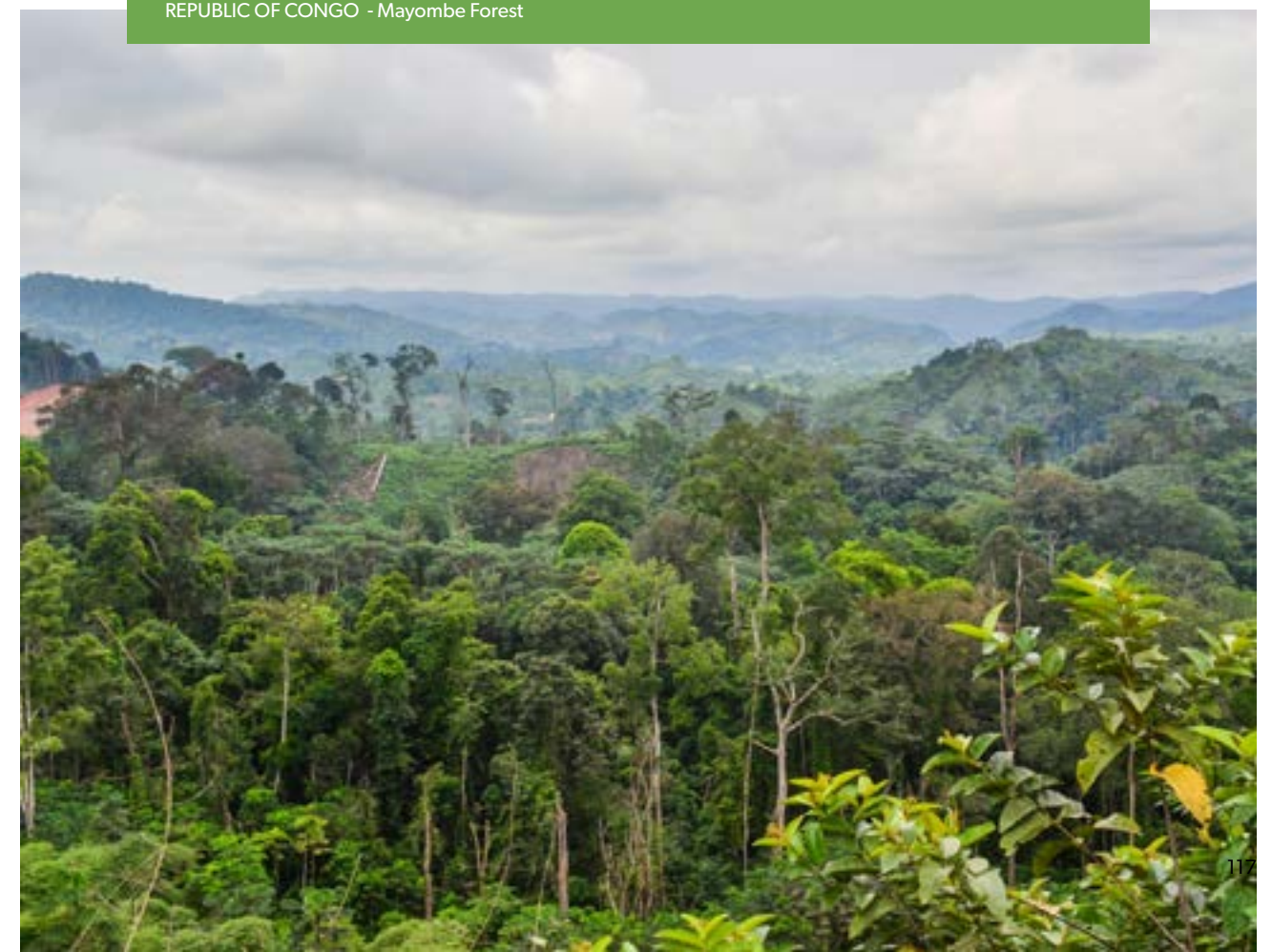
AccelREDD's support facilitated all activities by funding staff and short-term consultants' time. For example, two short-term consultants supported the PMU in drafting the Emission Reduction Monitoring Report, which was key for meeting the final deadline. The report focuses on the work that improved the reference emission level and performance accounting frameworks, which were mentioned in the FY22/23 report and relied on AccelREDD's funding to contract FRMi, the University of Maryland, and carbon accounting short-term consultants. Furthermore, with AccelREDD's funding, a study was contracted and conducted to identify and assess potential gaps in key beneficiaries' implementation of environmental and social safeguards, which helped meet the effectiveness condition on safeguards compliance.

In FY24, the aim is to complete the Emission Reduction Monitoring Report for the first performance period as soon as possible, which is expected to take approximately eight months. Along with a completeness check of the information provided by the report and verification by an independent third party, completing the report will require: several rounds of revision; additional field work, including stakeholder consultations; adjustments to the BSP; finalization of an interministerial decree to clarify the distribution of benefits among government beneficiaries; and finalization of the ongoing updates of the safeguards instruments. The task team will continue to support the PMU to ensure successful completion of these tasks.
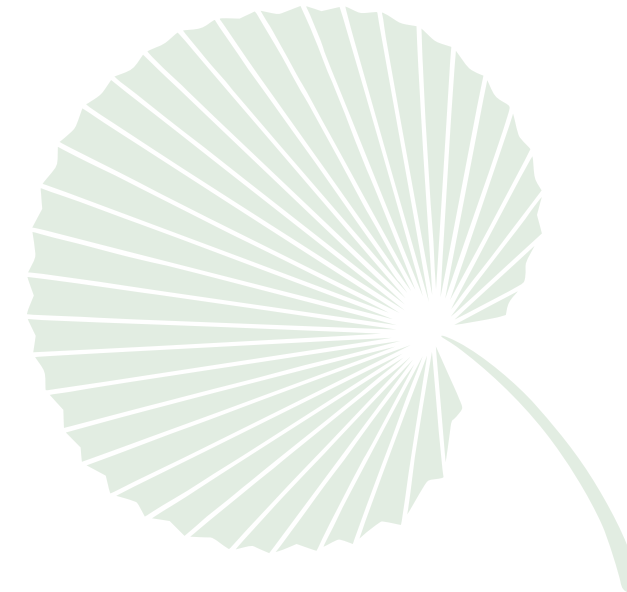
Once the verification process is completed, the first performance-based payment will be received and distributed in accordance with the BSP. The amount of this first payment is yet to be determined as part of the Emission Reduction Monitoring Report verification process but was estimated at US$4,295,000 in the project appraisal document.

REPUBLIC OF CONGO - Mayombe Forest

6
Financial Performance

6.1 PROGREEN FINANCIAL OVERVIEW

PROGREEN's fiscal year ran from July 1, 2022, to June 30, 2023 (FY23). As of the end of FY23, the PROGREEN umbrella program included two trust funds: the anchor PROGREEN Multi-Donor Trust Fund (MDTF) (TF073388) and the associated Accelerating the Implementation of REDD+ in Africa (AccelREDD) (TF073235). The PROGREEN MDTF has signed contributions of US$234.0 million from two development partners: Germany's Bundesministerium für wirtschaftliche Zusammenarbeit (BMZ) and the Swedish International Development Cooperation Agency. Paid-in contributions (actual funds received) as of June 30, 2023, were US$177.3 million.

As of the end FY23, US$120.0 million of available funds had been allocated to PROGREEN country programs, knowledge products, and global activities in the form of approved grant amounts. From these active grants, a total of US$26.2 million was disbursed (more than double the disbursement amount compared to FY22). Table 13 provides the PROGREEN financial summary as of June 30, 2023[1].

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1   "Approved grant amounts" in the context of trust funds mean that a grant funding request has been formally requested by the task team and approved by the program management team and the World Bank's accounting system. This process assigns a trust fund number to the grant and allocates funds. The amounts "accepted" for funding the Partnership Council are higher than the "approved grant amounts" in the World Bank's accounting systems due to the time lag from Partnership Council action to final World Bank project approval. This is further explained in this section.

Table 13.   PROGREEN MDTF financial summary
(as of June 30, 2023)

PROGREEN MDTF (TF073388)	Amount (US$)
Signed contributions	233,986,648
Paid-in contributions	177,298,370
Unpaid contributions	56,688,278
Investment income (+)	6,386,000
Administration fee (–)	2,580,000
Approved grant amount	120,013,426
Disbursements (–)	26,218,954
Fund Balance	154,885,483
Commitments (–)	48,945,408
Available balance	106,003,302

Under PROGREEN's governance structure, the Partnership Council reviews countries' expressions of interest for large recipient-executed grants at an early point in the project cycle. After Partnership Council acceptance, the country and management teams are informed that these funds have been earmarked for the country investment program. Throughout the project cycle, the World Bank and government continue designing and structuring the project using funds from IBRD/IDA sources, PROGREEN, and other sources. This continued development process refines the implementation approach, target sites, institutional arrangements, and agency roles and responsibilities, in addition to other legal requirements, for a World Bank operation. This process may take a year or more from the Partnership Council's "acceptance" to the final "approval" of the operation by the World Bank and the respective government. This timing lag creates a gap between the total of funds accepted by the Partnership Council and the total of funds recorded in the World Bank's financial management and monitoring system (as shown in Table 13 above). For example, the Partnership Council has accepted funding allocations of US$144.8 million for 12 country program investments. However, because the newer ones (such as India and Rwanda) have not yet reached the stage of Board approval, these large amounts are not entirely reflected in the "Approved grant amount" line item of US$120.0 million. This difference is acknowledged by using "acceptance"

for Partnership Council funding decision and "approval" for the World Bank funding decision.

An important caveat on the term "available balance" is that this is not all available for new allocations and approvals because some of the funds are already reserved to countries that the Partnership Council has "accepted" for future funding. In addition, continued knowledge activities at both country and global level and the operation of the trust fund draw down the available balance based on budgeting decisions accepted by the Partnership Council.

As described in the structure of this Annual Report, the allocated grant amounts were distributed among 71 grant activities that fell into four program areas, as shown in Table 14. Country program investments (also institutionally known as "Type 1 programs") account for 78 percent of portfolio, while country knowledge activities (also known institutionally as "Type 2 programs") account for another 14 percent. The Global Program and Program Management and Administration account for the rest. Table 14 and Figure 2 show the breakdown of activities by grant amount and by disbursements.

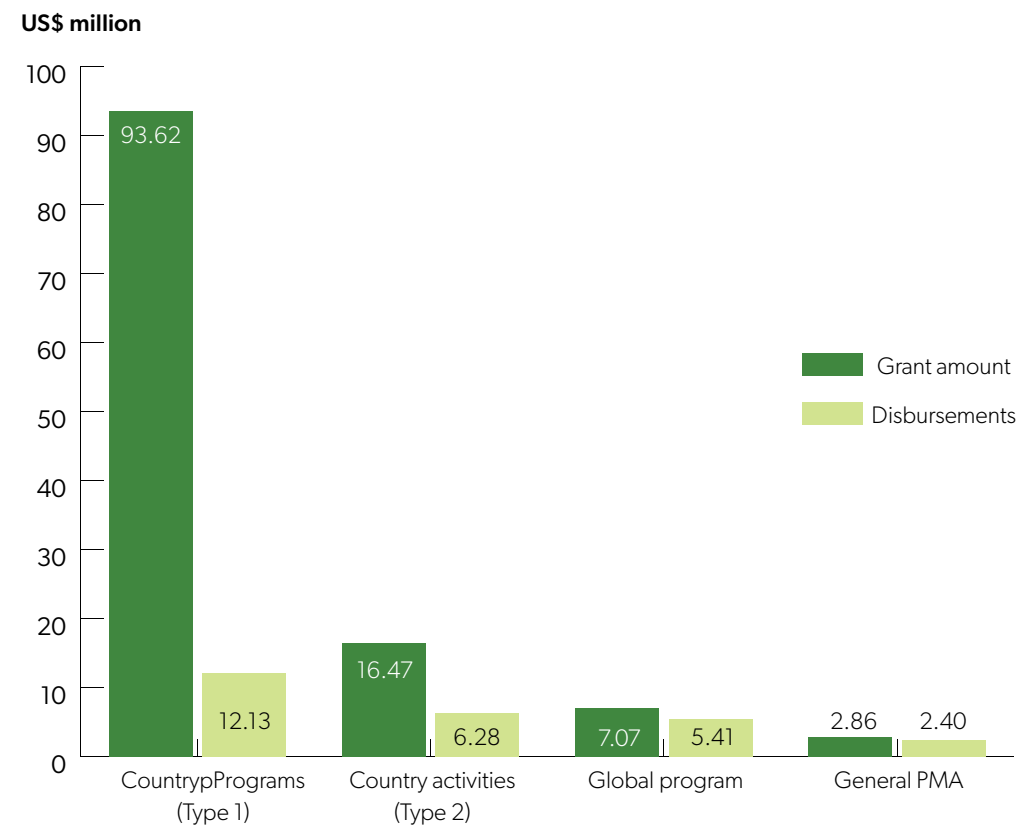**Table 14.   PROGREEN MDTF portfolio by activity type**
(as of June 30, 2023)

Activity Type	Grant Amount		Disbursements	
	US$	% of total	US$	% of total
Country programs (Type 1)	93,617,000	78.0%	12,134,440	46.3%
Country activities (Type 2)	16,474,830	13.7%	6,277,389	23.9%
Global program	7,066,596	5.9%	5,407,791	20.6%
Program management and administration	2,855,000	2.4%	2,399,334	9.2%
Total	**120,013,426**	**100%**	**26,218,954**	**100%**

Across the World Bank's regions at the end of FY23, the PROGREEN portfolio was heavily focused on Sub-Saharan Africa (Eastern and Southern Africa, and Western and Central Africa). Fifty-seven percent of the total portfolio, or US$68.9 million of the approved grant amount, concentrated in this region, followed by Latin America and the Caribbean at 15 percent (US$18.5 million) and Europe and Central Asia at 11 percent (US$13.5 million). South Asia, East Asia and Pacific, and the Middle East and North Africa came in at 3 percent, 3 percent, and 2 percent, respectively. Global Program activities (including knowledge-building, flagship programs, tools, technical assistance, communications, and knowledge management activities) made up 6 percent of the portfolio. Program management and administration accounted for 2 percent of the approved grant amounts.

BELIZE - Ambergris Caye

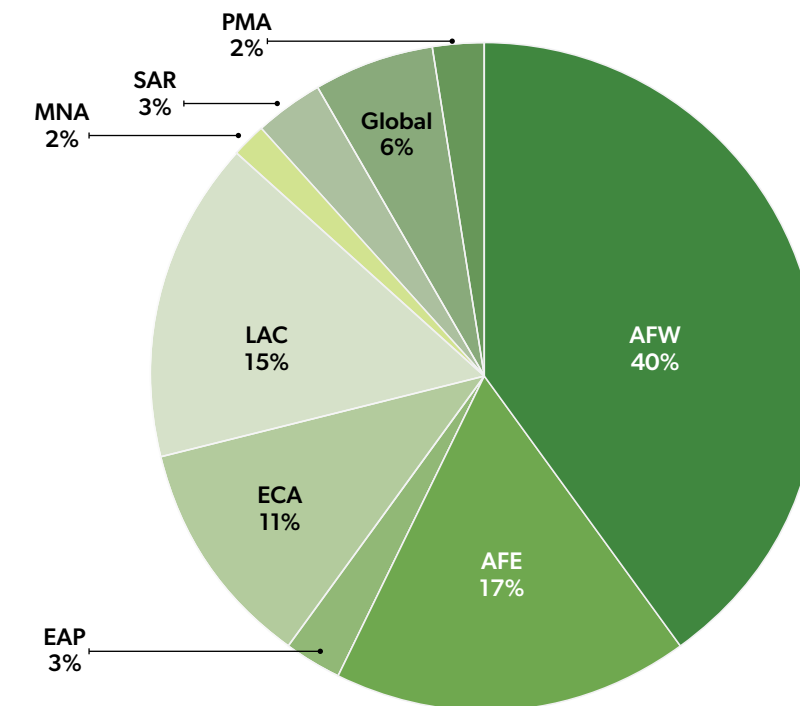**Figure 2.** **PROGREEN MDTF portfolio by activity type** (as at June 30, 2023)

US$ million

Table 15. **PROGREEN MDTF portfolio by region** (as of June 30, 2023)

Region	Grant Amount		Disbursements	
	US$	% of total	US$	% of total
Eastern and Southern Africa (AFE)	20,694,431	17.2%	3,444,035	13.1%
Western and Central Africa (AFW)	48,153,000	40.1%	8,283,992	31.6%
East Asia and Pacific (EAP)	3,256,222	2.7%	870,451	3.3%
Europe and Central Asia (ECA)	13,500,000	11.2%	1,109,272	4.2%
Latin America and Caribbean (LAC)	18,539,051	15.4%	2,732,597	10.4%
Middle East and North Afric (MNA)	2,039,126	1.7%	892,045	3.4%
South Asia (SAR)	3,910,000	3.3%	1,079,436	4.1%
Global Program	7,066,596	5.9%	5,407,791	20.6%
Program management and administration (PMA)	2,855,000	2.4%	2,399,334	9.2%
Total	**120,013,426**	**100%**	**26,218,953**	**100%**

Figure 3. **PROGREEN MDTF portfolio grant amount percentage by region** (as of June 30, 2023)

In terms of disbursements, the Western and Central Africa region continued to lead the portfolio, making up the largest share at 32 percent of total disbursements, or US$8.3 million. This was followed by the Global Program, at 21 percent or US$5.4 million. Regional disbursements almost doubled in FY22 relative to FY22 due to an increase in the pace of implementation and in RETF disbursements. Table 15 and Figure 3 on the right show the PROGREEN portfolio's geographic breakdown.

PROGREEN MDTF activities fall into two categories, depending on the execution type: World Bank-executed trust funds (BETFs) and recipient-executed trust funds (RETFs). RETFs made up 62 percent of the PROGREEN portfolio by approved grant amount due to the large size of approved country programs (Type 1). In terms of disbursements, however, RETFs only constituted 28 percent of the portfolio due to the complex process of getting the operations up and running under country counterpart agencies. Their share was comparatively smaller due to the fact that RETF disbursements only commenced in FY22, and are only in their second or third year of implementation. BETFs, which account for 38 percent of the approved grant amounts, were responsible for 72 percent of FY23 disbursements. BETFs include Type 2 country activities, Global Program activities, and project management and administration activities.

Table 16. PROGREEN portfolio by execution type
(in US$ million, as of June 30, 2023)

Execution type	Grant amount	Disbursements
BETFs	46,013,426	18,952,380
RETFs	74,000,000	7,266,574
Total	120,013,426	26,218,954

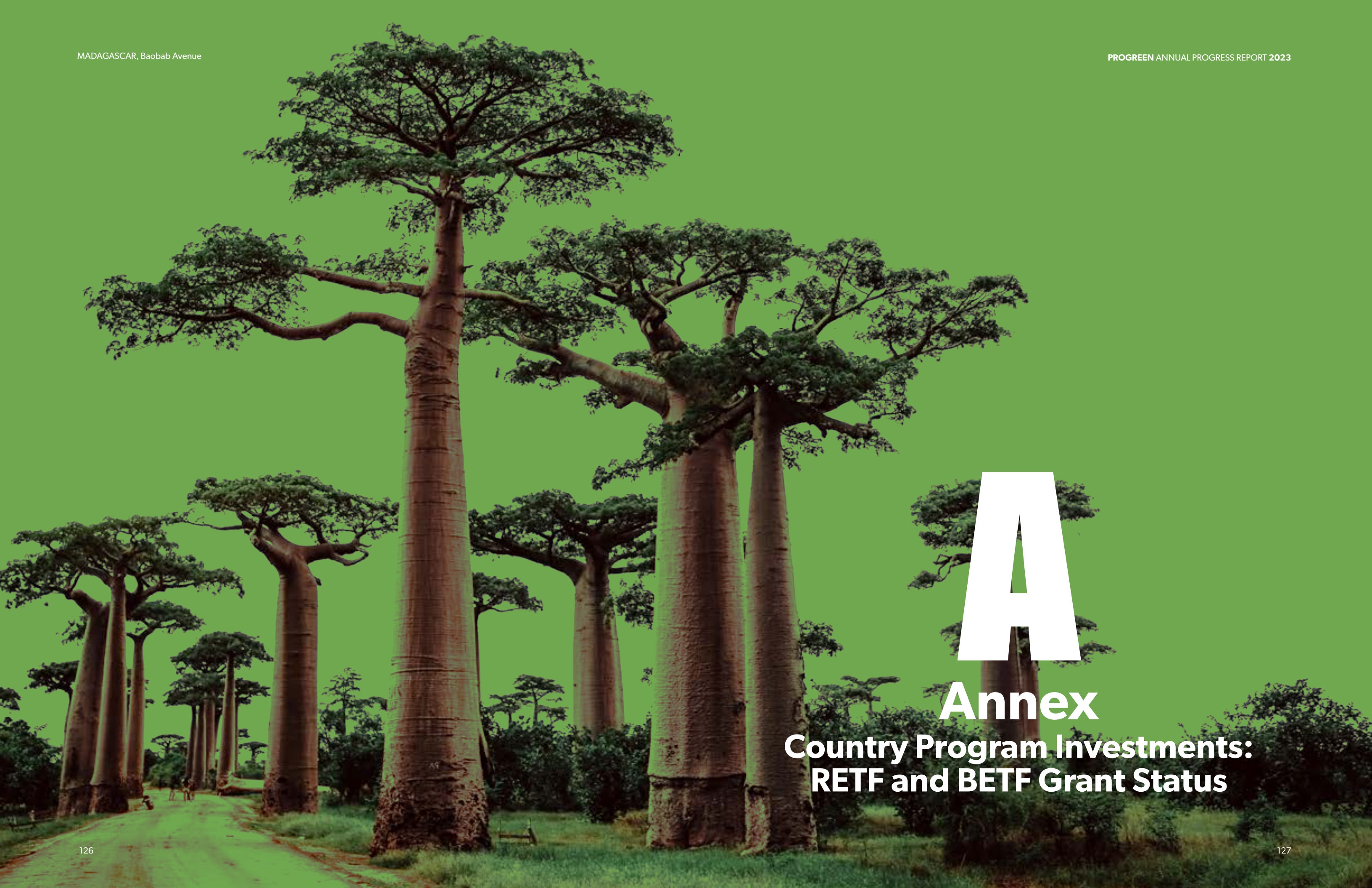MAURITANIA - Terjit Oasis, Oujeft, Adrar

6.2 ACCELREDD FINANCIAL OVERVIEW

At the end of FY23, AccelREDD had signed contributions of US$17.1 million from the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety, and Consumer Protection. All the signed contributions were received.

As at the end of FY23, US$14.1 million had been allocated to AccelREDD activities in the form of approved grant amounts, of which US$5.1 million was disbursed. However, the amount of AccelREDD Steering Committee-approved envelopes was higher, at US$17.5 million, including several RETF operations approved in FY23 (for example, in Ethiopia, the Democratic Republic of Congo, and Madagascar). Table 17 provides the AccelREDD Single-Donor Trust Fund (SDTF) financial summary, as of June 30, 2023.

Table17. AccelREDD SDTF financial summary
(as of June 30, 2023)

PROGREEN MDTF (TF073388)	Amount (US$)
Signed contributions	17,110,500
Paid-in contributions	17,110,500
Unpaid contributions	0
Investment income (+)	1,208,619
Administration fee (–)	120,000
Approved grant amount	14,077,683
Disbursements (–)	5,138,600
Fund Balance	13,120,523
Commitments (–) [2]YY	1,684,681
Available balance	11,435,842

All AccelREDD activities focused on Africa and benefited the following countries: the Democratic Republic of Congo, the Republic of Congo, Ethiopia, Ghana, Madagascar, and Burkina Faso.

A

Annex
Country Program Investments: RETF and BETF Grant Status

Table A1. Country and Regional Program (Type 1) RETF Status

Country/Regional program	Partnership council allocation	RETF amount (US$ millions)	Parent project information		Project name		IBRD/IDA lending (US$ millions)	Added co- finance (US$ millions)	Board approval	Effectiveness	First disbursement
Argentina	09/31/20	12.00	P175669		Sustainable Recovery of Landscapes and Livelihoods in Argentina		45		02/24/22	08/31/22	10/12/22
Central Asia: Kazakhstan	10/19/20	2.00	P171577		CA-RESILAND- Kazakhstan Resilient Landscapes Restoration Project			4.34 GEF	06/14/21	07/01/21	
			P179008		PROGREEN-Additional Finance*				06/14/23	N/A	
Central Asia: Uzbekistan	10/19/20	8.00	P174135		CA-RESILAND- Uzbekistan Resilient Landscapes Restoration		142	3.00 KWBP	06/7/22	10/07/23	
Central Asia: Kyrgyz Republic	07/14/22	5.00	P177407		CA-RESILAND-Kyrgyz Republic Resilient Landscapes Restoration		45	2.40 KWBP	04/25/24 (expected)	–	
Ecuador	04/15/22	13.60	P178622		Harnessing the Potential of Forests and Biodiversity for Sustainable Development in Ecuador		40		07/18/24 (expected)	11/21/24 (expected)	
Ethiopia	10/19/20	13.00	P174385		2nd Ethiopia Resilient Landscapes and Livelihoods			165.30 GCF	03/18/21	03/31/21	06/01/22
Ghana	10/19/20	15.00	P171933		Ghana Landscape Restoration and Small-scale Mining		75	12.75 GEF 0.0 ETF	08/30/21	02/10/22	03/04/22
India	10/14/22	7.00	P178994		Transformational Restoration for Ecological and Economic Development		400		7/18/24 (expected)	10/1/24 (expected)	
	6/28/23	2.40	P179935		Enhancing Landscape and Ecosystem Management Project		242		11/20/23	1/18/24 (expected)	
Nepal	06/01/21	12.00	P170798		Forests for Prosperity			2.00 SCF	07/08/20	07/16/21	11/15/22
			P181002		PROGREEN–Additional Finance*				03/24/24 (expected)		
Oasis: Morocco	10/19/20 Revised 02/22/23	12.00	P178763		Morocco Climate Operation/ Support to NDC (P4R) PROGREEN-Additional Finance**		350		06/09/23	09/29/23	
Republic of Congo	12/5/22	12.00	P177786		Climate-Resilient and Inclusive Livelihoods Project (ProClimat)		70		3/23/23	11/10/23	
Rwanda	12/5/22	12.00	P178161		Volcanoes Community Resilience Project		50	110.00 EUIB	10/13/23	12/27/23 (expected)	
Sahel: Burkina Faso	10/19/20	12.00	P170482		Communal Climate Action and Landscape Management		113		06/15/22	01/24/23	02/17/23
Total		**138.00**					**1,572**	**322.39**			

INDIA , Thol Bird Sanctuary

Table A2 below shows the status of the BETF activities for Type 1 country/regional programs. These are undertaken by World Bank Task Teams with a short approval process (no Board approval required) and in time to support the design and implementation of the co-financed investment operation.

Table A2. Country and Regional Program BETF Status

Country/Regional program		Project name	Amount (US$ millions)	Grant Approval
Argentina	P175669	Sustainable Recovery of Landscapes and Livelihoods in Argentina	1.2	06/15/21
Central Asia	P170870	Central Asia Climate & Environment (CLIENT) Program	2.5	01/08/21
Central Asia: Kyrgyz Republic	P177407	CA-RESILAND-Kyrgyz Republic Resilient Landscapes Restoration	0.5	10/26/22
Central Asia: Kyrgyz Republic	P178120	Resilient Agri-food Clusters Development Project	0.5	11/16/22
Ecuador	P178622	Harnessing the Potential of Forests and Biodiversity for Sustainable Development in Ecuador	1.4	09/21/22
Ethiopia	P174385	2nd Ethiopia Resilient Landscapes and Livelihoods	2.1	04/15/21
Ghana	P171933	Ghana Landscape Restoration and Small-scale Mining	0.2	10/05/21
	P175989	Ghana Green Growth PASA	1.3	01/12/21
India	P178994	Transformational Restoration for Ecological and Economic Development		
Nepal	P170798	Forests for Prosperity	2.5	05/01/22
Oasis	P180858	Green Recovery in Maghreb PASA	1.35	04/17/23
Republic of Congo	P177786	Climate-Resilient and Inclusive Livelihoods Project (ProClimat)	3.0	02/02/23
Rwanda	P178161	Volcanoes Community Resilience Project	2.0	03/20/23
Sahel: Burkina Faso	P170482	Communal Climate Action and Landscape Management	0.4	02/11/21
Sahel: G5	P176188	Sahel Landscape Restoration Program PASA	1.4	03/05/21
Sahel: Chad	P171611	Chad Local Development and Adaptation Project	0.35	01/21/21
Sahel: Mauritania	P168847	Mauritania Agriculture Development and Innovation Support Project	0.35	03/18/21
Total			**23.65**	

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