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All dollar amounts are U.S. dollars unless otherwise indicated.

GEF replenishment periods: **Pilot phase:** 1991–94; **GEF-1:** 1995–98; **GEF-2:** 1999–2002; **GEF-3:** 2003–06; **GEF-4:** 2006–10; **GEF-5:** 2010–14; **GEF-6:** 2014–18; **GEF-7:** 2018–22; **GEF-8:** 2022–26

Contents

Foreword

The Least Developed Countries Fund (LDCF) was established in 2001 under the United Nations Framework Convention on Climate Change to support the climate adaptation efforts of least developed countries. The fund is mandated to finance the preparation of national adaptation programs of action and the implementation of priority projects under these national programs in least developed countries. The LDCF is a unique adaptation fund as it is dedicated to least developed and low-income countries facing significant structural challenges to sustainable development, which are especially vulnerable to the impacts of climate change.

The Special Climate Change Fund (SCCF) was established in 2001 under the United Nations Framework Convention on Climate Change to help vulnerable nations address negative impacts of climate change. The SCCF finances activities, programs, and measures related to climate change that complement those funded by resources allocated to the Global Environment Facility (GEF) climate change focal area and by bilateral and multilateral funding. The SCCF strategy for 2022–26 emphasizes the adaptation needs of small island developing states (window A) and bolstering technology transfer, innovation, and private sector engagement (window B).

The GEF Independent Evaluation Office is pleased to present the LDCF/SCCF Annual Evaluation Report (AER) 2024. This report follows the biennial schedule of the GEF Annual Evaluation Report, which assesses the performance of completed projects using information from terminal evaluations every other year. Unlike previous reports, this AER synthesizes evaluative evidence and findings from GEF Trust Fund evaluations conducted during GEF-8, which also covers LDCF/SCCF projects. Additionally, the report includes the Management Action Record (MAR). The AER 2024 has benefited from feedback provided by the GEF Agencies and the GEF Secretariat.

The synthesis of evidence in this report draws on examples from both LDCF/SCCF and GEF Trust Fund projects. For the latter, the focus is on adaptation co-benefits and insights that offer valuable lessons for LDCF/SCCF initiatives. The AER 2024 summarizes key takeaways for future LDCF/SCCF projects.

The MAR tracks progress in implementing the GEF management's action plan, which was endorsed by the LDCF/SCCF Council. The MAR 2024 for the LDCF/SCCF reports on two evaluations, with progress in implementation rated as substantial and high.

The AER 2024 was presented to the LDCF/SCCF Council as an information document during its June 2024 meeting. Through this report, the GEF Independent Evaluation Office aims to share the findings and lessons from the synthesis with a broader audience to inform future LDCF and SCCF programming.

Geeta Batra
Director, GEF Independent Evaluation Office

Acknowledgments

The conduct of the Least Developed Countries Fund/Special Climate Change Fund Annual Evaluation Report 2024 was led by Anna Viggh, Senior Evaluation Officer of the Global Environment Facility Independent Evaluation Office (GEF IEO). The core evaluation team included Rasec Niembro, IEO Evaluation Analyst, and Dennis Bourse, consultant. The evaluation benefited from the oversight and support of Geeta Batra, Chief Evaluation Officer and GEF IEO Director since April 2024; and Juha Uitto, GEF IEO Director until March 2024.

Operational and administrative oversight were provided by Juan Jose Portillo, Senior Operations Officer. Karen Holmes edited the report, while Nita Congress designed and laid out the publication and provided editorial quality control. We also acknowledge the support received from the GEF Secretariat.

The GEF IEO is grateful to all these individuals and institutions for their contributions. Final responsibility for this report remains firmly with the Office.

Abbreviations

AER	annual evaluation report
CIEWS	climate information and early warning systems
COP	conference of the parties
FAO	Food and Agriculture Organization of the United Nations
GEF	Global Environment Facility
IEO	Independent Evaluation Office
LDC	least developed country
LDCF	Least Developed Countries Fund
MAR	management action record
M&E	monitoring and evaluation
MTF	multitrust fund
NAP	national adaptation plan
NAPA	national adaptation program of action
SCCF	Special Climate Change Fund
SHARP	Self-Evaluation and Holistic Assessment of Climate Resilience of Farmers and Pastoralists
SIDS	small island developing states
SIP	strategic investment program
SLM	sustainable land management
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change

Executive summary

This annual evaluation report (AER) on the Least Developed Countries Fund and the Special Climate Change Fund (LDCF/SCCF) prepared by the Independent Evaluation Office (IEO) of the Global Environment Facility (GEF) presents a synthesis of evaluative evidence, findings, conclusions, and recommendations from GEF Trust Fund evaluations conducted during GEF-8. These evaluations cover interventions spanning the GEF-3 to GEF-7 replenishment periods.

To prepare the LDCF/SCCF AER 2024, the GEF IEO reviewed and synthesized LDCF- and SCCF-relevant evidence from five recent GEF IEO evaluations and their respective management responses from the GEF Secretariat:

- Evaluation of the GEF's Approach and Interventions in Water Security
- Strategic Country Cluster Evaluation: GEF Support to Drylands Countries
- Evaluation of Community-Based Approaches at the GEF
- Learning from Challenges in GEF Projects
- Evaluation of GEF Support to Climate Information and Early Warning Systems.

The synthesis of evidence aligns with the themes and levers of transformation as formulated in the GEF Programming Strategy on Adaptation to Climate Change for the LDCF and the SCCF for GEF-8. The themes covered are agriculture, food security, and health; water; nature-based solutions; and climate information and early warning systems (CIEWS). Levers of transformation covered by this AER are policy coherence and mainstreaming of climate adaptation, strengthened governance for adaptation, and knowledge exchange and collaboration.

The synthesis also touches on priorities cutting across the LDCF and the SCCF, including strengthening innovation and private sector engagement. Other cross-cutting considerations and priorities taken into account are gender equality, youth empowerment, resilience to climate and nonclimate-related shocks and stresses, institutional capacity development for adaptation-focused work, and climate adaptation awareness raising. The synthesis of evidence focuses on LDCF, SCCF, multitrust fund (MTF), and GEF Trust Fund projects, specifically drawing on examples from 22 GEF Trust Fund projects and 22 LDCF, SCCF, and MTF projects. The emphasis on GEF Trust Fund projects lies not on their contributions to global environmental benefits, but rather on adaptation co-benefits and in extracting valuable insights in alignment with adaptation themes, transformational levers, and cross-cutting considerations and priorities that provide lessons for LDCF and SCCF projects.

From GEF-3 to GEF-7, the LDCF and the SCCF provided financial support to a total of 426 projects: 305 LDCF projects, 73 SCCF projects, and 48 MTF projects. These 426 projects represent a collective investment of $2 billion, with 57 percent of the projects

completed and the remaining 43 percent under implementation as of this writing. The portfolio covered by the five recent GEF IEO evaluations reviewed for this report comprises a total of 759 projects of which 118 are funded by the LDCF and 31 by the SCCF; 21 are MTF projects. Of these latter, 18 are financed by the LDCF and the GEF Trust Fund, and 3 are financed by the SCCF and the GEF Trust Fund.

Key findings by theme

- **Agriculture, food security, and health.** The report highlights the disruptive impact of climate change on food security, emphasizing the need for adaptive agricultural practices. Projects funded focus on enhancing agricultural resilience through sustainable practices such as climate-smart agriculture, organic farming, and improved water management. These initiatives aim to increase crop yields, improve food security, and support rural livelihoods while promoting environmental sustainability and public health.
- **Water.** Water security is a critical focus, with projects aiming to improve water access, quality, and management through integrated water resource management strategies. Efforts in water security include infrastructure improvements, conservation measures, and community-based water governance. The projects reviewed address the challenges of water scarcity, flooding, and water quality issues exacerbated by climate change, and highlight the importance of ecosystem-based water management approaches.
- **Nature-based solutions.** Projects that include nature-based solutions or that introduce or incorporate the sustainable management and restoration of ecosystems to address climate change and other societal challenges. These projects focus on sustainable land and water management practices, such as agroforestry and ecological intensification, which enhance resilience, support biodiversity, and provide socioeconomic benefits, particularly in vulnerable regions like the Sahel.
- **CIEWS.** CIEWS are essential for climate adaptation, providing critical data for risk assessment and disaster preparedness. The LDCF/SCCF portfolio supports the development of CIEWS infrastructure and institutional capacity, integrating these systems into broader disaster risk reduction and climate adaptation strategies. Effective CIEWS interventions involve community engagement, policy framework strengthening, and addressing the "last mile" challenge to ensure that early warnings reach and are actionable by vulnerable communities.

Key findings by lever of transformation

- **Policy coherence and mainstreaming of climate adaptation.** Policy coherence involves promoting consistent policy actions across government departments to achieve agreed-upon objectives. It enhances the alignment between economic, social, and environmental policies, thereby achieving ambitious environmental goals more efficiently. Mainstreaming climate adaptation incorporates climate change considerations into decision-making processes across sectors and governance levels. However, challenges such as policy misalignment, unclear responsibilities, and institutional silos hinder effective implementation.
- **Strengthened governance for adaptation.** This involves vertical and horizontal integration to foster collaboration among decision-makers. It emphasizes natural resource governance, sustainability, and ownership to manage environmental risks and build resilience to climate change. Successful projects involve community engagement, capacity building, and synergistic partnerships. Adaptive management is crucial for flexible and responsive approaches to address climate change impacts.

- **Knowledge exchange and collaboration.** Knowledge exchange and collaboration drives innovation, technology transfer, and scaling-up of adaptation solutions. It advances collaboration among stakeholders and facilitates South-South cooperation for sharing lessons and research findings. Innovative approaches—such as people-centered early warning systems, and microcredit and climate index microinsurance leveraging accurate climate data to provide financial services to vulnerable households and farmers—have shown potential. However, delivering actionable climate information to local communities remains challenging, especially in ensuring long-term sustainability due to funding constraints.

Key findings related to cross-cutting priorities

The AER identified several cross-cutting priorities and considerations to address climate change adaptation effectively.

- **Strengthening innovation.** Innovative approaches in adaptation are crucial yet underutilized, with, according to the CIEWS evaluation, only 22 percent of projects mentioning them and 5 percent implementing them successfully. Efforts should focus on leveraging novel technologies and collaborations, especially at the water-climate nexus.
- **Private sector engagement.** According to the water security evaluation, private sector engagement in water security projects is limited, with only 18 percent of completed projects having engaged with the private sector. Despite the perception of water as a public good, opportunities exist for the private sector to enhance resilience and participate in water management initiatives.
- **Gender equality.** Empowering women in decision-making and project activities is crucial but faces challenges due to cultural norms and gender discrimination. Despite progress, women often encounter barriers to participation and access to benefits. Successful projects have demonstrated positive impacts, such as income generation, job creation, and access to resources through women's involvement in land restoration, and by ensuring women's representation in management and decision-making committees. Ongoing initiatives are increasingly addressing gender disparities—for example, benefiting women with improved water access, food security, and socioeconomic opportunities.
- **Youth empowerment.** Youth engagement remains limited, with—according to the water security evaluation—only 11 percent of projects involving youth. However, successful initiatives have improved water security and reduced outmigration pressures, demonstrating the potential benefits of involving youth in adaptation projects.
- **Resilience to climate and nonclimate-related shocks.** Projects focus on climate-resilient practices, disaster risk management, and income-generating activities to improve food security, market access, and livelihoods.
- **Institutional capacity development.** Building institutional capacity for adaptation is critical for sustainability. Multistakeholder governance platforms show potential but require ongoing support to ensure their effectiveness postproject.
- **Climate adaptation awareness raising.** Raising awareness of water security issues has successfully reshaped government priorities in several regions. However, there is a need to transition from awareness to action, ensuring communities have the tools and support for effective disaster response and climate adaptation.

The report further provides an overview of key takeaways on critical topics including water security and access in agriculture, integrated water management, CIEWS, policy alignment challenges, governance in climate adaptation, private sector

engagement, gender inclusion and empowerment, resilience-enhancing initiatives, and institutional capacity building.

Progress on Management Action Record

Following the 2019 Professional Peer Review of the GEF IEO, the GEF revised its approach to the Management Action Record (MAR). GEF management now responds to each IEO evaluation recommendation with an action plan, which the GEF Council comments on and endorses. The GEF IEO tracks the progress of these plans. The GEF Council began endorsing these action plans in June 2021, and the 2024 MAR is the second prepared under this revised approach.

The MAR 2024 tracks progress in implementation of management's action plans in response to recommendations from the 2020 LDCF program evaluation and the 2021 SCCF program evaluation. Summaries follow.

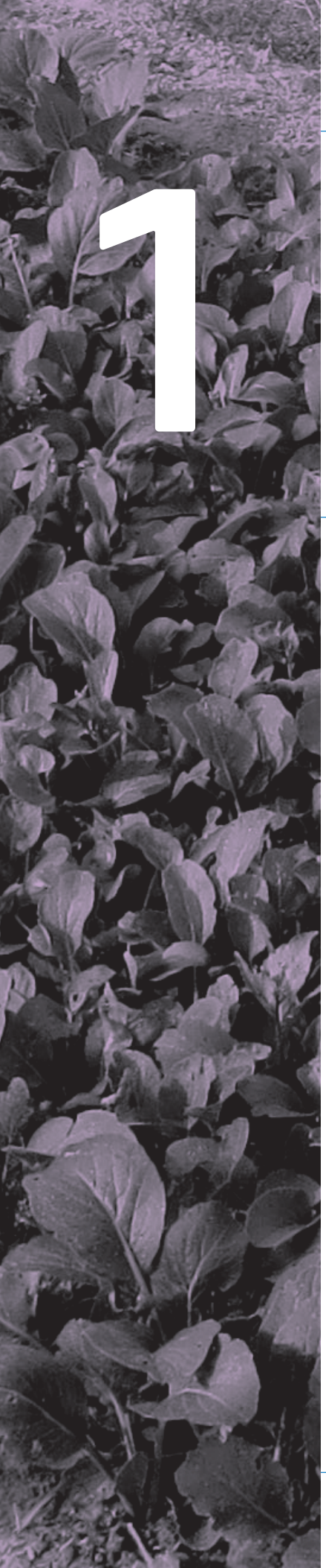
LDCF program evaluation

- **Recommendation:** Enhance the sustainability of outcomes by emphasizing project and contextual factors during design and implementation.
- **Response:** The GEF Secretariat agreed and continued actions to improve project design and implementation. Progress included subregional adaptation workshops and strategic collaborations with financial institutions.
- **Progress rating:** Substantial. GEF-8 efforts, including dedicated programs, capacity-building workshops, and increased funding from multilateral development banks, have led to improved sustainability of outcomes.

SCCF program evaluation

- **Recommendation:** Revitalize the SCCF by focusing on windows SCCF-A and SCCF-B, and by enhancing the fund's visibility and communication.
- **Response:** Partially agreed. The GEF Secretariat has aligned SCCF-A and SCCF-B with the recommendations and undertaken steps to enhance the fund's visibility. However, it disagreed with the recommendation to remove windows SCCF-C and SCCF-D without a decision by the United Nations Framework Convention on Climate Change Conference of the Parties.
- **Progress rating:** High. Significant steps include clearer articulation of the SCCF's niche, regional workshops for capacity building, and enhanced donor outreach. The SCCF-A window focused on non–least developed country small island developing states and SCCF-B on technology transfer and innovation. This recommendation will be graduated.

Overall, the GEF Secretariat has made substantial progress in implementing both recommendations, enhancing project sustainability, and revitalizing the SCCF, with strong ongoing efforts to meet climate finance commitments.



1 Introduction

The Independent Evaluation Office (IEO) of the Global Environment Facility (GEF) prepares a consolidated annual evaluation report (AER) of the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF) each year. The AER reports on LDCF/SCCF performance through assessment of completed projects using information from terminal evaluations available from the IEO's biennially compiled terminal evaluation review data set. In alternate years, the AER reports on the funds through a synthesis of evaluative evidence, findings, conclusions, and recommendations from GEF Trust Fund evaluations that also cover LDCF/SCCF projects. All AERs also present the GEF Management Action Record (MAR) to track implementation of LDCF/SCCF Council-approved action plans.

1.1 Methodology

For the LDCF/SCCF AER 2024, the GEF IEO reviewed and synthesized LDCF- and SCCF-relevant evidence from five recent GEF IEO evaluations and their respective management responses from the GEF Secretariat (table 1.1). These evaluations cover projects—funded primarily by the GEF Trust Fund, but also by the LDCF and/or the SCCF—spanning the GEF-3 to GEF-7 replenishment periods (see annex A and annex B).

The synthesis of evidence aligns with the themes and levers of transformation (table 1.2) formulated in the GEF-8 LDCF/SCCF Programming Strategy (GEF 2022). Drawing on evidence from the evaluations listed in table 1.1 and from the most recent LDCF and SCCF program evaluations (GEF IEO 2022a, 2022b), the synthesis also touches on the following cross-cutting priorities for the LDCF and the SCCF: strengthening innovation, private sector engagement, gender equality, youth empowerment, resilience to climate and nonclimate-related shocks and stresses, institutional capacity development for adaptation-focused work, and climate adaptation awareness raising.

The synthesis of evidence focuses on 22 LDCF, SCCF, and multitrust fund (MTF) projects; and 21 GEF Trust Fund projects. The latter were examined in terms of their adaptation co-benefits rather than their contributions to global environmental benefits; and to extract valuable insights in alignment with adaptation themes, transformational levers, and cross-cutting considerations and priorities that provide valuable lessons for LDCF and SCCF projects. This inclusive approach enriches the depth of insights and lessons the AER 2024 provides, offering valuable guidance for future LDCF and SCCF initiatives.

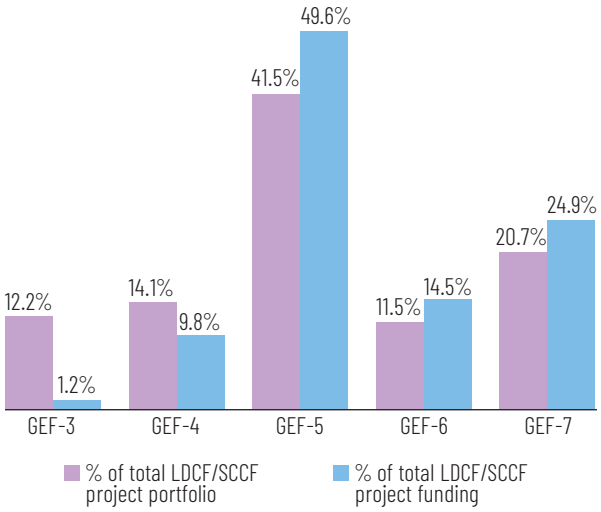
Although many of the projects reviewed for this AER were implemented and often completed before the GEF Programming Strategy on Adaptation to Climate Change 2022–2026 was adopted, they are notably aligned with its themes and transformational approaches. This alignment matches up with the GEF IEO's requirement for evidence that supports high-impact areas, reflects national priorities, and demonstrates interventions capable of catalyzing change and enabling systemic shifts.

1.2 Portfolio overview

From GEF-3 to GEF-7, the LDCF and the SCCF financially supported a total of 426 projects. This total comprises 305 LDCF projects, 73 SCCF projects, and 48 MTF projects. Figure 1.1 provides an overview of the distribution of LDCF/SCCF projects and funding by GEF replenishment period. These 426 projects represent a collective investment of $2 billion and over $11 billion in cofinancing. Fifty-seven percent of these projects are completed. The remaining 43 percent are currently under implementation (table 1.3).

MTF projects leveraged the most cofinancing. On average, these projects received $8.25 in expected cofinancing contributions at project approval for every dollar funded by the LDCF, the SCCF, and the GEF Trust Fund. It is important to note that the expected cofinancing contributions at project design may not reflect the final cofinancing realized at project completion. LDCF and SCCF projects on average leveraged $4.45 and $4.94, respectively, in expected cofinancing contributions for every dollar invested. At $5.93 million, MTF projects also have the largest average project size.

Figure 1.1 Distribution of LDCF/SCCF projects and funding by GEF replenishment period



Source: GEF Portal.

The LDCF/SCCF portfolio's regional distribution highlights a concentrated focus on supporting adaptation efforts in Africa and Asia and the Pacific, as shown in figure 1.2. This reflects the LDCF's focus on least developed countries (LDCs), which are mainly situated in Africa (33 countries) and Asia and the Pacific (11 countries),[1] and the heightened vulnerabilities and pressing needs in these regions. It is important to note that although the SCCF is mandated to support all GEF-eligible countries, including non-LDCs and non-small island developing states (SIDS), this mandate has been largely unfulfilled due to the fund's chronic underfunding. The SCCF has faced significant resource

[1]Source: UN List of LDCs, accessed May 2024.

Table 1.1 Evaluations and management responses reviewed for AER 2024

Title	Date presented to Council	Council Doc. No.
Evaluation of the GEF's Approach and Interventions in Water Security	June 2023	GEF/E/C.64/01/Rev.02
Management Response		GEF/C.64/13
Strategic Country Cluster Evaluation: GEF Support to Drylands Countries	February 2024	GEF/E/C.66/01
Management Response		GEF/C.66/14
Evaluation of Community-Based Approaches at the GEF	February 2024	GEF/E/C.66/02
Management Response		GEF/C.66/15
Learning from Challenges in GEF Projects	February 2024	GEF/E/C.66/03/Rev.1
Management Response		GEF/C.66/16
Evaluation of GEF Support to Climate Information and Early Warning Systems	February 2024	GEF/E/C.66/04
Management Response		GEF/C.66/17

Table 1.2 Portfolio themes and levers of transformation

Theme	Lever
Theme 1: Agriculture, food security, and health	Lever 1: Policy Coherence And Mainstreaming Of Climate Adaptation
Theme 2: Water	Lever 2: Strengthened governance for adaptation
Theme 3: Nature-based solutions	Lever 3: Knowledge exchange and collaboration
Theme 4: Climate information and early warning systems	

Table 1.3 Projects supported by LDCF/SCCF from GEF-3 to GEF-7

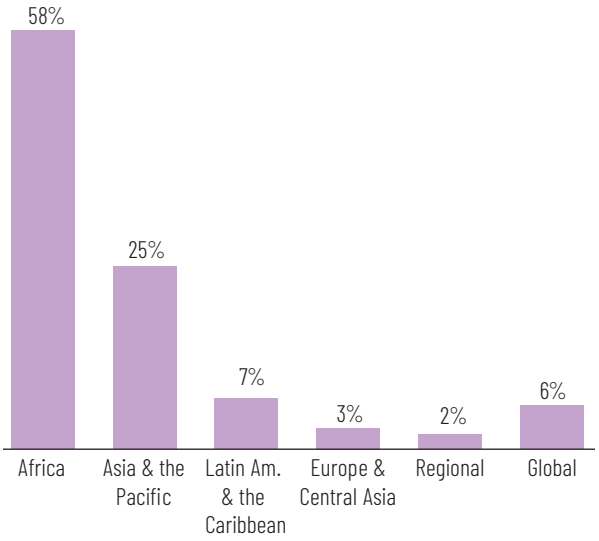
Funding source	Number of projects	Funding (million $)	Cofinancing leveraged (million $)	Status	
				Completed	Under implementation
LDCF[a]	305	1,358.6	6,540.1	172	133
SCCF	73	360.9	2,123.7	51	22
MTF[b]	48	284.8	2,349.1	18	30
Total	426	2,004.3	11,012.9	241	185

Source: GEF Portal.

a. The number of LDCF projects includes 51 enabling activities, all of which supported the formulation of national adaptation programs of action (NAPAs).

b. MTF project financing: LDCF = 52%, GEF Trust Fund = 39%, SCCF = 9%.

Figure 1.2 Regional distribution of LDCF/SCCF projects from GEF-3 to GEF-7



Source: GEF Portal.

constraints, limiting its ability to provide comprehensive support across its intended global scope.

The portfolio covered by the five recent GEF IEO evaluations reviewed for this AER consists of 759 projects. Of these, 118 projects are funded by the LDCF and 31 by the SCCF; 21 are MTF projects. Of the MTF projects, 18 are financed by the LDCF and the GEF Trust Fund, and 3 are financed by the SCCF and the GEF Trust Fund (table 1.4).

MTF projects again leveraged the most cofinancing. Across the five evaluations reviewed, MTF projects leveraged the most cofinancing, with $7.50 in expected cofinancing contributions at project approval for every dollar funded by the LDCF, the SCCF, and the GEF Trust Fund. LDCF and SCCF projects on average leveraged $4.55 and $5.57, respectively, in expected cofinancing contributions for every dollar invested. At $5.92 million, LDCF projects have the largest average project size in the evaluations' project portfolio.

In terms of regional distribution, the majority—105 of the 170 LDCF/SCCF/MTF projects—were implemented in the Africa region. Forty-three were implemented in the Asia and the Pacific region, 9 in the Latin America and the Caribbean region, and 3 in the Europe and Central Asia region (figure 1.3). Nine of the remaining 10 projects were implemented regionally and one project was implemented globally. This distribution is similar to that of the GEF-3 to GEF-7 LDCF/SCCF portfolio. The regional concentration of projects can be primarily attributed to the substantial influence of the LDCF within the overall portfolio. The SCCF's limited

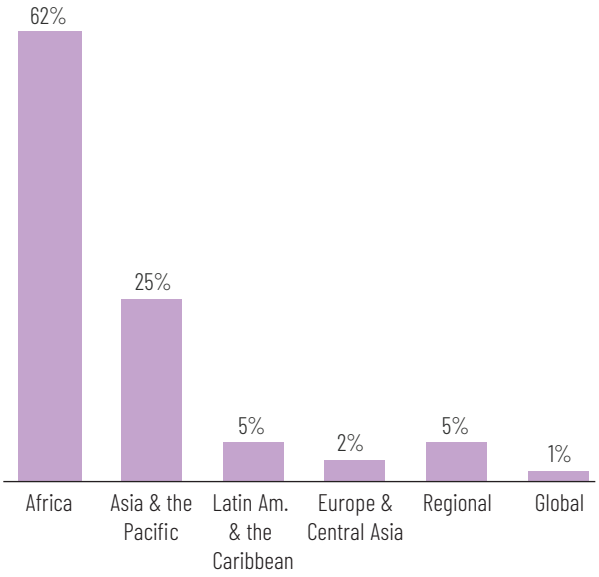
Table 1.4 Overview of the evaluations' project portfolio by funding source

Funding source	Number of projects	Funding (million $)	Cofinancing leveraged (million $)	Status	
				Completed	Under implementation
LDCF[a]	118	698.1	3,178.6	71	47
SCCF	31	124.2	691.4	20	11
MTF[b]	21	91.1	683.2	7	14
Subtotal	170	913.4	4,533.2	98	72
GEF Trust Fund	589	2,089.8	14,372.3	382	207
Total	759	3,003.2	18,905.5	480	279

Source: GEF Portal.

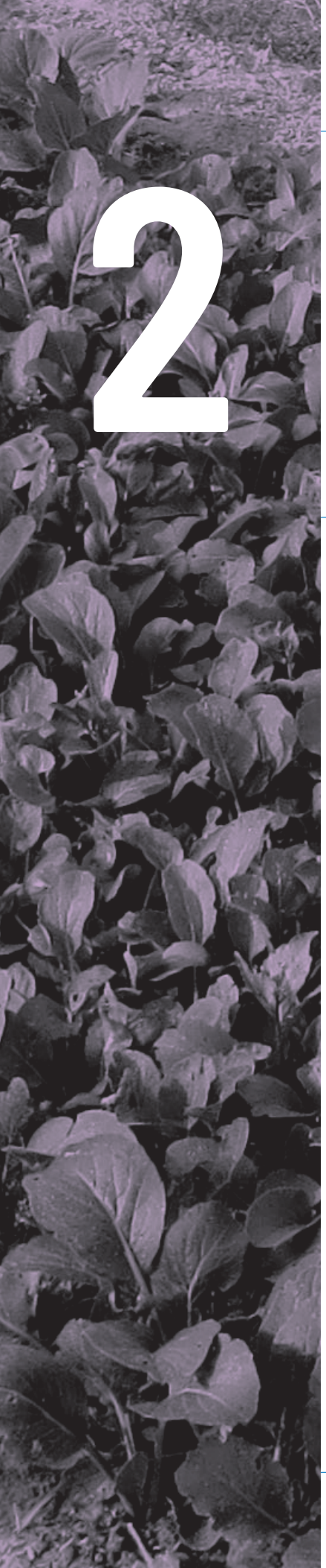
a. MTF project financing: LDCF = 48%, GEF Trust Fund = 46%, SCCF = 6%.

Figure 1.3 **Regional distribution of LDCF/SCCF projects in evaluations' project portfolio**



Source: GEF Portal.

financial resources have constrained its ability to support countries effectively, resulting in geographic distribution patterns for the LDCF/SCCF project portfolio in which the LDCF country focus predominates due to its larger share of resources.



2 Findings

2.1 Themes

The themes covered in this AER are (1) agriculture, food security, and health; (2) water; (3) nature-based solutions; and (4) climate information and early warning systems (CIEWS). The water theme is covered most intensively, largely in the Evaluation of the GEF's Approach to and Interventions in Water Security (GEF IEO 2024b), and the Strategic Country Cluster Evaluation: GEF Support to Drylands Countries (GEF IEO 2024e). The agriculture, food security, and health theme receives the second strongest emphasis; followed by the climate information and early warning systems theme, which is mostly covered in the Evaluation of GEF Support to Climate Information and Early Warning Systems (GEF IEO 2024c).

Theme 1: Agriculture, food security, and health

According to the Intergovernmental Panel on Climate Change's *Special Report: Climate Change and Land* (IPCC 2019), the ongoing impact of climate change is already disrupting food security. Rising temperatures, shifting precipitation patterns, and more frequent extreme weather events are key contributors. These alterations in climate conditions can significantly affect crop yields, food availability, and even the nutritional quality of produce. Such consequences pose serious threats to human health, especially among vulnerable populations. The latest LDCF program evaluation reports that 58 percent of LDCF implementation projects contribute to the GEF land degradation focal area, and "contributions are in line with the primary priority areas for LDCF support—agriculture, climate information systems, water resource management, disaster risk management, and natural resource management" (GEF IEO 2022a, 15). Agriculture and food security is the sector receiving the highest level of support from LDCF financing (GEF 2022). Agricultural adaptation is a focal area of the SCCF-A financing window, and 36 percent of completed SCCF projects delivered climate-smart agriculture benefits (GEF IEO 2022b).

Water security and access in agriculture are crucial for ensuring food security, economic stability, and environmental sustainability. Various projects worldwide focus on improving water access and management in agricultural contexts. For instance, the Sudan LDCF project Implementing NAPA [National Adaptation Program of Action] Priority Interventions to Build Resilience in the Agriculture and Water Sectors to the Adverse Impacts of Climate Change (United Nations Development Programme [UNDP]; GEF ID 3430) implemented solar water pumps, enhancing water availability for irrigation during dry months and consequently increasing agricultural production and food security. Similarly, GEF Trust Fund project Conservation and Sustainable Use of Biodiversity and Land in Andean Vertical Ecosystems (Inter-American Development Bank; GEF ID 3831) installed small-scale irrigation and water harvesting infrastructure in Bolivia, resulting in increased agricultural yields during drought periods. These projects demonstrate the significance of targeted interventions in enhancing water security and access, ultimately contributing to sustainable agricultural practices and livelihoods.

Sustainable agricultural practices play a pivotal role in ensuring food security and environmental sustainability. For instance, the Community-based Land Management GEF Trust Fund project in Guinea (World Bank; GEF ID 1877) emphasizes sustainable land use practices, including agroecology and agroforestry, to restore degraded lands and enhance agricultural productivity. By promoting the use of organic fertilizers, crop diversification, and integrated pest management, this project fosters soil health, biodiversity conservation, and climate resilience in rural communities. Similarly, two sustainable land management (SLM) projects in Malawi—the GEF Trust Fund's SIP [Strategic Investment Program]: Private Public Sector Partnership on Capacity Building for SLM in the Shire River Basin (UNDP; GEF ID 3376) and the GEF Trust Fund/LDCF's Shire Natural Ecosystems Management Project (World Bank; GEF ID 4625)—focus on promoting conservation agriculture techniques such as minimum tillage, crop rotation, and cover cropping. By minimizing soil disturbance and enhancing soil organic matter, these practices improve soil fertility, water retention, and crop resilience to climate variability. Furthermore, the project integrates agroforestry systems such as planting trees on farmlands to enhance biodiversity, provide ecosystem services, and diversify farmers' income sources.

Projects worldwide demonstrate how investments in agricultural initiatives yield positive outcomes beyond food production alone, including income generation, employment creation, poverty reduction, and enhanced food security for communities in need. For example, the SCCF-financed project Scaling up Adaptation in Zimbabwe, with a Focus on Rural Livelihoods, by Strengthening Integrated Planning Systems (UNDP; GEF ID 4960) sought to reduce the vulnerability of rural communities to climate variability in three districts through two main lines of action. It (1) diversified and strengthened livelihoods and sources of income for vulnerable smallholder farmers, and (2) increased knowledge and understanding of climate-related risks through the development of community-based early warning systems. At completion, according to the project's terminal evaluation, households with high vulnerability had decreased from an 88 percent baseline to around 27 percent across all three districts. The communities that were consulted during the terminal evaluation process considered themselves to be less vulnerable to climate change because of improvements in water security, better-protected ecosystems, the introduction of climate-smart agricultural practices, and access to financial support services they previously lacked. Similarly, the GEF Trust Fund Niger SIP: Oasis Micro-Basin Sand Invasion Control in the Goure and Maine Regions (PLECO) (UNDP; GEF ID 3381) generated short-term employment and income through activities like cash- and food-for-work programs aimed at stabilizing dunes and implementing natural resource management techniques. Additionally, income from

seedling sales—especially by women—improved food security and reduced poverty in the region.

The health impacts of agriculture extend beyond food production, influencing various aspects of public health. Projects worldwide showcase how agricultural initiatives can have both positive and negative health outcomes. For instance, while agriculture contributes to providing nutritious food, it also exposes farmers and communities to risks such as pesticides, water contamination, and zoonotic diseases. The integration of sustainable agricultural practices, including organic farming and integrated pest management, can mitigate these risks and promote healthier environments for farmers and consumers alike. As an example, the aforementioned Malawi SLM projects emphasize the adoption of sustainable agricultural practices to reduce pesticide use and soil contamination. By promoting organic farming methods and improving water management, these projects aim to safeguard public health while enhancing agricultural productivity and environmental sustainability. Similarly, Guinea's Community-based Land Management project prioritizes community health by promoting agroecology and reducing chemical inputs in agriculture. By implementing organic farming techniques and integrating natural pest control methods, this project contributes to healthier environments and safer food production systems.

Numerous projects worldwide demonstrate how agricultural initiatives can adapt to changing climate conditions and safeguard food security. For example, two Ethiopian SLM projects—the GEF Trust Fund's SIP: Country Program for Sustainable Land Management (World Bank; GEF ID 2794) and the GEF Trust Fund/LDCF Sustainable Land Management Project 2 (GEF ID 5220)—enabled income and dietary diversification by allowing households to grow high-value fruits and vegetables year round. This led to further income and employment and reduced outmigration pressures, especially for youth. The introduction of drought-resistant crop varieties and water-efficient irrigation systems in the Kenya GEF Trust Fund child project Food-IAP [Integrated Approach Pilot]: Establishment of the Upper Tana Nairobi Water Fund (United Nations Environment Programme; GEF ID 9139) also illustrates proactive adaptation measures. By enhancing crop resilience to drought and optimizing water use efficiency, the intervention mitigates the adverse effects of climate change on agricultural productivity and food security. Similarly, the promotion of climate-smart agricultural practices such as agroforestry and conservation agriculture in the Malawi SLM projects exemplify effective adaptation strategies. By enhancing soil health, water retention, and crop diversity, these practices strengthen the resilience of farming systems to climate variability and contribute to sustainable food production.

Theme 2: Water

Water emerges as a key theme in the LDCF/SCCF Programming Strategy (GEF 2022), underscoring its significance in the GEF's adaptation efforts through integrated water resource management interventions. These efforts encompass improving freshwater quality and quantity, including interventions for water storage, conservation, and accessibility. Water is the sector receiving the second highest level of support from LDCF financing (GEF 2022). Adaptation in water resource management is one of the focal areas of the SCCF-A financing window, and 30 percent of completed SCCF projects provided support on access to water sources (GEF IEO 2022b). The GEF IEO's water security evaluation (GEF IEO 2024b) also reports that an estimated 60 percent of adaptation activities are related to water—such as irrigation, rainwater harvesting, and soil moisture conservation.

Integrated strategies for sustainable water management at the community level are crucial for addressing the multifaceted challenges of water security effectively. By integrating various aspects of water management,

such as supply, sanitation, and conservation, communities can ensure the long-term availability and quality of water resources while promoting socioeconomic development and environmental sustainability. These integrated strategies involve coordinating efforts across sectors, engaging stakeholders, and considering local socioeconomic and environmental contexts. They often include measures such as watershed management, water harvesting, efficient irrigation techniques, wastewater treatment, and community-based water governance. For example, the GEF Trust Fund's SIP: Participatory Integrated Watershed Management Project (Asian Development Bank; GEF ID 3368) in The Gambia successfully improved local livelihoods by promoting community-based approaches to watershed management. By involving local communities in decision-making processes and leveraging existing institutions, the project effectively enhanced water availability and quality while supporting sustainable land use practices. Overall, integrated strategies for sustainable water management at the community level play a vital role in enhancing resilience, improving livelihoods, and safeguarding ecosystems.

The linkages between climate change adaptation and water management are fundamental, as climate change significantly affects water resources, exacerbating water scarcity, flooding, and water quality issues. Effective water management is crucial for adapting to these changes and enhancing resilience in communities and ecosystems. Projects that integrate climate change adaptation and water management often focus on enhancing water infrastructure, implementing water conservation measures, and promoting sustainable water use practices. For instance, the GEF Trust Fund/SCCF El Salvador project Climate Change Adaptation to Reduce Land Degradation in Fragile Micro-Watersheds Located in the Municipalities of Texistepeque and Candelaria de la Frontera (Food and Agriculture Organization of the United Nations [FAO]; GEF ID 4616) combines climate change adaptation efforts with land degradation reduction measures to enhance water resilience in vulnerable microwatersheds, featuring participatory processes and community engagement. Similarly, the Malawi GEF Trust Fund child project Food-IAP [Integrated Approach Pilot]: Enhancing the Resilience of Agro-Ecological Systems (International Fund for Agricultural Development; GEF ID 9138) works to build capacity for catchment management interventions, integrating climate change adaptation with sustainable water management practices. The LDCF Landscape Restoration for Increased Resilience in Urban and Peri-Urban Areas of Bujumbura (UNDP; GEF ID 10099) project in Burundi demonstrates the importance of integrating climate change adaptation into water management strategies at the local level. By focusing on landscape restoration and resilience-enhancing activities, this project aims to improve water management practices and enhance the adaptive capacity of urban and periurban communities. Overall, integrating climate change adaptation and water management is crucial for enhancing resilience to climate impacts and ensuring sustainable water resources for communities and ecosystems.

Ecosystem-based water management focuses on utilizing natural ecosystems and their services to enhance water resource management and build the resilience of both people and nature to environmental changes. By recognizing the importance of healthy ecosystems for water regulation, purification, and availability, ecosystem-based approaches promote sustainable water management practices that benefit both people and nature. Projects integrating these approaches often involve restoring and conserving ecosystems such as wetlands, forests, and riparian zones to enhance water quality, regulate water flow, and reduce the impacts of floods and droughts. These projects also emphasize community involvement and stakeholder engagement to ensure sustainable use and management of water resources. For example, the GEF Trust Fund project Conservation

and Sustainable Use of Biodiversity, Forests, Soil and Water to Achieve the Good Living (Buen Vivir/Sumac Kasay) in Napo Province (FAO; GEF ID 4774) integrates ecosystem-based approaches to improve water quality and availability in an Ecuadorian province. By conserving forests and restoring degraded ecosystems, the project aims to enhance water regulation and resilience to climate change impacts.

Theme 3: Nature-based solutions

Nature-based solutions are defined by the International Union for the Conservation of Nature (IUCN) as "actions to protect, sustainably manage, and restore natural or modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits" (GEF STAP 2020, 2). The LDCF/SCCF Programming Strategy states that

> NbS [nature-based solutions] has been a cornerstone of the GEF's adaptation portfolio since inception. With high potential to deliver adaptation as well as a range of additional benefits contributing to resilience of people and ecosystems, as well as for biodiversity and climate change mitigation, NbS merits additional emphasis in the GEF-8 period as a means of effecting adaptation. (GEF 2022, 15)

Projects implemented prior to GEF-5 tend to incorporate nature-based solutions implicitly. For the adaptation portfolio, that was often done through ecosystem-based adaptation, ecosystem-based disaster risk reduction, climate adaptation services, integrated resource management, integrated land management, and SLM.

Sustainable land and water management and agroforestry approaches offer cost-effective solutions to widely distribute significant benefits to smallholder farmers across the Sahel, including in fragile and conflict-affected states. Ecological intensification and climate-smart agriculture based on sustainable land and water management and agroforestry are sustainable alternatives to more classic agricultural development. The significance of these practices lies in their ability to promote resilience in the face of climate-related risks while simultaneously fostering socioeconomic development. For instance, the Sahel and West Africa Program in Support of the Great Green Wall Initiative (World Bank; GEF ID 4511) was a programmatic approach developed by the World Bank using GEF Trust Fund, LDCF, and SCCF funding. Program projects surpassed their initial cumulative targets, establishing 1.6 million hectares of sustainable land and water management practices across 12 countries.

SLM is critical in mitigating climate risks, enhancing ecosystem health, and fostering socioeconomic resilience in vulnerable landscapes. The multifaceted approach taken in the Supporting Sustainable Land Management in Steppe and Semi-arid Zones through Integrated Territorial Planning and Agro-Environmental Incentives (UNDP; GEF ID 5699) GEF Trust Fund project was designed to transform land use practices in critical productive steppe, arid, and semiarid landscapes of Kazakhstan. The results achieved through implementation of SLM practices reduce the climate vulnerability of agroecosystems in the pilot areas. Increased vegetation cover helps regulate diurnal and seasonal fluctuations in temperature; it also increases soil moisture levels, which helps to strengthen root systems and increase humus levels, thus creating more resilient and productive ecosystems. The introduction of SLM and diversified farming systems improved food security and reduced the vulnerabilities connected with monocropping. Improved early warning systems—including the forecasting tools developed by the project—enabled farmers to make adjustments in the field. Adoption of SLM practices across the agroecosystems in the project pilot areas also generated biodiversity co-benefits. Rehabilitation of drainage courses and more efficient use of irrigation water resources contributed toward improving habitat integrity and resilience.

The GEF IEO's Learning from Challenges in GEF Projects evaluation pointed out the need to adequately address the risk posed by politically supported economic interests that conflict with a project's environmental objectives (GEF IEO 2024d). The LDCF project Building Shoreline Resilience of Timor-Leste to Protect Local Communities and Their Livelihoods (UNDP; GEF ID 5671) was designed to strengthen the resilience of coastal communities by introducing nature-based approaches to coastal protection. These approaches included (1) creating a policy framework and institutional capacity for climate-resilient coastal management, (2) establishing mangrove-supportive livelihoods to incentivize mangrove rehabilitation and protection, and (3) adopting integrated approaches to coastal adaptation to contribute to protecting coastal populations and productive lands. One designated mangrove restoration site was in Tibar Bay, home to the only remaining climax community of large, mature apple mangrove (Sonneratia alba) forests in Timor-Leste.[1] The LDCF project was intended to work cooperatively on mangrove protection, management, and restoration with the country's two most significant coastal infrastructure initiatives—the Tibar Bay Port project under construction at that point, and the Tasi Mane South Coast Gas Infrastructure project. Unfortunately, the LDCF project did not form effective partnerships or cooperative arrangements with either infrastructure project. Both during its design and implementation phases, it discussed potential partnerships and environmental offsets, but unsuccessfully. More extensive efforts, with a consideration of a wider set of options for negotiations, should have been made during the design phase to ensure success.

Theme 4: Climate information and early warning systems

Since 2010, when the GEF Secretariat first developed four-year programming strategies for the LDCF and the SCCF to coincide with the GEF replenishment periods, CIEWS have been noted in all the adaptation strategies (GEF IEO 2024c), and was elevated to be one of the four priority themes in the most recent LDCF/SCCF Programming Strategy (GEF 2022). CIEWS play a crucial role in supporting the implementation of NAPAs and national adaptation plans (NAPs) in countries supported by the LDCF and the SCCF.[2] NAPAs often prioritize vulnerable sectors and communities, aiming to enhance resilience and reduce vulnerability to climate-related risks. CIEWS are integral to NAPAs and NAPs, providing the necessary data and forecasts to identify priority areas for adaptation actions, assess risks, and design effective adaptation strategies. Seventy-eight percent of the projects included in the CIEWS evaluation portfolio were funded by the LDCF (GEF IEO 2024c).

The development of CIEWS infrastructure and enhancement of institutional capacity are pivotal in ensuring the effectiveness of CIEWS interventions for mitigating climate-related hazards. This entails establishing robust monitoring networks, deploying advanced technologies, and providing training to personnel. As an example, the SCCF's scaling up adaptation project in Zimbabwe focused on strengthening institutional capacity and community-based early warning systems to reduce

[1] A climax community of mangroves is a stable community of plants, animals, and fungi that have reached a steady state in a brackish water environment. A climax community of mangroves is a stable community of plants, animals, and fungi that have reached a steady state in a brackish water environment. Mangrove climax communities are the result of ecological succession, a process where vegetation in an area changes over time.

[2] NAPAs are primarily developed by LDCs; whereas NAPs are produced by both developing and developed countries, although they tend to be more prevalent in developing countries, especially those vulnerable to the impacts of climate change. NAPs provide a more comprehensive and long-term framework for adaptation planning and implementation; in LDCs, NAPs tend to build upon NAPAs.

vulnerability to climate variability. Similarly, the pilot projects of the regional GEF Trust Fund Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystems Nexus (United Nations Environment Programme; GEF ID 9685) initiative aim to demonstrate technology for water monitoring, enhance prediction capabilities, and disseminate relevant information to stakeholders. Similarly, interventions through the SCCF-financed project Strengthening Capacities of Rural Aqueduct Associations' (ASADAS) to Address Climate Change Risks in Water Stressed Communities of Northern Costa Rica (UNDP; GEF ID 6945) were critical following Hurricane Otto in 2017 for the country's recovery and to strengthen the institutional capacity of local water associations to be prepared for new climate-related disasters.

Strengthening the policy framework is a crucial upstream intervention for the success of CIEWS interventions. Although the GEF Secretariat provided a broader strategic direction highlighting the importance of CIEWS, countries had the flexibility to tailor activities to align with their national priorities. For instance, the SCCF-supported Pacific Resilience Program in Tonga (World Bank; GEF ID 5814) adjusted disaster-related legislation while simultaneously providing support for water and sanitation needs after Cyclone Gita in 2018.

Addressing the "last mile" challenge and fostering equitable and inclusive community engagement are critical to ensuring that warnings are effectively communicated to all communities, especially those in remote or marginalized areas, and that they are empowered to take appropriate actions. For instance, 11 projects in African LDCs approved through the LDCF in 2014 successfully established essential infrastructure, including the establishment of hydrological and meteorological stations; effectively improved the capabilities of national agencies; and successfully integrated new equipment into national systems. Despite efforts made to develop last mile services to meet needs identified through knowledge management products and the introduction of potential partners, the evidence shows a significant gap between the availability of early warning information and its effective delivery to those who need it most. To mitigate this outcome, the scaling up adaptation project in Zimbabwe prioritized community involvement in the development of community-based early warning systems and resilience-enhancing activities.

Sustainability, resilience, and the integration of CIEWS into broader disaster risk reduction and climate adaptation strategies are crucial for enhancing long-term resilience to climate-related hazards. Sustainability entails ensuring the continuity of CIEWS operations and maintenance over time; this involves strategies to maintain infrastructure, secure funding, and adapt to changing climate conditions. Resilience focuses on enhancing the ability of communities to withstand and recover from adverse events. Integrating CIEWS into broader disaster risk reduction and climate adaptation strategies involves aligning early warning efforts with wider development goals and priorities, such as poverty reduction, food security, and sustainable livelihoods; and aligning with existing risk reduction and adaptation initiatives to create more holistic and effective approaches to enhancing resilience. In the latter case, this includes incorporating CIEWS data and information into risk assessments, land use planning, infrastructure development, and emergency response protocols. For instance, the LDCF project Strengthening Climate Information and Early Warning Systems in São Tomé and Príncipe for Climate Resilient Development and Adaptation to Climate Change (UNDP; GEF ID 5004) focused heavily on improving warning mechanisms, such as the development of meteorological and community alert systems. However, the GEF IEO evaluation found that the project fell short in providing tangible support for early actions during disasters (GEF IEO 2024c). While it successfully strengthened capacity to issue timely warnings, the implementation lacked crucial elements such as community drills, prepositioning of emergency supplies, or establishing

safe evacuation routes. As a result, despite the improved warning systems, the affected communities continue to face challenges in effectively responding to disasters because of a lack of practical support for early actions.[3]

2.2 Levers of transformation

Levers of transformation covered by this AER are (1) policy coherence and mainstreaming of climate adaptation, (2) strengthened governance for adaptation, and (3) knowledge exchange and collaboration (GEF 2022). Lever 2 is covered most intensively, primarily by the drylands evaluation (GEF IEO 2024e). The lever on policy coherence and mainstreaming of climate adaptation is the second most extensively covered, also mostly by the drylands evaluation. The third lever is covered mostly and similarly in the water security evaluation (GEF IEO 2024b) and the Evaluation of Community-Based Approaches at the GEF (GEF IEO 2024a).

Lever 1: Policy coherence and mainstreaming of climate adaptation

The GEF defines policy coherence as "the systematic promotion of mutually reinforcing policy actions across government departments and agencies, creating synergies towards achieving the agreed objectives" (GEF 2023, 1). Coherent, integrated, and noncontradictory policies are recognized as key factors in implementation of the suite of Sustainable Development Goals. Better-integrated approaches, with increased alignment between economic, social, and environmental policies, can enhance the achievement of ambitious global environmental benefits more efficiently and cost-effectively. Mainstreaming of climate adaptation refers to integrating considerations for climate change impacts and adaptation measures into the decision-making processes, policies, and practices across various sectors and levels of governance. It recognizes that climate change affects multiple aspects of society and requires a holistic and integrated approach to address its impacts effectively. As an example of a policy-coherent approach, the GEF Scientific and Technical Advisory Panel advises that "policy changes should better assess, account and value the natural capital, and shift financial flows away from perverse subsidies and nature-degrading investments toward nature positive investments" (GEF STAP 2023, 18). The LDCF/SCCF Programming Strategy (GEF 2022) also focuses on a whole-of-society approach, which entails engaging with diverse actors and multisectoral stakeholders and facilitating their participation in the decision-making process to take appropriate measures together and mainstream climate considerations across different governance levels.

The challenge of policy alignment and coherence presents a significant hurdle in project implementation. As examples, in two Uzbekistan GEF Trust Fund projects—Reducing Pressures on Natural Resources from Competing Land Use in Non-irrigated Arid Mountain, Semi-Desert and Desert Landscapes (UNDP; GEF ID 4600) and Sustainable Forest and Rangelands Management in the Dryland Ecosystems of Uzbekistan (FAO; GEF ID 10367)—policy misalignment, including unclear institutional responsibilities and misaligned incentives, has been identified as a key barrier to SLM. Despite attempts to introduce changes in the policy landscape and break down institutional silos, success

[3] In its management response to the IEO evaluation, the GEF highlighted that the GEF's support does not extend to direct involvement in disaster risk management activities, such as evacuation and reconstruction, and that these activities fall outside the scope of support provided by the GEF, the LDCF, and the SCCF (GEF 2024). Nevertheless, there has been an observable trend within LDCF and SCCF projects toward integrating elements like climate-related disaster planning. These additions aim to enhance community preparedness in dealing with natural hazards.

has often been limited due to the complexity of coordinating policies across different administrative levels. Similarly, while multiple stakeholder engagements have been established across sectors under the leadership of district chief administrators, achieving policy coherence at lower levels of governance remained elusive in the Ethiopian SLM projects. Decentralization of decision-making processes adds another layer of complexity, making it difficult to ensure alignment and coordination across different levels of government.

Implementation of policy coherence activities faces challenges, primarily because of the discrepancy between policy timelines and project timelines. For instance, the Sustainable Land and Forest Management in the Greater Caucasus Landscape (UNDP; GEF ID 4332) GEF Trust Fund project in Azerbaijan aimed to address policy misalignments regarding land and pasture management. However, efforts to introduce changes in the policy landscape encountered obstacles due to the complexities of coordinating policies across various administrative levels and institutional silos. Similarly, the Malawi SLM projects analyzed the policy context at the design stage, yet the translation of these efforts into coherent policy frameworks remained challenging. The mismatch between shorter project implementation periods and the longer time frames required for meaningful policy change exacerbates this issue.

More recent projects in drylands have showcased evolving approaches aimed at targeting policy coherence, recognizing its pivotal role in achieving sustainable development objectives, according to the drylands evaluation. One notable example is the adoption of land degradation neutrality methods, which emphasize the integration of various policy sectors to promote SLM. Additionally, programmatic and phased approaches have been employed to foster policy coherence. These strategies involve implementing projects in stages, allowing for iterative adjustments and the incorporation of lessons learned into subsequent phases. By demonstrating tangible benefits at local or jurisdictional levels, these approaches influence national policy making.

Lever 2: Strengthened governance for adaptation

Engagement and collaboration among decision-makers constitutes an important part of strengthened governance which can be fostered through vertical integration (across governance levels) and horizontal integration (across sectors). There is growing recognition of more diverse entry points and scope for adaptation action beyond national-level priority action. A whole-of-society approach, as discussed earlier, would benefit from a whole-of-government approach spanning different government levels and departments. More specifically, it will support institutional coordination; integration of climate change across national, subnational, and local policies; creation of mechanisms for greater engagement of private, nonprofit, and community institutions; and development of tools and frameworks that can enable such engagements and coherence.

Natural resource governance is integral to strengthened governance for adaptation. Strengthening governance in this area is crucial for effectively managing environmental risks, promoting sustainable development, and enhancing resilience to climate change. Accordingly, GEF projects in dryland regions prioritize improving governance to address environmental degradation and enhance resilience. The Ethiopian SLM projects facilitated stakeholder engagement and partnerships at the district level under the leadership of local administrators, promoting coherent and successful natural resource governance within regular rural development systems.

Sustainability and ownership are crucial aspects of strengthened governance for adaptation, ensuring that initiatives effectively address climate change impacts and

endure beyond project completion. In the LDCF-financed project Enhancing Resilience of Liberia Montserrado County Vulnerable Coastal Areas to Climate Change Risks (UNDP; GEF ID 8015), sustainability was achieved through proactive community engagement. By involving local communities in decision-making, addressing their concerns, and providing training in construction and maintenance, the project fostered ownership and empowerment. This engagement ensured that the coastal protection structures were not only effective in reducing vulnerability to climate change impacts but also sustainable over the long run. As noted earlier, the Ethiopian SLM projects facilitated partnerships across sectors at the district level under the leadership of local administrators. This engagement with diverse stakeholders enabled the scaling-up of successful governance interventions, promoting sustainability and resilience across larger geographic areas.

Capacity building and synergistic partnerships—the latter exemplified by the Ethiopian SLM projects—are essential elements of strengthened governance for adaptation, enabling effective decision-making, resource management, and resilience-enhancing efforts. For example, the GEF Trust Fund's SIP: Community Driven SLM for Environmental and Food Security (World Bank; GEF ID 3382) in Niger focused on strengthening the capacity of local communities to manage natural resources sustainably. By providing training in governance principles, technical skills, and participatory planning processes, the project empowered communities to take ownership of adaptation initiatives and enhanced their resilience to climate change impacts. The importance of synergistic partnerships for effective governance is also demonstrated in Liberia's coastal resilience project. That project established partnerships across sectors involving government agencies, local communities, nongovernmental organizations, and other stakeholders. By coordinating action and leveraging diverse expertise and resources, these partnerships promote coherent and successful adaptation efforts—ultimately enhancing the resilience of coastal communities to climate change impacts.

Adaptive management and community engagement are critical components of effective governance for adaptation, facilitating flexible and responsive approaches to address climate change impacts while ensuring the active participation and ownership of local communities. The coastal resilience project in Liberia exemplifies adaptive management practices. The project faced challenges including delays, disagreements, and concerns from local communities regarding infrastructure design. Through adaptive management, the project restructured and implemented strategies to address these challenges. By actively responding to community needs and adjusting project designs, the project demonstrated resilience and effectiveness in achieving adaptation objectives.

Lever 3: Knowledge exchange and collaboration

According to the LDCF/SCCF Programming Strategy (GEF 2022), knowledge exchange will serve as a key vehicle for innovation and technology transfer, sharing of good practices, and scaling-up of adaptation solutions, and pioneering approaches and experience. The strategy will advance collaboration among different stakeholders, particularly by facilitating South-South cooperation for sharing of lessons, research community findings on context-appropriate solutions, and locally led processes that are catalyzing positive change.

Efforts to bridge information gaps for vulnerable groups, such as through radio and mobile technology, have shown promise but face ongoing challenges. Innovative approaches, though underutilized, have demonstrated potential, as seen, for example, in the LDCF-funded Community-based Climate Risks Management in Chad (UNDP; GEF ID 8001) project. The project developed a people-centered early warning

system that actively engaged communities. As part of its innovative approach, the project used the generated climate information to design a financial instrument providing microcredit and climate index microinsurance to 500 vulnerable households and farmers. By combining agricultural microinsurance with microcredit, enabled by accurate climate data, the approach proved mutually beneficial for insurance companies in reducing administration costs to serve remote areas and for the communities gaining access to these financial services.

Despite notable progress, challenges persist in delivering actionable climate information to local communities, particularly in the last mile of service delivery. While GEF projects have demonstrated efficiency, long-term sustainability of outcomes remains uncertain because of funding and resource constraints.

2.3 Cross-cutting priorities and considerations

Strengthening innovation

Innovation for adaptation involves leveraging novel approaches, technologies, and collaborations to address challenges at the intersection of water, climate, and sustainability. At the UN 2023 Water Conference, the United Nations Framework Convention on Climate Change (UNFCCC) Secretariat emphasized collaboration and innovation in addressing the water-climate nexus (GEF IEO 2024b). The CIEWS evaluation (GEF IEO 2024c) found that the use of innovative approaches in the project portfolio reviewed was limited, with only 22 percent mentioning such approaches during design and a mere 5 percent successfully implementing them by project completion.

The SCCF's Costa Rica rural aqueduct project provides a notable example of an innovative approach, implementing an alarm system using low-maintenance sensors to monitor the water level of the Zapote River. To improve communication efficiency, the project featured user-friendly and readily accessible communication tools, including social networks and cost-free instant messaging platforms. By harnessing these tools, the project successfully disseminated crucial information to the broader population, ensuring that they were well informed and capable of taking appropriate actions in response to the water-level monitoring data.

Private sector engagement

Only a small percentage of completed projects (18 percent) in the water security evaluation portfolio involved the private sector in implementing water security activities (GEF IEO 2024b); an even smaller share (14 percent) engaged the private sector during the design phase. Limited engagement was attributed to the perception of water as a public good, which offers restricted opportunities for private sector involvement in development projects aimed at enhancing water security. However, recognizing the significant role of the private sector as a major water user, opportunities exist for its involvement in improving water security by enhancing resilience against water risks, providing water services, and participating in multistakeholder water management initiatives. A more involved approach was to include companies that created water infrastructure as suppliers; the Implementing Integrated Water Resource and Wastewater Management in Atlantic and Indian Ocean SIDS (United Nations Environment Programme; GEF ID 2706) GEF Trust Fund project engaged companies to import and construct water efficiency equipment such as sensor tap systems and dual-flush valves for rainwater harvesting systems. The Sudan NAPA project also engaged a company to provide solar water pumps to communities. Projects dealing with wastewater treatment often involved private sector waste operators too, such as in the Shanghai Agricultural and Non-Point Pollution

Reduction (World Bank; GEF ID 3223) GEF Trust Fund project.

Various factors limit private sector involvement in CIEWS projects, including reliance on public funding, lack of defined participation frameworks and incentives, and competition between governments and the private sector as service providers. Positive examples include the LDCF-financed project Strengthening Climate Information and Early Warning Systems in Cambodia to Support Climate Resilient Development and Adaptation to Climate Change (UNDP; GEF ID 5318). The project developed a feasibility study and engagement strategy, partnering with companies allocating corporate social responsibility funds to climate adaptation initiatives. The LDCF-financed project SMARTFARM—A Data and Digital Technology Driven and Farm Management Solution for Climate Resilience in Ethiopia/Rwanda (International Fund for Agricultural Development; GEF ID 10965)—supported through the Challenge Program for Adaptation Innovation—devised strategies to involve private stakeholders such as agroprocessors, input suppliers, financial institutions, and telecommunications companies to strengthen agricultural value chains, mitigate risks, and attract investments. The project explores a user subscription model to provide value-added digital services to create a self-sustaining ecosystem benefiting farmers and the value chain.

While private sector engagement in GEF drylands projects historically has been limited, recent trends show an upward trajectory, with newer projects demonstrating increased consideration of private sector involvement in project design. Engaging the private sector sustainably in drylands can be more challenging than in more productive regions, due to issues related to connectivity to broader markets, the absence of incentives for investment in drylands, and the consequent capital outflow from common enterprises such as mining.

Gender equality

Inclusion and empowerment are central themes in the project portfolio reviewed, particularly concerning the involvement of women in decision-making processes and project activities. Despite progress, challenges persist, as evidenced by instances where deeply entrenched gender discrimination hinders women's participation and limits their access to project benefits. For example, in some drylands projects, women faced barriers due to cultural norms and a lack of alternative options for childcare, limiting their involvement in cash-for-work programs. However, there are success stories showcasing the positive impact of GEF projects on women's empowerment. Two efforts in Niger—the above-mentioned SIP and the GEF Trust Fund SIP: Agricultural and Rural Rehabilitation and Development Initiative (International Fund for Agricultural Development; GEF ID 3383)—have enabled women to actively engage in land restoration activities, manage nurseries, and generate additional income for their families. Additionally, the GEF Trust Fund-financed PSG-Sustainable and Inclusive Agribusiness Development Project (World Bank; GEF ID 5449) in Senegal ensured women's representation in management and technical committees related to land use and allocation, and increased women's access to developed land.

Gender considerations and contextual adaptations are essential aspects of effective water management strategies, ensuring inclusivity, equity, and sustainability. Projects that prioritize gender considerations in water management often involve empowering women, promoting their participation in decision-making, and addressing gender disparities in access to water resources and sanitation facilities. These projects recognize the significant contributions of women to water-related activities, such as collecting water, agriculture, and household water management; and aim to enhance their capacity to participate in and benefit from water initiatives, recognizing the roles, needs, and priorities of both women and men

in water-related decision-making processes and resource management activities. The water security evaluation found that gender considerations were not commonly addressed in completed projects that focused on water security, but they are much more prominent in ongoing projects. The Sudan NAPA implementation project was found to be very beneficial to women; women interviewed reported benefiting from improved water access through better diet and more consistent food supply.

Gender equality is not only a moral imperative but also a pathway to significant socioeconomic benefits. According to the drylands evaluation, socioeconomic benefits frequently include income generation and/or diversification at the household level; as well as civil society engagement and development, access to communal services, job creation, and food security. The Mainstreaming Sustainable Land and Water Management Practices (International Fund for Agricultural Development; GEF ID 2631) GEF Trust Fund project in Jordan created and supported six women's savings and credit groups. These groups were trained in SLM activities and provided with equipment and products needed for their activities. The two Niger SIP initiatives how women's active involvement in land restoration activities and management of nurseries not only contribute to environmental conservation but also generate additional income for them and their families.

Youth empowerment

Youth engagement and empowerment remains limited; within the project portfolio analyzed for the water security evaluation, only 11 percent of completed projects involved youth or youth groups. Some projects have shown promising outcomes, however. For instance, in the Ethiopian SLM projects, initiatives such as water harvesting and small-scale irrigation not only improved water security but also enabled income and dietary diversification for households, reducing outmigration pressures, particularly among youth. The SLM program also successfully treated over 860,000 hectares of degraded landscapes, benefiting smallholder farmers and landless youth through initiatives such as issuing landholding certificates in exchange for managing communal lands.

Resilience to climate and nonclimate-related shocks and stresses

By implementing climate-resilient agricultural practices, introducing drought-tolerant crops, and promoting conservation agriculture strategies, projects aim to improve food availability, market access, and livelihoods while reducing dependence on external food aid. For instance, the GEF Trust Fund project SIP: Mainstreaming Sustainable Land Management in Agropastoral Production Systems of Kenya (UNDP; GEF ID 3370) successfully enhanced agricultural productivity by introducing conservation agriculture strategies and drought-tolerant crops. This led to increased food availability in pilot areas; and households reported at least a 50 percent increase in agricultural production, accompanied by a significant decrease in reliance on food handouts. Similarly, Ethiopia's SLM projects delivered positive outcomes ranging from diversified and high-value agricultural production to better market access and alternative livelihood options. Also, the SCCF project Supporting Climate Resilient Livelihoods in Agricultural Communities in Drought-prone Areas (UNDP; GEF ID 6960) successfully implemented water-saving technologies such as drip irrigation, siphons, irrigation hoses; and developed and implemented on-farm water use plans that have been introduced to optimize water resource management. Moreover, activities aimed at creating alternative sources of income—such as the construction of greenhouses, the establishment of a sewing club, honey production, and involving women in adaptation measures at all stages—have been undertaken to diversify livelihoods and empower communities, thereby fostering resilience and promoting holistic

development. These interventions have resulted in income gains, improved food and nutrition security, and enhanced resilience among communities in dryland areas.

Projects adopt integrated approaches that combine climate-resilient practices, disaster risk management measures, and income-generating activities. By addressing underlying causes of vulnerability to climate and other shocks, and promoting adaptive practices, these interventions improve multiple dimensions of resilience, including food security, reduced exposure to climate shocks, and improved livelihoods. For instance, the LDCF project Building Resilience in the Face of Climate Change within Traditional Rain Fed Agricultural and Pastoral Systems in Sudan (FAO; GEF ID 10159) has introduced sustainable practices in agricultural production at the community level. Greater irrigation efficiency has been achieved in the management of water resources through the introduction of integrated women's farms, home gardens, and demonstration plots in dryland zones across nine states. Initiatives include environmental awareness programs, income diversification efforts, and support for drought-resistant crops.

Monitoring and evaluation (M&E) of resilience is essential for assessing the effectiveness of interventions and understanding their impact on vulnerable communities facing climate change. Projects implementing M&E frameworks focused on resilience aim to measure changes associated with resilience, identify strengths and weaknesses, and guide adaptive management strategies. For example, the Drylands Solutions Impact Program and the Resilient Food Systems Impact Program supported by FAO use the Self-Evaluation and Holistic Assessment of Climate Resilience of Farmers and Pastoralists (SHARP) tool. This tool, linked to the Land Degradation Neutrality conceptual framework, helps measure changes associated with the resilience of farmers and pastoralists to climate change. MTF projects—including the GEF Trust Fund/LDCF-financed Resilient, Productive and Sustainable Landscapes in Mali's Kayes Region (FAO; GEF ID 10362) project as well as the Ethiopia SLM program—have combined resources from different funds to deliver climate change adaptation and resilience benefits. These projects also integrate M&E frameworks to assess their effectiveness in enhancing resilience and adaptive capacity.

Institutional capacity development for adaptation-focused work

Institutional capacity development for adaptation is crucial for enhancing resilience to environmental challenges, with a focus on sustainability. For instance, in Malawi and Ethiopia, where there is a tradition of decentralized and institutionalized environmental governance, multistakeholder platforms for environmental management have shown greater sustainability.

In the GEF Trust Fund project Towards a Land Degradation-Neutral Azerbaijan (FAO; GEF ID 10708), cooperative resource governance structures for pasture and forest management at the district and community levels were piloted. However, postproject, the sustainability of district-level multistakeholder committees was not achieved, indicating the need for ongoing support and evaluation of such initiatives. Similarly, the community-driven SLM project in Niger invested in institutional strengthening for local government planning. While there was progress in adopting local government planning tools, further institutional support is needed for optimal functioning of local community management committees covering natural resource management and land tenure. Despite their being assessed as mediocre at project completion, these committees played a valuable role in managing conflicts arising from local land use and tenure issues, highlighting the importance of continued support for such initiatives.

Sustaining multistakeholder governance platforms post-project closure remains a challenge. Therefore, there is a need to establish governance frameworks that ensure the equitable participation of local actors and the delivery of local benefits, particularly in dryland areas (Stafford-Smith and Metternicht 2021).

Climate adaptation awareness raising

Projects play an important role in raising awareness of emerging water security issues and reshaping government priorities. Case studies reveal that these projects have effectively elevated the awareness of stakeholders, particularly in regions like Sudan and Burundi, where water security concerns were not previously given high priority. For instance, the Mainstreaming Groundwater Considerations into the Integrated Management of the Nile River Basin (UNDP; GEF ID 3321) GEF Trust Fund project introduced stakeholders to the critical importance of monitoring groundwater resources and their impact on surface water availability.

The CIEWS evaluation points toward the need to move from awareness raising to action. Clear and user-friendly climate information enables communities and authorities to take timely precautionary measures and implement evacuation plans, thereby reducing the impacts of disasters and enhancing socioeconomic benefits. For example, the LDCF CIEWS project in São Tomé and Príncipe focused heavily on improving warning mechanisms, such as the development of meteorological and community alert systems. However, because the project did not provide sufficient tangible support for early actions during disasters, the affected communities continue to face challenges in effectively responding to disasters despite the improved warning systems. On the other hand, the LDCF project CCA [Climate Change Adaptation] Growth: Implementing Climate Resilient and Green Economy Plans in Highland Areas in Ethiopia (GEF ID 6967) provided 500 rain gauges and trained farmers to adapt cropping patterns based on accurate weather monitoring amid changing climate conditions when traditional crops became nonviable. Ensuring usable climate data and training farmers empowered communities to make informed decisions.

2.4 Main takeaways

Water security and access in agriculture are essential for food security, economic stability, and environmental sustainability. Projects globally focus on improving water access and management in agriculture, such as via solar water pumps and small-scale irrigation systems. Sustainable agricultural practices like agroecology and agroforestry enhance productivity, soil health, and biodiversity conservation. Investments in agricultural initiatives yield outcomes beyond food production, including income generation, poverty reduction, and enhanced food security. Agricultural initiatives have a positive effect on public health through nutritious food provision, but pose risks including pesticide exposure; sustainable practices mitigate these risks. Agricultural projects adapt to climate change through water harvesting, drought-resistant crops, and climate-smart practices to safeguard food security and enhance resilience. These efforts collectively underscore the importance of holistic approaches to agricultural development that consider water management, sustainability, economic viability, and public health outcomes.

The findings highlight the critical need for integrated and ecosystem-based approaches to sustainable water management, especially in light of climate change impacts. They emphasize the importance of coordinating various aspects of water management, integrating climate change adaptation measures, and utilizing natural ecosystems to enhance water resilience. Examples from projects worldwide demonstrate the effectiveness of community involvement and stakeholder engagement in achieving sustainable water management goals.

CIEWS are pivotal for mitigating climate-related hazards. This involves establishing robust monitoring networks, deploying advanced technologies, and providing training to personnel. Additionally, addressing the last mile challenge by ensuring effective communication to all communities—especially in remote areas—is essential. Integrating CIEWS into broader disaster risk reduction and climate adaptation strategies is crucial for sustainability and resilience, aligning early warning efforts with wider development goals and priorities such as poverty reduction, food security, and sustainable livelihoods.

The challenge of policy alignment and coherence presents significant hurdles in project implementation. Issues such as unclear institutional responsibilities and misaligned incentives hinder efforts in SLM. Coordinating policies across administrative levels and decentralizing decision-making processes add complexity. Discrepancies between policy and project timelines impede policy-coherence activities. Evolving approaches, such as adopting integrated methods and employing phased strategies, aim to target policy coherence more effectively—demonstrating tangible benefits at local levels and influencing national policy making.

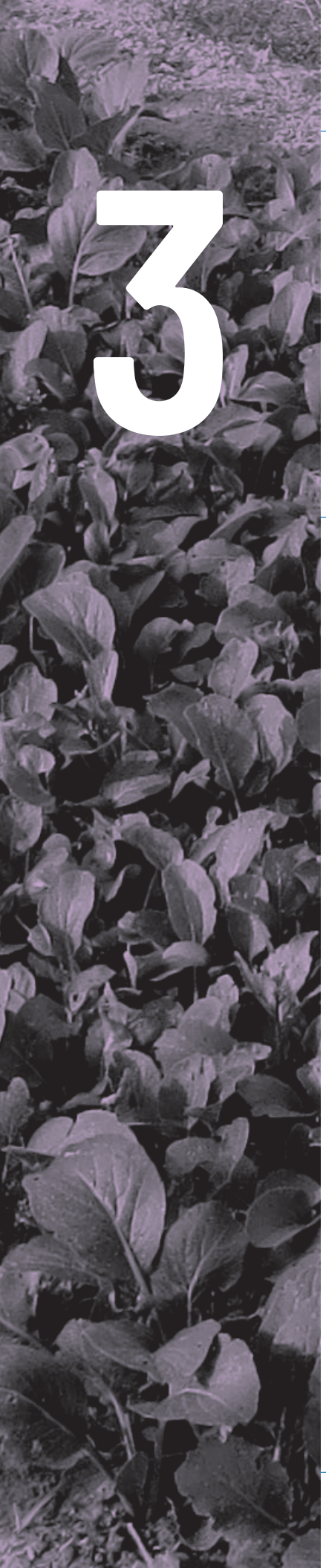
Governance plays a critical role in adapting to climate change and managing environmental risks, particularly concerning natural resource management. Strengthening governance in these areas is vital for promoting sustainable development and resilience. Examples include prioritizing governance improvements in dryland regions and facilitating stakeholder engagement led by local administrators to enhance resilience within regular rural development systems. Sustainability and ownership are essential aspects of strengthened governance, ensuring that initiatives effectively address climate change impacts and endure beyond project completion. Engaging communities proactively fosters ownership by involving them in decision-making and skill-building activities. Synergistic partnerships and capacity building strengthen governance for adaptation, empowering communities to take ownership of initiatives and boost resilience. Both adaptive management and community engagement are essential elements of effective governance for adaptation, allowing for flexible responses to climate change impacts while ensuring active community participation and ownership.

Private sector engagement in water security is limited due to the perception of water as a public good. However, opportunities exist for involving the private sector in resilience enhancement and multistakeholder initiatives. A more involved approach includes engaging companies that create water infrastructure as suppliers. One initiative engaged companies to import and construct water efficiency equipment such as sensor tap systems and dual-flush valves for rainwater harvesting systems. Another initiative involved a company providing solar water pumps to communities. Wastewater treatment often involves private sector waste operators. Challenges in CIEWS include reliance on public funding and competition between governments and the private sector as service providers. Engagement in dryland projects is increasing, yet challenges remain due to market connectivity issues and a lack of investment incentives (GEF IEO 2024e).

Despite cultural challenges, women are increasingly involved in decision-making processes and project activities. In the reviewed project portfolio, there is a strong focus on inclusion and empowerment, especially for women. In water management strategies, prioritizing gender considerations is essential for inclusivity and sustainability, acknowledging women's significant contributions. While gender considerations were less common in completed water security projects, ongoing projects prioritize them more. Promoting gender equality in environmental projects not only addresses disparities but also yields socioeconomic benefits, emphasizing the importance of empowering women.

Efforts in Africa aim to enhance food security and resilience to climate change by implementing climate-resilient agricultural practices and promoting conservation agriculture. These initiatives seek to increase food availability, reduce dependence on external food aid, and improve livelihoods. Integrated approaches combine climate-resilient practices with disaster risk management and income-generating activities to build resilience to climate shocks. M&E frameworks, such as FAO's SHARP tool, help assess the effectiveness of interventions in enhancing resilience across various projects and funds.

Building institutional capacity for adaptation is vital for resilience against environmental challenges, emphasizing sustainability. Decentralized governance models in Malawi and Ethiopia demonstrate effectiveness through multistakeholder platforms for environmental management. Sustaining these platforms beyond project closure remains a challenge, highlighting the need for ongoing support and the equitable participation of local actors.



3 Management action record

The MAR has been presented annually to the GEF Council since June 2006. It is the main accountability mechanism to monitor and report on progress in the implementation of recommendations from evaluations prepared by the GEF IEO. Prior to 2021, the Council endorsed the recommendations, and the GEF IEO tracked their implementation. The GEF Secretariat provided a management response to the IEO evaluations and recommendations, but the specific actions included in the management response were not endorsed by the Council.

As a follow-up to the professional peer review of the GEF's independent evaluation function (Menon 2020), the GEF approach to the MAR was revised. GEF management now responds to each GEF IEO evaluation recommendation with an action plan, and the Council comments on and endorses this plan. The GEF IEO then tracks progress in its implementation. The GEF Council began to endorse management action plans in June 2021. The 2024 MAR is the second one prepared using the revised approach.

The management response to a GEF IEO recommendation indicates whether it agrees with the recommendation. Where management agrees with a recommendation—including instances where it partially agrees—it is expected to identify specific actions, along with a time frame, where appropriate, to address it. In instances where management disagrees with a recommendation, it is not expected to provide an action plan to address the recommendation.

3.1 Rating approach

For each of the recommendations for which implementation of the management's action plan is tracked, GEF management is invited to provide self-ratings on progress in implementation along with commentary as necessary. Ratings and commentary on tracked recommendations are also provided by the GEF IEO for validation.

The scale for assessing the level of implementation of the management action plan is analogous to that used in earlier MARs. However, the description of the ratings has been updated to reflect the revised MAR process. The implementation progress ratings are as follows:

- **High.** The management action plan for the relevant recommendation has been fully implemented.
- **Substantial.** The management action plan for the relevant recommendation has largely been implemented or most actions have been implemented, but some aspects/actions have not been fully implemented.
- **Medium.** Some of the actions listed in the management action plan have been implemented, but not to a significant degree. While some of the specified actions have been implemented, there is only limited progress in implementation of the key specified actions.
- **Negligible.** Specified actions have not yet been implemented, or the progress made so far is negligible.
- **Not rated.** Sufficient information on implementation is not available to allow an assessment of progress.
- **N/A.** Not applicable may be used when subsequent decisions taken by the GEF Council supersede the management action plan.

The evaluation recommendations and the related management action plans may be graduated or retired from the MAR for one or more of the following reasons:

- **Graduated** due to high or, where appropriate, substantial level of progress in implementation of management's action plan.
- **Retired** because the evaluation recommendation and related action plan is not relevant anymore, or further progress on implementation of the action plan is unlikely. An automatic reason for retirement is if a recommendation and related action plan have been covered in the MAR for five years.

3.2 LDCF/SCCF MAR 2024

MAR 2024 for the LDCF/SCCF tracks progress in the implementation of management's action plan for two GEF IEO recommendations: one from the 2020 LDCF program evaluation (GEF IEO 2022a), and one for the 2021 SCCF program evaluation (GEF IEO 2022b).

LDCF program evaluation

GEF IEO recommendation: Continue to enhance the likelihood of the sustainability of outcomes. The GEF Secretariat and the GEF Agencies should continue to carry out relevant actions in project design and implementation as highlighted in the GEF Council document "Towards Greater Durability of GEF Investments" (GEF 2019). This should entail giving more emphasis to the project and context factors identified by this evaluation as affecting the sustainability of outcomes during project design and implementation.

Level of GEF management's agreement and its response including specified actions: Agreed. The Secretariat acknowledges the GEF IEO's recommendation to continue to enhance the likelihood of sustainability of outcomes. In this regard, the Secretariat will continue to carry out relevant actions in project design and implementation as highlighted in the Council document "Towards Greater Durability of GEF Investments," as recommended by the IEO and will continue to urge Agencies to emphasize contextual factors affecting sustainability outcomes (GEF 2020). No time frame was indicated.

GEF Secretariat's assessment of progress in implementation of its action plan: Substantial. In this period, the LDCF continued to implement the priorities of the GEF-8 strategy, which duly integrated the IEO's recommendation. It focused on the proposed dedicated

programs, collaboration with financial institutions, and the whole-of-society approach, which serve as key levers for the durability of adaptation outcomes. In this fiscal year, the GEF Secretariat delivered five subregional adaptation workshops under the dedicated programs covering all the LDCs and SIDS. These workshops led to improved capacity of countries in designing effective and durable adaptation projects in collaboration with the GEF Agencies, technical experts, the GEF Scientific and Technical Advisory Panel, and the UNFCCC. These sessions have also led to strong ownership and engagement of countries in the projects, which is expected to translate into durable outcomes.

The GEF also strengthened its focus on leveraging large-scale funding from multilateral development banks and other financial intermediaries to complement LDCF investments for long-term outcomes. These include strategic collaboration with the World Bank's International Development Association for scaling up nature-based solutions in LDCs, and partnership with the Green Climate Fund and the International Fund for Agricultural Development on a regional adaptation project in Great Green Wall region countries. Overall, the share of multilateral development banks and development finance institutions in LDCF programming has increased in GEF-8.

The whole-of-society approach was integrated in several LDCF projects which were approved by the Council in the reporting period. These projects have included approaches to engage stakeholders across governance levels, inclusive community-based governance structures, establishment of multisectoral dialogues, collaboration with the private sector, and engagement of communities and civil society in decision-making and implementation of adaptation activities. Such a wider societal engagement in projects will likely smooth the path for greater ownership, improved monitoring, and a process of learning for durable outcomes.

The GEF IEO's validation of reported implementation progress: Substantial. The GEF IEO acknowledges that ongoing GEF-8 efforts include dedicated programs, subregional workshops, leveraging funding, and the whole-of-society approach. The IEO encourages the Secretariat to continue enhancing the likelihood of sustainability of outcomes through actions in project design and implementation as highlighted by the GEF Secretariat (GEF 2019) and to continue to urge Agencies to emphasize contextual factors affecting sustainability outcomes.

SCCF program evaluation

GEF IEO recommendation: The GEF Secretariat should acknowledge the semidormant state of the SCCF and—together with the key and emerging donors and stakeholders—develop a proactive action plan to revitalize the fund. Removing windows SCCF-C and SCCF-D, which are evidently unattractive to donors; targeting support under window SCCF-A toward non-LDCs, particularly SIDS; and refocusing the fund toward technology transfer and innovation in adaptation in non-LDCs in window SCCF-B is the only way forward. In doing so, the Secretariat should actively articulate and communicate the SCCF's niche and "brand" its focused and distinctive roles in the climate finance architecture. In the short term—and despite the preference of traditional donors to focus on a few, larger funds—the existence of funds such as the SCCF could remain a proven and practical alternative for donors to diversify their funding, or an opportunity for new and emerging or smaller donor countries in climate finance.

Level of GEF management's agreement and its response including specified actions: Partially agreed. The GEF Secretariat agrees with the report's recommendation that "the Secretariat should actively articulate and communicate the SCCF's niche and brand its focused and distinctive roles in the climate finance architecture" and points out that it has been actively doing so. In consultation with donors to the LDCF and the SCCF,

the GEF's LDCF/SCCF Programming Strategy (GEF 2022) outlined a clear role for the SCCF, including the two aspects subsequently captured in this recommendation. The Secretariat will continue to further sharpen the focus for SCCF-A and SCCF-B along the lines recommended in the evaluation and as detailed in the LDCF/SCCF Programming Strategy.

The GEF Secretariat does not agree with the report's recommendation that "Removing windows SCCF-C and SCCF-D…is the only way forward." Such an action by the Secretariat is not possible in the absence of a decision by the UNFCCC Conference of the Parties (COP). Further, while SCCF-C and SCCF-D have not been resourced, the GEF Secretariat has not received indication that the mere existence of these windows affects the willingness of donors to fund the SCCF-A and SCCF-B windows, nor did their existence preclude donors from contributing to windows A and B prior to 2015.

GEF Secretariat's assessment of progress in implementation of its action plan: High. The GEF has been making strong progress in following up on IEO recommendations, including a clear articulation of the niche and value added of the SCCF in the climate finance landscape, laid out in the LDCF/SCCF Programming Strategy for the 2022–26 period. The GEF has focused support under window SCCF-A on support for non-LDC SIDS. In conjunction, the GEF has been supporting regional workshops to build the capacity of non-LDC SIDS to program SCCF-A resources effectively. These measures have resulted in robust adaptation concepts from these countries, with a total of $26 million approved for adaptation concepts presented under the SCCF-A window at the 34th and 35th LDCF/SCCF Council Meetings. The SCCF-B window is focused on technology transfer, innovation, and private sector engagement, as recommended by the IEO, and a third call for the Challenge Program for Adaptation Innovation was issued on April 5, 2024.

A senior-level specialist has been hired to further the visibility and outreach of the LDCF and the SCCF, under the dedicated program on Communications and Visibility Enhancement included in the LDCF/SCCF Programming Strategy for 2022–26. Functions will include outreach to donors, visibility events, and written products. The GEF has held pledging events for the LDCF and the SCCF at UNFCCC COP27 and COP28, resulting in donor pledges for the SCCF—including from new donors. The 2022–26 programming strategy, which includes financing scenarios for the SCCF, has been endorsed by the GEF Council and is under implementation.

The GEF IEO's validation of reported implementation progress: High. The IEO acknowledges that the Secretariat has sharpened the focus of the SCCF-A and SCCF-B windows in the LDCF/SCCF Programming Strategy, employed a senior specialist dedicated to the visibility and outreach of the LDCF/SCCF, and liaised with donors with the result of increased pledges to the SCCF; and that the LDCF/SCCF Programming Strategy with financing scenarios has been endorsed by the Council and is being implemented. This recommendation will be graduated.

Overall, the GEF Secretariat has made substantial progress in implementing both recommendations, enhancing project sustainability, and revitalizing the SCCF, with strong ongoing efforts to meet climate finance commitments.

Annex A

AER 2024 portfolio

GEF ID	GEF period	GEF fund	GEF Agency	Project title	Country	Evaluation
3299	GEF-4	SCCF	UNDP	Strengthening the Capacity of Vulnerable Coastal Communities to Address the Risk of Climate Change and Extreme Weather Events	Thailand	CBA
4216	GEF-4	LDCF	UNDP	Integration of Climate Change Risk and Resilience into Forestry Management (ICCRIFS)	Samoa	CBA
4222	GEF-4	LDCF	UNDP	Promoting Autonomous Adaptation at the community level in Ethiopia	Ethiopia	CBA
4696	GEF-5	LDCF	UNDP	Strengthening the Resilience of Small-Scale Rural Infrastructure and Local Government Systems to Climatic Variability and Risk	Timor-Leste	CBA
4960	GEF-5	SCCF	UNDP	Scaling up Adaptation in Zimbabwe, with a Focus on Rural Livelihoods, by Strengthening Integrated Planning Systems	Zimbabwe	CBA
4967	GEF-5	SCCF	UNDP	Scaling up Risk Transfer Mechanisms for Climate Vulnerable Agriculture-based Communities in Mindanao	Philippines	CBA
9199	GEF-6	GET, LDCF	UNDP	Enhancing Sustainability and Climate Resilience of Forest and Agricultural Landscape and Community Livelihoods	Bhutan	CBA
10096	GEF-7	LDCF	UNDP	Ecosystems/Landscape approach to climate proof the Rural Settlement Program of Rwanda	Rwanda	CBA
10159	GEF-7	LDCF	FAO	Resilience of Pastoral and Farming Communities to Climate Change in North Darfur	Sudan	CBA
10350	GEF-7	LDCF	IFAD	Sustainable Natural Resource and Livelihood Adaptive Programme (SNRLAP)	Sudan	CBA
10438	GEF-7	SCCF	CAF	UAVs/drones for Equitable Climate Change Adaptation: Participatory Risk Management through Landslide and Debris Flow Monitoring in Mocoa, Colombia	Colombia	CBA
4554	GEF-5	LDCF	UNDP	Effective Governance for Small Scale Rural Infrastructure and Disaster Preparedness in a Changing Climate	Lao PDR	CBA, LFC

GEF ID	GEF period	GEF fund	GEF Agency	Project title	Country	Evaluation
6914	GEF-6	LDCF	UNDP	Adapting Afghan Communities to Climate-Induced Disaster Risks	Afghanistan	CBA, LFC
8001	GEF-6	LDCF	UNDP	Community-based Climate Risks Management in Chad	Chad	CBA, CIEWS
9194	GEF-6	LDCF	UNIDO	Strengthening Adaptive Capacities to Climate Change through Capacity Building for Small Scale Enterprises and Communities Dependent on Coastal Fisheries in The Gambia	Gambia, The	CBA, CIEWS
10789	GEF-7	GET, LDCF	FAO	Building Community Based Integrated and Climate Resilient Natural Resources Management and Enhancing Sustainable Livelihood in the South-Eastern Escarpments and Adjacent Coastal Areas of Eritrea	Eritrea	CBA, Drylands
3103	GEF-4	SCCF	UNDP	Climate-resilient Infrastructure in Northern Mountain Province of Vietnam	Viet Nam	LFC
3242	GEF-4	SCCF	UNDP	Adaptation to Climate Change in the Nile Delta through Integrated Coastal Zone Management	Egypt, Arab Rep.	LFC
3406	GEF-4	LDCF	UNDP	Integrating Climate Change Risk into Community-Level Livestock and Water Management in the Northwestern Lowlands	Eritrea	LFC
3408	GEF-4	LDCF	UNEP	Implementing NAPA Priority Interventions to Build Resilience in the most Vulnerable Coastal Zones in Djibouti	Djibouti	LFC
4227	GEF-4	LDCF	UNEP	Building Adaptive Capacity and Resilience to Climate Change in Afghanistan.	Afghanistan	LFC
4276	GEF-5	LDCF	UNDP	Adaptation in the coastal zones of Mozambique (LDCF)	Mozambique	LFC
4368	GEF-5	SCCF	IFAD	Promoting a Value Chain Approach to Climate Change Adaptation in Agriculture in Ghana	Ghana	LFC
4570	GEF-5	LDCF	IFAD	Adapting Agriculture Production in Togo	Togo	LFC
4585	GEF-5	LDCF	UNDP	Enhancing the resilience of tourism-reliant communities to climate change risks.	Samoa	LFC
4724	GEF-5	LDCF	UNDP	Enhancing Resilience of Vulnerable Coastal Areas and Communities to the Impact of Climate Change in the Gambia	Gambia, The	LFC
5075	GEF-5	LDCF	UNDP	Reducing Vulnerability from Climate Change in the Foothills, Lowlands and the Lower Senqu River Basin	Lesotho	LFC
5177	GEF-5	LDCF	UNDP	Promoting Climate-resilient Development and Enhanced Adaptive Capacity to Withstand Disaster Risks in Angola's Cuvelai River Basin	Angola	LFC
5435	GEF-5	LDCF	UNDP	Promoting Climate Resilient Community-based Regeneration of Indigenous Forests in Zambia's Central Province	Zambia	LFC
5438	GEF-5	GET, SCCF	WB	MENA: Improved Desert Ecosystems and Climate Resilient Oases Project	Algeria	LFC

GEF ID	GEF period	GEF fund	GEF Agency	Project title	Country	Evaluation
5664	GEF-5	LDCF	UNEP	Building Resilience of Communities Living Around the Northern Pistachio Belt (NPB) and Eastern Forest Complex (EFC) of Afghanistan through an EbA Approach.	Afghanistan	LFC
5671	GEF-5	LDCF	UNDP	Building Shoreline Resilience of Timor-Leste to Protect Local Communities and their Livelihoods	Timor-Leste	LFC
6955	GEF-6	SCCF	FAO	Strengthening the Adaptive Capacity to Climate Change in the Fisheries and Aquaculture Sector	Chile	LFC
6988	GEF-6	LDCF	UNDP	Strengthening the Resilience of Vulnerable Coastal Areas and Communities to Climate Change in Guinea Bissau	Guinea-Bissau	LFC
8015	GEF-6	LDCF	UNDP	Enhancing Resilience of Liberia Montserrado County Vulnerable Coastal Areas to Climate Change Risks	Liberia	LFC
2553	GEF-4	SCCF	UNDP	Piloting Climate Change Adaptation to Protect Human Health	Barbados, Bhutan, China, Fiji, Jordan, Kenya, Uzbekistan	CIEWS
3249	GEF-3	SCCF	WB	Adaptation to Climate Change in Arid and Semi-Arid Lands (KACCAL)	Kenya	CIEWS
3704	GEF-4	LDCF	UNDP	Integrated Adaptation Programme to Combat the adverse Effects of Climate Change on Agricultural Production and Food Security in Benin	Benin	CIEWS
3728	GEF-4	LDCF	UNEP	Strengthening of the Gambia's Climate Change Early Warning Systems	Gambia, The	CIEWS
3841	GEF-4	LDCF	UNEP	Build Lesotho's capacity for monitoring and predicting climate change impacts, delivering early warning for extreme events and local and national planning for adaptation to climate change.	Lesotho	CIEWS
4018	GEF-4	LDCF	WB	São Tomé and Príncipe: Adaptation to Climate Change	São Tomé and Príncipe	CIEWS
4700	GEF-4	LDCF	UNDP	Integrating Community-based Adaptation into Afforestation and Reforestation Programmes in Bangladesh	Bangladesh	CIEWS
4958	GEF-5	LDCF	UNDP	Climate risk finance for sustainable and climate resilient rain-fed farming and pastoral systems – Sudan	Sudan	CIEWS
4991	GEF-5	LDCF	UNDP	Strengthening climate information and early warning systems in Tanzania for climate resilient development and adaptation to climate change	Tanzania	CIEWS
4992	GEF-5	LDCF	UNDP	Strengthening climate information and early warning systems in Africa for climate resilient development and adaptation to climate change – Ethiopia	Ethiopia	CIEWS
4993	GEF-5	LDCF	UNDP	Strengthening climate information and early warning systems in Africa for climate resilient development and adaptation to climate change	Uganda	CIEWS

GEF ID	GEF period	GEF fund	GEF Agency	Project title	Country	Evaluation
4995	GEF-5	LDCF	UNDP	Strengthening climate information and early warning systems in Eastern and Southern Africa for climate resilient development and adaptation to climate change Development and Adaptation to Climate Change - Zambia	Zambia	CIEWS
5002	GEF-5	LDCF	UNDP	Strengthening climate information and early warning systems in Western and Central Africa for climate resilient development and adaptation to climate change	Benin	CIEWS
5003	GEF-5	LDCF	UNDP	Strengthening climate information and early warning systems in Africa for climate resilient development and adaptation to climate change – Burkina Faso	Burkina Faso	CIEWS
5004	GEF-5	LDCF	UNDP	Strengthening climate information and early warning systems in São Tomé and Principe for climate resilient development and adaptation to climate change.	São Tomé and Principe	CIEWS
5006	GEF-5	LDCF	UNDP	Strengthening climate information and early warning systems in Africa for climate resilient development and adaptation to Climate Change	Sierra Leone	CIEWS
5049	GEF-5	LDCF	UNDP	Adaptation to Climate Change in the Coastal Zone in Vanuatu	Vanuatu	CIEWS
5071	GEF-5	LDCF	UNEP	Strengthening climate services and early warning systems in the Gambia for climate resilient development and adaptation to climate change	Gambia, The	CIEWS
5111	GEF-5	LDCF	FAO	Reducing vulnerability and increasing adaptive capacity to respond to impacts of climate change and variability for sustainable livelihoods in agriculture sector in Nepal	Nepal	CIEWS
5318	GEF-5	LDCF	UNDP	Strengthening climate information and early warning systems in Cambodia to support climate resilient development and adaptation to climate change	Cambodia	CIEWS
5328	GEF-5	LDCF	FAO	Building Climate Change Resilience in the Fisheries Sector in Malawi	Malawi	CIEWS
5451	GEF-5	LDCF	WB	Strengthening Hydro-Meteorological and Climate Services	Congo, Dem. Rep	CIEWS
5581	GEF-5	LDCF	WB	Community Resilience to Climate and Disaster Risk in Solomon Islands Project	Solomon Islands	CIEWS
5667	GEF-5	SCCF	FAO	Climate Change Adaptation in the Eastern Caribbean Fisheries Sector Project	St. Vincent and the Grenadines, Grenada, Dominica, St. Lucia, Trinidad and Tobago, Antigua and Barbuda, St. Kitts and Nevis	CIEWS
5723	GEF-5	SCCF	WB	West Balkans Drina River Basin Management Project	Bosnia and Herzegovina, Serbia, Montenegro	CIEWS

GEF ID	GEF period	GEF fund	GEF Agency	Project title	Country	Evaluation
5814	GEF-5	SCCF	WB	Pacific Resilience Program	Pacific Islands (regional), Tonga	CIEWS
5902	GEF-5	LDCF	UNDP	Adapting to climate change induced coastal risks in Sierra Leone	Sierra Leone	CIEWS
6926	GEF-6	LDCF	UNEP	Strengthening climate services in Lesotho for climate resilient development and adaptation to climate change	Lesotho	CIEWS
6984	GEF-6	LDCF	UNDP	Building Resilience of Health Systems in Asian LDCs to Climate Change	Bangladesh, Cambodia, Lao PDR, Myanmar, Nepal, Timor-Leste	CIEWS
8018	GEF-6	LDCF	UNDP	Building Resilience of Health Systems in Pacific Island LDCs to Climate Change	Kiribati, Solomon Islands, Tuvalu, Vanuatu	CIEWS
8023	GEF-6	LDCF	UNDP	Strengthening Climate Information and Early Warning Systems for Climate Resilient Development and Adaptation to Climate Change in Guinea	Guinea	CIEWS
9303	GEF-6	LDCF	UNDP	Climate Change Adaptation in the Lowland Ecosystems of Ethiopia	Ethiopia	CIEWS
9364	GEF-6	LDCF	WB	São Tomé and Príncipe Additional Financing - West Africa Coastal Area Resilience Investment Project	São Tomé and Príncipe	CIEWS
10105	GEF-7	LDCF	UNDP	Strengthening climate information and early warning systems for climate resilient development and adaptation to climate change in Guinea-Bissau	Guinea-Bissau	CIEWS
10160	GEF-7	LDCF	UNDP	Increased resilience and adaptive capacity of the most vulnerable communities to climate change in Forested Guinea	Guinea	CIEWS
10203	GEF-7	LDCF	AfDB	Strengthening the Adaptive Capacity and Resilience of Communities in Uganda's watersheds	Uganda	CIEWS
10376	GEF-7	LDCF	UNDP	Enhancing the resilience of vulnerable coastal communities in Sinoe County of Liberia	Liberia	CIEWS
10415	GEF-7	GET, LDCF	UNDP	Adaptation to Climate Change in the Coastal Zone of Vanuatu – Phase II (V-CAP II)	Vanuatu	CIEWS
10965	GEF-7	LDCF	IFAD	SMARTFARM - A data and digital technology driven and farm management solution for climate resilience.	Ethiopia, Rwanda	CIEWS
4950	GEF-5	LDCF	UNDP	Strengthening Liberia's capability to provide climate information and services to enhance climate resilient development and adaptation to climate change	Liberia	CIEWS, LFC
4994	GEF-5	LDCF	UNDP	Strengthening climate information and early warning systems in Africa for climate resilient development and adaptation to climate change	Malawi	CIEWS, LFC

GEF ID	GEF period	GEF fund	GEF Agency	Project title	Country	Evaluation
4822	GEF-5	LDCF	FAO	Strengthening Resilience to Climate Change through Integrated Agricultural and Pastoral Management in the Sahelian zone in the Framework of the Sustainable Land Management Approach	Mali	Drylands
5220	GEF-5	GET, LDCF	WB	PSG: Sustainable Land Management Project 2	Ethiopia	Drylands
5432	GEF-5	LDCF	FAO	Integrating Climate Resilience into Agricultural and Agropastoral Production Systems through Soil Fertility Management in Key Productive and Vulnerable Areas Using the Farmers Field School Approach	Angola	Drylands
5436	GEF-5	LDCF	WB	Disaster Risk Management and Urban Development Project	Niger	Drylands
10103	GEF-7	LDCF	UNEP	Climate change adaptation and livelihoods in three arid regions of Mauritania	Mauritania	Drylands
10178	GEF-7	GET, LDCF	UNDP	Watershed approaches for climate resilience in agro-pastoral landscapes	South Sudan	Drylands
10180	GEF-7	LDCF	UNEP	Planning and implementing Ecosystem based Adaptation (EbA) in Djibouti's Dikhil and Tadjourah regions	Djibouti	Drylands
10362	GEF-7	GET, LDCF	FAO	Resilient, productive and sustainable landscapes in Mali's Kayes Region	Mali	Drylands
10364	GEF-7	LDCF	FAO	Integrated Adaptation Program to enhance resilience of communities and ecosystems in the dry Miombo Woodlands of Tanzania Mainland and Dryland of Zanzibar	Tanzania	Drylands
10505	GEF-7	GET, LDCF	CI	Strengthen Management and Climate Change Resilience in Angola's Conservation Areas for Sustainable Development	Angola	Drylands
10562	GEF-7	GET, LDCF	FAO	Resilient and sustainable livelihoods for rural Yemen	Yemen, Rep.	Drylands
10687	GEF-7	GET, LDCF	UNDP	Climate security and sustainable management of natural resources in the central regions of Mali for peacebuilding	Mali	Drylands
10688	GEF-7	GET, LDCF	UNDP	Restoring and Enhancing the Value of Degraded Lands and Forest Ecosystems for Enhanced Climate Resilience in Benin	Benin	Drylands
2931	GEF-4	SCCF	UNDP	Adaptation to Climate Change through Effective Water Governance	Ecuador	WS
3265	GEF-4	SCCF	WB	Mainstreaming Adaptation to Climate Change into Water Resources Management and Rural Development	China	WS
3404	GEF-4	LDCF	UNDP	Promoting Climate-Resilient Water Management and Agricultural Practices	Cambodia	WS

GEF ID	GEF period	GEF fund	GEF Agency	Project title	Country	Evaluation
3430	GEF-4	LDCF	UNDP	Implementing NAPA Priority Interventions to Build Resilience in the Agriculture and Water Sectors to the Adverse Impacts of Climate Change	Sudan	WS
3581	GEF-4	LDCF	UNDP	Building Adaptive Capacity and Resilience to Climate Change in the Water Sector in Cape Verde	Cabo Verde	WS
3689	GEF-4	LDCF	UNDP	Adaptation to the effects of drought and climate change in Agro-ecological Zone 1 and 2 in Zambia	Zambia	WS
3857	GEF-4	LDCF	UNDP	Adapting Water Resource Management in Comoros to Increase Capacity to Cope with Climate Change	Comoros	WS
3967	GEF-4	SCCF	WB	Integrating Climate Change in Development Planning and Disaster Prevention to Increase Resilience of Agricultural and Water Sectors	Morocco	WS
4019	GEF-4	LDCF	UNDP	Strengthening Resilience and Adaptive Capacity to Climate Change in Guinea-Bissau's Agrarian and Water Sectors	Guinea-Bissau	WS
4068	GEF-4	LDCF	WB	Increasing Resilience to Climate Variability and Hazards	Kiribati	WS
4234	GEF-5	LDCF	IFAD	Climate Change adaptation project in the areas of watershed management and water retention	Senegal	WS
4255	GEF-4	SCCF	UNDP	To Promote the Implementation of National and Transboundary Integrated Water Resource Management that is Sustainable and Equitable Given Expected Climate Change.	Eswatini	WS
4422	GEF-5	SCCF	EBRD	Increasing Climate Resilience through Drinking Water Rehabilitation in North Tajikistan	Tajikistan	WS
4492	GEF-5	SCCF	WB	Adaptation of Nicaragua's Water Supplies to Climate Change	Nicaragua	WS
4599	GEF-5	LDCF	UNDP	Building Adaptive Capacity to Catalyze Active Public and Private Sector Participation to Manage the Exposure and Sensitivity of Water Supply Services to Climate Change in Sierra Leone	Sierra Leone	WS
4610	GEF-5	SCCF	IDB	Adaptation to Climate Impacts in Water Regulation and Supply for the Area of Chingaza - Sumapaz - Guerrero	Colombia	WS
4692	GEF-5	LDCF	UNDP	Strengthening Resilience of Farming Communities' Livelihoods against Climate Changes in the Guinean Prefectures of Gaoual, Koundara and Mali	Guinea	WS
4797	GEF-5	LDCF	UNDP	Climate Proofing Local Development Gains in Rural and Urban Areas of Machinga and Mangochi Districts	Malawi	WS
5115	GEF-5	SCCF	EBRD	Promoting Climate Resiliency of Water Supplies in Kyrgyzstan	Kyrgyz Republic	WS
5124	GEF-5	LDCF	FAO	Strengthening Capacity for Climate Change Adaptation through Support to Integrated Watershed Management Programme in Lesotho	Lesotho	WS

GEF ID	GEF period	GEF fund	GEF Agency	Project title	Country	Evaluation
5133	GEF-5	GET, LDCF	WB	Senegal River Basin Climate Change Resilience Development Project	Regional	WS
5147	GEF-5	SCCF	IFAD	Enhancing Resilience of Agricultural Sector in Georgia (ERASIG)	Georgia	WS
5174	GEF-5	LDCF	IFAD	Rural Adaptation in Yemen	Yemen, Rep.	WS
5190	GEF-5	LDCF	AfDB	Improving Climate Resilience of Water Sector Investments with Appropriate Climate Adaptive Activities for Pastoral and Forestry Resources in Southern Mauritania	Mauritania	WS
5204	GEF-5	LDCF	AfDB	Building Resilience to Climate Change in the Water and Sanitation Sector	Uganda	WS
5209	GEF-5	LDCF	AfDB	Building Resilience to Climate Change in the Water and Sanitation Sector	Sierra Leone	WS
5211	GEF-5	LDCF	UNDP	Integrated Water Harvesting Technologies to Adapt to Climate Change Induced Water Shortage	Yemen, Rep.	WS
5232	GEF-5	LDCF	AfDB	Flood Control and Climate Resilience of Agriculture Infrastructures in Oueme Valley	Benin	WS
5233	GEF-5	LDCF	AfDB	Enabling Climate Resilience in the Agriculture Sector in the Southwest Region of Madagascar	Madagascar	WS
5263	GEF-5	SCCF	AfDB	Enhancing the Resilience of Poor Communities to Urban Flooding in Yaounde	Cameroon	WS
5332	GEF-5	LDCF	UNDP	Supporting Rural Community Adaptation to Climate Change in Mountain Regions of Djibouti	Djibouti	WS
5384	GEF-5	GET, SCCF	CAF	Andes Adaptation to the Impact of Climate Change on Water Resources Project (AICCA)	Regional	WS
5456	GEF-5	LDCF	UNEP	Ecosystem-based Approaches to Adaptation (EbA) in the Drought-prone Barind Tract and Haor "Wetland" Area	Bangladesh	WS
5504	GEF-5	LDCF	AfDB	Reducing Rural and Urban Vulnerability to Climate Change by the Provision of Water Supply	Central African Republic	WS
5666	GEF-5	SCCF	UNIDO	Mainstreaming Climate Change Adaptation through Water Resource Management in Leather Industrial Zone Development	Pakistan	WS
8009	GEF-6	LDCF	UNEP	Ecosystem-Based Adaptation for Climate-resilient Development in the Kathmandu Valley, Nepal	Nepal	WS
8013	GEF-6	LDCF	AfDB	Climate Adaptation for Sustainable Water Supply	Malawi	WS
8020	GEF-6	LDCF	UNDP	Planning and Financing Adaptation in Niger	Niger	WS
9052	GEF-5	LDCF	ADB	CPDP: Enhancing Climate Resilience of the Urban Services Sector in Timor-Leste	Timor-Leste	WS

GEF ID	GEF period	GEF fund	GEF Agency	Project title	Country	Evaluation
9166	GEF-6	LDCF	FAO	Strengthening Agro-ecosystems' Adaptive Capacity to Climate Change in the Lake Chad Basin (Lac, Kanem, Bahr El Ghazal, and Part of the Hadjer-Lamis Region)	Chad	WS
10099	GEF-7	LDCF	UNDP	Landscape restoration for increase resilience in urban and peri-urban areas of Bujumbura	Burundi	WS
10320	GEF-7	LDCF	UNDP	Strengthening the climatic resilience of the drinking water sector in the South of Haiti	Haiti	WS
10430	GEF-7	LDCF	UNDP	Resilience for Peace & Stability, Food and Water Security Innovation Grant Program	Global	WS
10514	GEF-7	LDCF	UNDP	Integrated Water Resource Management and Ecosystem-based Adaptation (EbA) in the Xe Bang Hieng River Basin and Luang Prabang City	Lao PDR	WS
10593	GEF-7	LDCF	ADB	South Tarawa Water Supply Project	Kiribati	WS
10680	GEF-7	LDCF	UNIDO	Promotion of climate adaptation technology and business model innovations and entrepreneurship in Sierra Leone	Sierra Leone	WS
10742	GEF-7	LDCF	ADB	Funafuti Water and Sanitation Project	Tuvalu	WS
10746	GEF-7	LDCF	ADB	Strengthening Resilience of Water Supply in Honiara	Solomon Islands	WS
10779	GEF-7	LDCF	UNDP	Advancing Climate Resilience of Water Sector in Bhutan (ACREWAS)	Bhutan	WS
10793	GEF-7	LDCF	FAO	Building climate-resilient livelihoods and food systems	Lesotho	WS
10883	GEF-7	LDCF	AfDB	Co-management of climate extremes for agriculture resilience via innovative technologies for irrigation in São Tomé and Príncipe	São Tomé and Príncipe	WS
4034	GEF-4	LDCF	UNDP	Improving the Resilience of the Agriculture Sector in Lao PDR to Climate Change Impacts	Lao PDR	WS, CBA
4340	GEF-5	SCCF	UNDP	Strategic Planning and Action to Strengthen Climate Resilience of Rural Communities in Nusa Tenggara Timor-Province (SPARC)	Indonesia	WS, CBA
4551	GEF-5	LDCF	UNDP	Community Based Flood and Glacial Lake Outburst Risk Reduction	Nepal	WS, CBA
4616	GEF-5	GET, SCCF	FAO	Climate Change Adaptation to Reduce Land Degradation in Fragile Micro-Watersheds Located in the Municipalities of Texistepeque and Candelaria de la Frontera	El Salvador	WS, CBA
4625	GEF-5	GET, LDCF	WB	Shire Natural Ecosystems Management Project	Malawi	WS, CBA
5056	GEF-5	LDCF	UNDP	Strengthening Community Resilience to Climate-induced Disasters in the Dili to Ainaro Road Development Corridor, Timor-Leste	Timor-Leste	WS, CBA

GEF ID	GEF period	GEF fund	GEF Agency	Project title	Country	Evaluation
10199	GEF-7	LDCF	AfDB	Improving Water Availability in The Gambia's Rural and Peri-Urban Communities for Domestic and Agricultural Use	Gambia, The	WS, CBA
10713	GEF-7	GET, LDCF	UNEP	Adapting to climate change and enabling sustainable land management through productive rural communities in Timor-Leste	Timor-Leste	WS, CBA
4036	GEF-4	SCCF	IFAD	TT-Pilot (GEF-4) DHRS: Irrigation Technology Pilot Project to face Climate Change Impact	Jordan	WS, LFC
4725	GEF-5	LDCF	UNDP	Solomon Islands Water Sector Adaptation Project (SIWSAP)	Solomon Islands	WS, LFC
6923	GEF-6	LDCF	UNDP	Mainstreaming Climate Risk Considerations in Food Security and IWRM in Tsilima Plains and Upper Catchment Area	Eritrea	WS, LFC
3838	GEF-4	LDCF	UNEP	Reducing Vulnerability to Climate Change by Establishing Early Warning and Disaster Preparedness Systems and Support for Integrated Watershed Management in Flood Prone Areas	Rwanda	WS, CIEWS
4709	GEF-5	GET, LDCF	WB	GGW: Integrated Disaster and Land Management (IDLM) Project	Togo	WS, CIEWS
5604	GEF-5	SCCF	UNDP	Technology Transfer for Climate Resilient Flood Management in Vrbas River Basin	Bosnia and Herzegovina	WS, CIEWS
6945	GEF-6	SCCF	UNDP	Strengthening Capacities of Rural Aqueduct Associations' (ASADAS) to Address Climate Change Risks in Water Stressed Communities of Northern Costa Rica	Costa Rica	WS, CIEWS
6968	GEF-6	LDCF	UNDP	Chad National Adaptation Plan	Chad	WS, CIEWS
8014	GEF-6	LDCF	AfDB	Climate Change Adaptation for Sustainable Rural Water Supply in Lowlands Lesotho	Lesotho	WS, CIEWS
10089	GEF-7	LDCF	AfDB	Strengthening rural and urban resilience to climate change and variability by the provision of water supply and sanitation in Chad	Chad	WS, CIEWS
10411	GEF-7	LDCF	AfDB	Malawi-climate resilient and sustainable capture fisheries, aquaculture development and watershed management project	Malawi	WS, CIEWS
3893	GEF-4	LDCF	IFAD	Support to the Adaptation of Vulnerable Agricultural Production Systems	Mauritania	WS, Drylands
4261	GEF-4	SCCF	UNDP	Integrating climate change risks into water and flood management by vulnerable mountainous communities in the Greater Caucasus region of Azerbaijan	Azerbaijan	WS, Drylands
5270	GEF-5	GET, LDCF	WB	GGW Natural Resources Management in a Changing Climate in Mali	Mali	WS, Drylands

GEF ID	GEF period	GEF fund	GEF Agency	Project title	Country	Evaluation
6960	GEF-6	SCCF	UNDP	Supporting Climate Resilient Livelihoods in Agricultural Communities in Drought-prone Areas	Turkmenistan	WS, Drylands
8028	GEF-6	LDCF	UNDP	Support for Integrated Water Resources Management to Ensure Water Access and Disaster Reduction for Somalia's Pastoralists	Somalia	WS, Drylands
9318	GEF-6	LDCF	UNDP	Climate Resilience in the Nakambe Basin	Burkina Faso	WS, Drylands
10792	GEF-7	GET, LDCF	IFAD	Adaptive Agriculture and Rangeland Rehabilitation Project (A2R2) - Somalia	Somalia	WS, Drylands
10083	GEF-7	GET, LDCF	WB	Sustainable Natural Resources Management Project -AF	Sudan	WS, CBA, Drylands
4908	GEF-5	GET, LDCF	WB	GGW: Agriculture Production Support Project (with Sustainable Land and Water Management)	Chad	WS, Drylands, LFC
5343	GEF-5	SCCF	UNDP	Scaling Up Community Resilience to Climate Variability and Climate Change in Northern Namibia, with a Special Focus on Women and Children	Namibia	WS, Drylands, LFC
5855	GEF-5	LDCF	UNDP	Flood Hazard and Climate Risk Management to Secure Lives and Assets in Mali	Mali	WS, Drylands, CIEWS

Source: GEF Portal.

Note: **Fund:** GET = GEF Trust Fund; LDCF = Least Developed Countries Fund; SCCF = Special Climate Change Fund. **GEF Agency:** ADB = Asian Development Bank; AfDB = African Development Bank; CAF = Development Bank of Latin America; CI = Conservation International; EBRD = European Bank for Reconstruction and Development; FAO = Food and Agriculture Organization of the United Nations; IDB = Inter-American Development Bank; IFAD = International Fund for Agricultural Development; UNDP = United Nations Development Programme; UNEP = United Nations Environmental Programme; UNIDO = United Nations Industrial Development Organization; WB = World Bank. **Evaluation:** The AER 2024 portfolio of LDCF/SCCF projects were covered by five recent GEF IEO evaluations: CBA = Evaluation of Community-Based Approaches at the GEF; CIEWS = Evaluation of GEF Support to Climate Information and Early Warning Systems; Drylands = Strategic Country Cluster Evaluation: GEF Support to Drylands Countries; LFC = Learning from Challenges in GEF Projects; WS = Evaluation of the GEF's Approach and Interventions in Water Security.

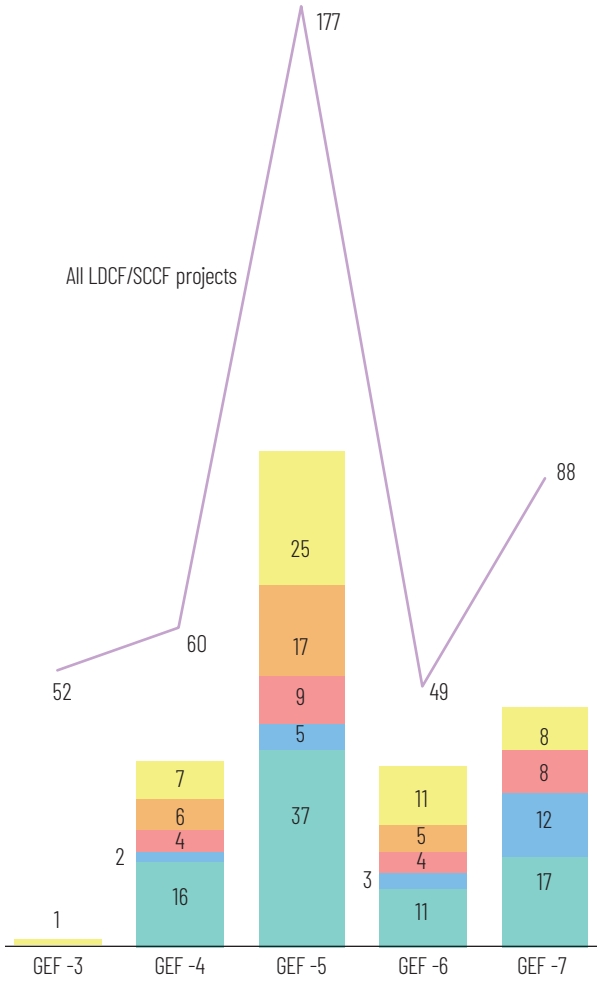
Annex B

AER 2024 portfolio description

The number of approved projects funded by the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF)—including multitrust fund projects (MTF)—has fluctuated across the GEF replenishment periods (figure A1.1). The largest number of projects, 177, was approved during GEF-5. During GEF-4 and GEF-7, there was a moderate level of approvals, with 60 and 88 projects, respectively. The number of projects approved in GEF-6 was slightly lower at 49, with 52 projects approved in GEF-3.

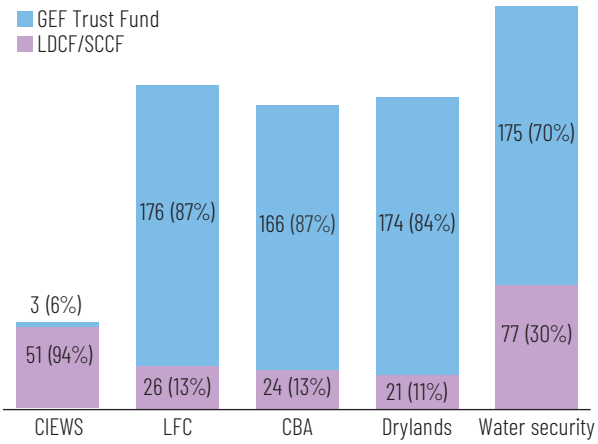
The representation of LDCF- and SCCF-supported projects varies across the five evaluations reviewed due to the nature and focus of each evaluation (figure A1.2). In three of the five evaluations, the LDCF/SCCF portfolio constitutes between 11 and 13 percent of the total number of projects reviewed. The remaining two evaluations have a larger proportion of LDCF/SCCF projects. In the case of the water security evaluation (GEF IEO 2024b), the higher representation of LDCF/SCCF projects is explained by the context in which these projects were implemented, as well as by their approach, which often had an adaptation focus related to water projects. For the climate information and early warning systems evaluation (GEF IEO 2024c) 78 percent of the projects were funded by the LDCF. Climate information and early warning systems are integral to national adaptation plans and national adaptation programs of action, providing the necessary data and forecasts to identify priority areas for adaptation actions, assess risks, and design effective adaptation strategies.

Figure A1.1 Number of LDCF/SCCF projects by GEF replenishment period: total and in the AER 2024 portfolio



Note: AER 2024 portfolio projects are shown in terms of the evaluations covered by this review: ☐ = Evaluation of GEF Support to Climate Information and Early Warning Systems; ☐ = Learning from Challenges in GEF Projects; ☐ = Evaluation of Community-Based Approaches at the GEF; ☐ = Strategic Country Cluster Evaluation: GEF Support to Drylands Countries; ☐ = Evaluation of the GEF's Approach and Interventions in Water Security.

Figure A1.2 Number of projects by funding source per evaluation reviewed



Source: GEF Portal.

Note: CBA = community-based approaches; LFC = learning from challenges; CIEWS = climate information and early warning systems.

Half of the LDCF/SCCF/MTF projects—85 of 170—were implemented by the United Nations Development Programme (table A1.1). Twenty were implemented by the World Bank, and 15 by the Food and Agriculture Organization of the United Nations.

Table A1.1 Project distribution by lead GEF Agency

Agency	No. of projects	% of projects
United Nations Development Programme	85	50.0
World Bank	20	11.8
Food and Agriculture Organization of the United Nations	15	8.8
African Development Bank	14	8.2
United Nations Environment Programme	13	7.6
International Fund for Agricultural Development	10	5.9
Asian Development Bank	4	2.4
United Nations Industrial Development Organization	3	1.8
Development Bank of Latin America	2	1.2
European Bank for Reconstruction and Development	2	1.2
Conservation International	1	0.6
Inter-American Development Bank	1	0.6
Total	170	100.0

Source: GEF Portal.

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