

## The IFAD-GEF Advantage III

## An integrated approach for food systems, climate and nature



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Case studies and "snapshots" present selected aspects of projects based on available documentation; data may change as a project moves through the project cycle.
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## Contents

Acknow	ledgements	4
Abbrevi	ations and acronyms	5
What IF	AD can offer the GEF	6
Overvie	w	8
IFAD	and GEF: more vitally important than ever	8
IFAD co	mparative advantages	12
IFAD	IFAD investments in healthy food systems	
	stments in biodiversity: IFAD's role in ensuring regenerative and re-based solutions	14
Clim	ate change adaptation and mitigation investments	16
Reve	Reversing land degradation and combating desertification	
	cus on the custodians of nature: IFAD's work with Indigenous Peoples and communities	19
Inves	Investing in gender equality and women's empowerment	
Targeting youth and harnessing a dividend		
Build	ling resilience: a focus on countries with fragile situations	26
Sma	l island developing states	28
Priva	te sector engagement and innovative financing	30
IFAD GE	F project case studies	32
	bodia: connecting local companies and farmers for renewable energy nology benefits	33
Keny	a: Africa's first water fund	36
Mexi	co: promoting biodiversity benefits	39
Morocco: diversification and Rio Convention dividends		42
Nige	r: nature-based solutions greening the Sahel	45
Looking	ahead: expanding the IFAD-GEF partnership	48
List c	of Figures and Boxes	
Figure 1.	IFAD-GEF active portfolio financing by focal area	10
Figure 2.	Common challenges in the project areas	32
Box 1.	Cambodian small and medium-sized RET enterprise snapshots	35
Box 2.	Esther's avocado superheroes save water in Kenya	38
Box 3.	The IFAD-GEF-GCF connection in Mexico	41
Box 4.	Women's livelihoods diversification in the mountains of Morocco	44
Box 5.	Countering land degradation in Niger with nature-based solutions	47

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## Abbreviations and acronyms

**ASAP** IFAD's Adaptation for Smallholder Agriculture Programme Food and Agriculture Organization of the United Nations FAO **GCF** Green Climate Fund **GEF** Global Environment Facility GGWGreat Green Wall GHG greenhouse gas IFAD International Fund for Agricultural Development RET renewable energy technology RFS GEF Resilient Food Systems Integrated Approaches Pilot Programmme (2017-2022) RPSF IFAD's Rural Poor Stimulus Facility SDG Sustainable Development Goal SIDS small island developing states SLM sustainable land management

## What IFAD can offer the GEF

United Nations organizations



International financial institution

77
Member States

96 countries

with active portfolios

US\$8.4

active portfolio

US\$328

in GEF grants, which leveraged

US\$1.9

in co-financing for the IFAD-GEF partnership to date



Focus on agriculture and targeting of the most vulnerable and a deep reach into remote areas



Long-term relationships with governments and create pathways for scaling up



Systematic measurement of results and impact – focus on sustainable benefits for countries



Leveraging of finance to ensure a multiplied return on the ground

 $Source: https://unfccc.int/sites/default/files/resource/Climate\%20 Finance\%20 Workshop\_IFAD\%20 presentation\_April\%202023\_final.pdf$ 

"Over the past 70 years the global food system has become less efficient at its primary objective – delivering nutritious food sustainably. A focus on producing high-calorie grains has pushed up yields and cut prices of staple foods. The cost? Food waste, malnutrition and obesity, and environmental degradation."

– IFAD, Rural Development Report 2021. Transforming food systems for rural prosperity (Rome: IFAD, 2021).

"Transforming the way we produce, distribute and consume food so that our actions are truly inclusive and sustainable requires a paradigm shift. We need to work in partnership, assemble and leverage finance and investments, and strengthen policies, knowledge and capacities."

- IFAD President, Alvaro Lario



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#### Overview

#### IFAD and GEF: more vitally important than ever

Human-induced degradation now affects a third of agricultural land.¹ Biodiversity is declining at an unprecedented rate, with around 1 million animal and plant species now threatened with extinction – more than ever before in human history.² In 2015, the global adoption of the Sustainable Development Goals (SDGs) marked a collective commitment towards positive transformation. Yet, as we approach the midpoint towards the 2030 deadline, the ominous shadow of human-induced climate change looms large. This crisis is amplifying adversities worldwide, hitting vulnerable communities the hardest. This emphasizes the intrinsic link between the SDGs and climate action. Fulfilling the SDGs necessitates addressing climate change equitably, prioritizing those least responsible yet most affected.³

Transforming the way we live towards a "healthy planet and healthy people" as envisioned by the Global Environment Facility (GEF) has never been more important.<sup>4</sup> As the financial mechanism for multilateral environmental agreements on biodiversity, climate change and land degradation, the GEF catalyses global environmental benefits through integrated, large-scale initiatives. The International Fund for Agricultural Development (IFAD), the sole United Nations specialized agency and financial institution exclusively dedicated to reducing poverty and food insecurity in rural areas, has a mandate inextricably aligned with the GEF.

<sup>1</sup> FAO, The state of the world's land and water resources for food and agriculture – Systems at breaking point. Synthesis report 2021 (Rome: Food and Agriculture Organization of the United Nations, 2021).

<sup>2</sup> Secretariat of the Convention on Biological Diversity, Global Biodiversity Outlook 5 – Summary for Policy Makers (Montreal: Secretariat of the Convention on Biological Diversity, 2020).

<sup>3</sup> IPCC, Summary for Policymakers. In Climate Change 2023: Synthesis Report. A Report of the Intergovernmental Panel on Climate Change (Geneva: Intergovernmental Panel on Climate Change, 2023).

<sup>4</sup> GEF, GEF-8 Programming Directions (Washington, D.C.: Global Environment Facility, 2022).

Agriculture has a large carbon and ecological footprint – and therefore holds significant transformative potential. Small farms support agrobiodiversity, carbon storage and sustainable land management (SLM), which are crucial for a healthy planet and people.

Since 2001, the IFAD-GEF partnership has responded to global issues, and the current portfolio<sup>5</sup> totals more than US\$300 million across 35 worldwide projects and US\$1.9 billion in co-financing.<sup>6</sup> These projects have a range of national, regional and global scopes, integrating multiple focal areas (figure 1) through stakeholder collaboration. In 2022 and 2023, approvals surpassed US\$64 million in GEF grants, coupled with IFAD co-financing exceeding US\$347 million. Furthermore, projects worth around US\$100 million are currently in the design stage, with an additional "soft pipeline" nearing another US\$100 million.

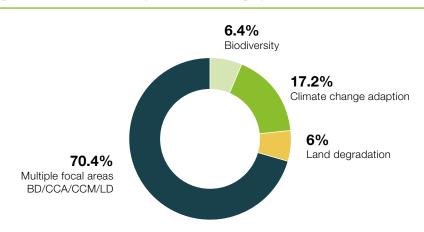


Figure 1. IFAD-GEF active portfolio financing by focal area

Note: BD: biodiversity; CCA: climate change adaptation; CCM: climate change mitigation; LD: land degradation.

**IFAD's comparative advantage:** IFAD values the GEF partnership for grant financing, sustainable practices and policy influence aiding climate and environment alignment. IFAD enhances the IFAD-GEF partnership with unique strengths aligned with GEF's vision of planetary well-being:

People-centred approach: IFAD's targeted poverty alleviation<sup>7</sup> in remote areas
uniquely equips it to help rural communities adapt to climate change and
environmental threats. Using strong safeguards, IFAD connects underserved
communities with sustainable development, amplifying their voice globally.
Initiatives such as the Farmers' Forum,<sup>8</sup> Rural Youth Alliances and Indigenous

As of May 2023, 4 projects have been endorsed, 11 projects are soon to start implementation, 8 projects are under implementation, 2 projects are completing, and 10 are closing.

<sup>6</sup> One global, three regional, four in Asia and the Pacific, eight in East and Southern Africa, four in Latin America and the Caribbean, seven in Near East, North Africa, Europe and Central Asia, and eight in West and Central Africa.

<sup>7</sup> IFAD's Poverty Targeting Policy was updated in 2022. See https://webapps.ifad.org/members/eb/137/docs/EB-2022-137-R-5. pdf?attach=1#:~:text=The%20Policy%20defines%20IFAD%27s%20target,those%20who%20are%20food%2Dinsecure.

<sup>8</sup> See https://www.ifad.org/en/farmers-forum.

Peoples' Forum<sup>9</sup> directly influence IFAD investments. IFAD also convenes stakeholders and promotes partnerships between them through multistakeholder platforms such as the multi-donor Platform for Agricultural Risk Management.<sup>10</sup>

- Building resilience: IFAD excels in bolstering smallholder resilience, aligning
  with Agenda 2030's holistic goals. Its investments tackle interconnected climate,
  environmental, food security and social challenges. Fragile contexts and small
  island developing states (SIDS) receive dedicated attention in IFAD's commitment.
- Scaling with innovation: From its GEF-6 Resilient Food Systems leadership to co-leading the GEF-8 Food Systems Integrated Program with the Food and Agriculture Organization of the United Nations (FAO), IFAD propels global agrifood transformation. Pioneering sustainable development bonds and mobilizing climate funds, IFAD blends innovative financing such as remittances and private sector involvement. IFAD, a capital markets pioneer, enters with a sustainable bond after an AA+ rating, raising US\$150 million in climate funds. Innovative financing includes remittances and crowdfunding. IFAD's Private Sector Financing spurs smallholder investment. Partnering with GEF, IFAD drives digital transformation for food systems, combining traditional knowledge and low-tech solutions. IFAD contributes to GEF's Adaptation Innovation Challenge.
- Evidence of impact: In 2022, IFAD projects impacted 78 million people across 100 countries. <sup>11</sup> During IFAD11 (2019-2021), 38 million people's resilience increased by over 20 per cent, surpassing the target. Ranked number one by the *Quality of Official Development Assistance report*, <sup>12</sup> IFAD aspires to reach 40 million people annually by 2030.

These advantages stem from robust internal systems, fortified by safeguards, rigorous impact assessment and strategic project design. IFAD's transformative focus spans environment, climate, gender, nutrition and youth. Detailed sections highlight IFAD's strengths and alignment with the GEF mandate, supported by project case studies from diverse regions.

<sup>9</sup> See https://www.ifad.org/en/indigenous-peoples-forum.

<sup>10</sup> See https://www.p4arm.org/.

<sup>11</sup> IFAD, Report on IFAD's Development Effectiveness 2022 (RIDE) (Rome: IFAD, 2022), https://www.ifad.org/en/ride-report/development-results.html.

<sup>12</sup> CGD, Quality of Official Development Assistance 2021 (Washington, D.C.: Center for Global Development, 2021), https://www.cgdev.org/publication/quality-official-development-assistance.

<sup>13</sup> IFAD's Social, Environmental and Climate Assessment Procedures (SECAP) are updated as needed, most recently in 2021. See https://www.ifad.org/en/secap.

<sup>4</sup> IFAD, Framework for implementing transformational approaches to mainstreaming themes (Rome: IFAD, 2019), https://www.ifad.org/documents/38711624/44045778/ECG+Integrated\_Framework.pdf/4de8bfdd-89b9-44b6-5d63-78a16bbf814e?t=1635257421980.

This third edition of the GEF-IFAD Advantage demonstrates the comparative advantage that the GEF-IFAD partnership has brought, and can bring in the future, in areas such as:

- Healthy food systems
- Biodiversity
- Climate change adaptation and mitigation
- Land degradation and desertification
- Indigenous Peoples as custodians of nature
- Gender equality and women's empowerment
- Youth engagement
- Building resilience in countries with fragile situations
- Small island developing states
- Private sector engagement and innovative financing.

## IFAD comparative advantages

#### IFAD investments in healthy food systems

IFAD's food systems focus holds vast promise for inclusion, food security, nutrition and climate action. Sustainable systems ensure nourishment and planetary health for future generations. As family farmers drive 80 per cent of global food value, their role is pivotal in any transformation for a healthier planet.<sup>15</sup>

IFAD's holistic support to rural small-scale **producers and their organizations** boosts food system sustainability. Renewed emphasis on nutrition aids "healthy people" and a "healthy planet". IFAD-GEF investments protect food's nutrition amid climate and biodiversity challenges, driving sustainable food systems. <sup>16</sup> IFAD backs Indigenous Peoples' food systems, offering guidance and collaborating with Rome agencies via the Coalition on Indigenous Peoples' Food Systems. <sup>17</sup>

IFAD plays a pivotal role in the United Nations Food Systems Summit's Coordination, co-leads the Investment Hub and the Coalition for Decent Work in Food Systems and advocates at Rio Convention gatherings. These actions drive global food system progress. Generating knowledge via investments, IFAD's Rural Development Report<sup>18</sup> guides and informs on food system transformation. Collaborating on *The State of Food Security and Nutrition in the World* report, IFAD joins United Nations efforts to end hunger and enhance nutrition.

In IFAD11 (2019-2021), IFAD's rigorous impact assessments show that IFAD investments improved food production for 62.4 million producers, surpassing the 47 million target, and increased the productive capacity of targeted households by 23 per cent on average.<sup>19</sup>

<sup>15</sup> S.K. Lowder, M.V. Sanchez and R. Bertini,, "Which farms feed the world and has farmland become more concentrated?", World Development 2021, 142(2): 105455, https://www.researchgate.net/publication/350524818\_Which\_farms\_feed\_the\_world\_and\_has\_farmland\_become\_more\_concentrated.

<sup>16</sup> IFAD's Nutrition Action Plan 2019-2025 sets out how IFAD will achieve its nutrition-related goals. See https://www.ifad.org/en/-/document/fad-action-plan-nutrition-2019-2025.

<sup>17</sup> IFAD, Sustainable and resilient Indigenous Peoples' Food Systems for improved nutrition (Rome: IFAD, 2022), https://www.ifad.org/en/web/knowledge/-/sustainable-and-resilient-indigenous-peoples-food-systems-for-improved-nutrition.

<sup>18</sup> IFAD, Rural Development Report 2021. Transforming Food Systems for Rural Prosperity (Rome: IFAD, 2021).

<sup>19</sup> IFAD, Report on IFAD's Development Effectiveness 2022 (RIDE) (Rome: IFAD, 2022), https://www.ifad.org/en/ride-report/development-results.html.



AFRICA IFAD led the GEF Resilient Food Systems Integrated Approaches Pilot Programme (RFS) (2017-2022), which operated in 12 countries in sub-Saharan Africa. It focused on transformational change within African food systems by supporting innovative and scalable activities on a broader scale. Within each participating country, GEF Implementing Agencies worked closely with national institutions to complement national efforts to address the drivers of environmental degradation and achieve food security for smallholder farmers. The World Agroforestry Centre has developed a Land Degradation Surveillance Framework (LDSF), and in Eswatini, for example, data from the LDSF are informing public decision support dashboards.

Through actions such as agroforestry, reforestation and SLM, the RFS avoided/sequestered over 21 million metric tons of greenhouse gases (GHGs). It also included a strong focus on agrobiodiversity to build resilience in agricultural systems. The RFS exceeded its target of bringing 56,900 hectares of terrestrial protected areas under improved management effectiveness (GEF-7 core indicator 1.2). FAO and Bioversity International supported countries in assessing agrobiodiversity using participatory techniques developed as part of the Diversity Assessment Tool for Agrobiodiversity and Resilience.

RFS country projects engaged over 3.6 million beneficiaries and more than 1.5 million women. It incorporated the Women's Empowerment in Agriculture Index to measure qualitative change in women's and men's lives, and strategies included improving land tenure security, income generation and SLM training, increasing access to finance, supporting women's leadership, workload reduction and collaboration with traditional leaders to promote women's meaningful participation and equal benefits. GEF ID: 9070.

Building on this experience, IFAD and FAO will jointly lead the GEF Food Systems Integrated Programme, which is set to channel an estimated US\$230 million, to be complemented by additional co-financing, to support countries to transform their agrifood systems to be more sustainable and resilient. It will aim to catalyse national and global shifts towards sustainable climate- and nature-positive production systems and value chains related to staple crops, commodities, livestock and aquaculture.

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## Investments in biodiversity: IFAD's role in ensuring regenerative and nature-based solutions

Food systems rely on biodiversity and ecosystem services vital for farming. Declining biodiversity endangers small-scale farmers dependent on healthy ecosystems for nourishing crops. A transformation in food production is imperative to meet global demand sustainably. FAD's focus groups, including small-scale farmers, Indigenous Peoples and local communities, maintain highly complex, biodiverse production systems and natural habitats at the territorial, field, landscape and watershed levels. Small farms are more likely to incorporate, grow and sustain agro-biodiverse systems while producing food. 22

Enhancing biodiversity benefits, IFAD adopted its first dedicated **biodiversity strategy** and a core indicator to track progress.<sup>23,24</sup> Biodiversity conservation is now included in IFAD's updated **safeguard**, with detailed risk assessment and mitigation guidance.<sup>25</sup> IFAD has long embraced **nature-based solutions**,<sup>26</sup> pledging 30 per cent of its climate finance for small-scale agriculture's nature-based solutions by 2030.<sup>27</sup> Initiatives such as the Agrobiodiversity Innovation Challenge<sup>28</sup> and partnerships such as the United Nations Decade for Restoration and the Partnership of Biodiversity and Finance are crucial collaborations for delivering impact.

Over 70 per cent of IFAD projects have components or activities linked to biodiversity, around 48 per cent enhancing diversity through integrated farming systems,<sup>29</sup> and 46,000 groups supported for resource management and climate resilience.

<sup>20</sup> Secretariat of the Convention on Biological Diversity, Global Biodiversity Outlook 5 – Summary for Policy Makers (Montreal: Secretariat of the Convention on Biological Diversity, 2020).

<sup>21</sup> Miguel A. Altieri, Clara I. Nicholls and Rene Montalba, "Technological Approaches to Sustainable Agriculture at a Crossroads: An Agroecological Perspective", Sustainability 2017, 9(3), 349, https://doi.org/10.3390/su9030349.

Vincent Ricciardi, Zia Mehrabi, Hannah Wittman and Dana James, "Higher yields and more biodiversity on smaller farms", Nature Sustainability 2021, 4(7): 1-7.

<sup>23</sup> IFAD, IFAD Strategy on Biodiversity 2022-2025 (Rome: IFAD, 2022), https://www.ifad.org/en/-/biodiversity-strategy.

<sup>24 &</sup>quot;Biodiversity improvements at ecosystem-level", which measure improvements via two sub-indicators: (i) area of intact biodiversity in hectares (biodiversity intactness); and (ii) average natural capital in US dollars/ha (ecosystem service flows).

<sup>25</sup> IFAD, Social, Environmental and Climate Assessment Procedures, 2021 edition, vol. 2 (Rome: IFAD, 2022), https://www.ifad.org/en/secap

<sup>26</sup> The International Union for Conservation of Nature (IUCN) has defined nature-based solutions 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". Source: IUCN, Global Standard for Nature-based Solutions. A userfinently framework for the verification, design and scaling up of NbS, 1st edition (Gland, Switzerland: International Union for Conservation of Nature, 2020), https://portals.iucn.org/library/sites/library/files/documents/2020-020-En.pdf.

<sup>27</sup> For more on IFAD's work on nature-based solutions, see IFAD, Nature-based Solutions. ASAP Technical Series (Rome: IFAD, 2021), https://www.ifad.org/en/web/knowledge/-/asap-technical-series-nature-based-solutions.

<sup>28</sup> See https://www.eatgrowsave.org/agrobiodiversity-innovation-challenge.

<sup>29</sup> Identified in an IFAD agroecology stocktake of projects in 2023.



Brazil The Rural Sustainable Development Project in the Semi-arid Region of Bahia (2014-2022) enhanced local agrobiodiversity through the Creole Seed Programme. With financing of about US\$2 million, the programme operated in 30 rural territories of Bahia and was implemented by multiple partners. The project also built agrobiodiversity capacity of rural youth through a network of agricultural family schools and features as a best practice in a CBD report. So Since the 1980s, IFAD's investments in Brazil have focused on the semi-arid north-eastern region of the country, known as the sertão, and where the GEF-supported Sustainable Land Management in the Semi-Arid Sertão project established agroecological consortiums to certify organic groups, which proved to be popular and effective. Thanks to the restoration activities, more than 1,000 hectares of the Caatinga biome have been restored. Ninety-three per cent of project beneficiaries report the adoption of a new technology that has had a positive impact on ecosystem restoration, such as production of natural pesticides to combat pests and diseases, use of manure and biofertilizers, recovery and preservation of natural forest or the conservation of soil or water.

Indonesia The GEF-financed Integrated Management of Peatland Landscapes in Indonesia (IMPLI) (2020-2026) aims to conserve biodiversity, reduce GHG emissions and improve rural livelihoods in selected peatland areas. Indonesia has approximately 25 million hectares of peatlands, which provide unique ecosystem services and a source of livelihoods for rural people. They store an estimated 46 gigatons of carbon, equivalent to approximately 8-14 per cent of global soil carbon. Despite the local and global importance of these ecosystems, they face growing threats, including from logging and agricultural conversion by smallholder farmers and large private sector plantations. IMPLI has the potential to achieve a carbon balance of more than -72 million tons through restoration activities. The project builds on long-standing IFAD-GEF collaboration in the country. The IFAD-GEF success story will be scaled up in Strengthened Systems for Community-based Conservation of Forests and Peatland Landscapes in Indonesia (CoPLI), which will focus on strengthening the institutional framework and conservation of peatland ecosystems driven by Indigenous Peoples and local communities. Like the IMPLI, private sector engagement is a critical element.<sup>31</sup> IMPLI GEF ID: 9239. COPLI GEF ID: 10731.

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<sup>30</sup> CBD, Best Practices in Gender and Biodiversity. Pathways for multiple benefits (Montreal: Secretariat of the Convention on Biological Diversity, 2022), https://www.cbd.int/gender/publications/CBD-Best-practices-Gender-Biodiversity-en.pdf.

<sup>31</sup> For more details, see GEF, "Working together to conserve the irreplaceable peat forests of Borneo", Global Environment Facility, 6 April 2022, https://www.thegef.org/newsroom/feature-stories/working-together-conserve-irreplaceable-peat-forests-borneo.

#### Climate change adaptation and mitigation investments

Rural smallholders, whose livelihoods depend heavily on agriculture, directly experience the initial impacts of climate change. Regrettably, they lack the resources and capabilities required for effective adaptation or investment in climate-resilient practices. This hinders their efforts to decrease the carbon footprint of agriculture and make meaningful progress towards achieving net-zero GHG emissions and climate-resilient development. According to the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6),<sup>32</sup> the agriculture, forestry and other land use (AFOLU) sector contributes about 22 per cent of total global anthropogenic GHG emissions.<sup>33</sup> Smallholders in developing nations produce around 5 per cent of global GHG emissions, equivalent to 47 per cent of those emitted by agriculture.<sup>34</sup> Farms, however, can also serve as carbon sinks by capturing and storing carbon in soil and vegetation, facilitated by practices such as afforestation and agroforestry. Grassland rehabilitation, pasture restoration and improved fodder crop management also have huge carbon sequestration potential.

IFAD mobilizes, assembles and delivers climate finance that reaches smallholders. Only 1.7 per cent of climate finance – a tiny fraction of what is needed – went to small-scale farmers in developing countries in 2017 and 2018, according to an IFAD-supported report.<sup>35</sup> Although the amount of climate finance is increasing overall, the share going to agriculture is decreasing.<sup>36</sup> IFAD is also increasingly able to mobilize finance: supplementary funds from climate and environment partners, for example, jumped from US\$39.5 million in 2004 to US\$224.9 million in 2021.

IFAD's recently upgraded Green Climate Fund (GCF) accreditation is another promising step in this direction: IFAD can now submit proposals for over US\$250 million to the GCF (including co-financing). IFAD is recognized as an early mover in designing climate finance for adaptation, as well as for its focus on the most vulnerable people.<sup>37</sup> IFAD is also part of the Finance in Common global network of public development banks, which aims to align financial flows on the 2030 Agenda and Paris Agreement for Climate Change.<sup>38</sup> IFAD exceeded its IFAD11 target for climate finance and is on track for 40 per cent of its portfolio to be comprised of climate finance by 2024.<sup>39</sup> In 2021, over 90 per cent of projects were rated as moderately satisfactory or above for their contribution to adaptation to climate change. IFAD also developed an **Adaptation Framework**,<sup>40</sup> a menu of adaptation options for small-scale agriculture that can be used in project design.

<sup>32</sup> IPCC, Climate Change 2022: 2: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the IPCC Sixth Assessment Report (Geneva: Intergovernmental Panel on Climate Change, 2022).

<sup>33</sup> IPCC, Climate Change and Land. Summary for Policymakers (Geneva: Intergovernmental Panel on Climate Change, 2020).

<sup>34</sup> For a rough estimate of the proportion of global emissions from smallholder agriculture, see Table, 2017: https://www.tabledebates.org/research-library/rough-estimate-proportion-global-emissions-smallholder-agriculture.

<sup>35</sup> Climate Policy Initiative, Examining the Climate Finance Gap for Small-Scale Agriculture (Rome: IFAD and Climate Policy Initiative, 2020), https://www.ifad.org/en/web/knowledge/publication/asset/42157635.

<sup>36</sup> FAO, Climate finance in the agriculture and land use sector – global and regional trends between 2000 and 2018 (Rome: Food and Agriculture Organization of the United Nations, 2021), https://www.fao.org/3/cb6056en/cb6056en.pdf.

<sup>37</sup> MOPAN, Lessons in Multilateral Effectiveness. Pulling Together: The Multilateral Response to Climate Change (Paris: Multilateral Organisation Performance Assessment Network, 2021).

<sup>38</sup> See https://financeincommon.org

<sup>39</sup> IFAD uses the multilateral development bank methodologies for tracking climate change adaptation and mitigation finance.

<sup>40</sup> See https://www.ifad.org/en/web/knowledge/-/publication/adaptation-framework-tool.

IFAD has also sharpened its focus on mitigation actions. The Paris Alignment Roadmap outlines IFAD's support for nations' climate plans through low-emission, climate-resilient paths for SDG achievement. A roadmap study suggests that IFAD's portfolio is overall a carbon sink, potentially mitigating 20 million metric tons of GHGs.<sup>41</sup> The IFAD12 target aims at 96 million tons of GHG avoidance or sequestration. Future projects will analyse carbon balance at design. A new initiative aids small-scale farmers in curbing methane emissions, and IFAD is a partner in the Global Methane Pledge initiative.



Global IFAD's flagship Adaptation for Smallholder Agriculture Programme (ASAP) was launched in 2012 to make climate finance work for small-scale farmers. The first phase has financed 44 projects in 41 countries, and supported 6.8 million rural people to increase their resilience to climate change, already exceeding its target. It is set to mitigate 50 million tons of GHG emissions over 20 years. ASAP has played a major role in scaling up successful multiple-benefit and no-regrets approaches to climate change adaptation throughout IFAD's entire portfolio, including in GEF-supported projects. The first phase is on track to achieve its target of 50 per cent female beneficiaries, with all projects integrating gender dimensions and benefiting women in actions aimed at achieving ASAP outcomes. All three strategic objectives of IFAD's gender equality policy are being supported, especially women's economic empowerment and equal voice. The Enhanced Adaptation for Smallholders Adaptation Programme (ASAP+) was launched in 2020 and aims to increase the resilience of 10 million people while avoiding/sequestering over 100 million tons of GHGs.

**Nicaragua** In the Adapting to Markets and Climate Change Project (NICADAPTA) (2013-2020) the planting of shade trees (fruit, timber, musaceous – bananas and plantains) in diversified cropland improved soil health and groundwater retention and increased the level of carbon sequestered per hectare by setting up a multi-layered agroforestry system. Uptake by farmers was high, and cropland restoration activities resulted in a reduction of 118,300 tons of GHGs over a 20-year period while also enhancing productivity.

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<sup>41</sup> IFAD, Paris Alignment – Greenhouse Gas Accounting Analysis for IFAD's investment portfolio in the AFOLU sector (Rome: IFAD, 2022), https://www.ifad.org/en/web/knowledge/-/paris-alignment-greenhouse-gas-accounting-analysis-for-ifad-investment-portfolio-in-the-afolu-sector.

<sup>42</sup> See the Egypt and Niger case studies for examples.

<sup>43</sup> IFAD, Gender and Climate Change, ASAP Technical Series (Rome: IFAD, 2022), https://www.ifad.org/en/web/knowledge/-/asap-technical-series-gender-and-climate-change.

#### Reversing land degradation and combating desertification

Agriculture is the main driver of land degradation, so changing the way food is grown also presents an unmissable opportunity to restore the planet and achieve land degradation neutrality (LDN).<sup>44</sup> Land degradation makes communities more vulnerable to disease and disasters, particularly in the drylands.<sup>45</sup> For this reason, nations have committed to restoring 1 billion hectares of degraded land by 2030<sup>46</sup> and to setting voluntary LDN targets.

From inception, IFAD aids smallholders in combating land degradation, a vital aspect of the IFAD-GEF partnership bolstered by multi-benefit climate investments such as ASAP. A recent stocktake revealed that nearly a third of IFAD projects support rangeland and forest rehabilitation. IFAD emphasizes people-centric methods such as farmer-managed natural regeneration, resource mapping and community-based management. IFAD investigates smallholder motivations in implementing SLM. For instance, IFAD and the World Overview of Conservation Approaches and Technologies assessed smallholder land practices in Cambodia, Lao People's Democratic Republic and Uganda (2018-2020), especially those adopted by women and youth, finding a focus on food and income enhancement rather than solely soil conservation.<sup>47</sup>

Improving **tenure security** through SLM accelerates efforts to address desertification, land degradation and drought, as rural people are motivated to invest in longer-term measures. <sup>48</sup> IFAD is currently supporting an estimated 45 million poor rural people in 60 countries in tenure-related interventions. Between 2016 and 2020 alone, IFAD supported almost 150 projects with tenure security measures. <sup>49</sup> Since 2000, IFAD has invested more than US\$4 billion in programmes to combat land degradation and desertification and promote SLM, and US\$130 million is being mobilized by IFAD in support of the Abidjan Legacy Programme, launched at the United Nations Convention to Combat Desertification (UNCCD) 15th Conference of the Parties (COP15), in support of environmentally sustainable food value chains. This will be supported by a GEF knowledge management project (GEF ID: 11000).

<sup>44</sup> UNCCD, Food System Resilience and Land Restoration. UNCCD Global Land Outlook Working Paper (Bonn: United Nations Convention to Combat Desertification, 2021).

<sup>45</sup> UNCCD, Summary for Decision Makers. In Global Land Outlook, 2nd edition (Bonn: United Nations Convention to Combat Desertification, 2022).

<sup>46</sup> At the UNCCD's 15th session of the Conference of the Parties (COP 15), 2022.

<sup>47</sup> IFAD, Supporting Extension Services to Scale Up Sustainable Land Management. The potential of WOCAT's tools and methods (Rome: IFAD, 2023), https://www.ifad.org/en/web/knowledge/-/supporting-extension-services-to-scale-up-sustainable-land-management-the-potential-of-wocat-s-tools-and-methods.

<sup>48</sup> FAO and UNCCD, Technical Guide on the Integration of the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security into the Implementation of the United Nations Convention to Combat Desertification and Land Degradation Neutrality (Rome: Food and Agriculture Organization of the United Nations and Bonn: United Nations Convention to Combat Desertification, 2022).

<sup>49</sup> See IFAD, The Land Tenure Security Advantage: A catalytic asset for sustainable and inclusive rural transformation (Rome: IFAD, 2020), https://www.ifad.org/en/web/knowledge/-/publication/the-land-tenure-security-advantage-a-catalytic-asset-for-sustainable-and-inclusive-rural-transformation.



Africa Building on years of experience in "re-greening the Sahel", IFAD supports the Great Green Wall (GGW) initiative<sup>50</sup> through its own investments amounting to US\$1.4 billion, as well as through multiple regional programmes totalling about US\$480 million in collaboration with partners such as the African Development Bank, African Risk Capacity, GCF, FAO, UNCCD and the World Food Programme. Furthermore, IFAD is set to lead the GCF-supported GGW regional support programme that aims to restore 100 million hectares of degraded land, mitigate 250 million tons of carbon and create 10 million green jobs by creating an 8,000-kilometre green barrier stretching across the entire width of the continent. IFAD is also developing a complementary regional support project with the GEF to improve access to best practices, foster innovation and digital transformation and facilitate cross-learning across GGW countries for enhanced resilience to climate change impacts, which will be implemented together with the GCF programme. GEF ID: 11000.

**Jordan** The Mainstreaming Sustainable Land and Water Management Practices (MENARID) and Mainstreaming Biodiversity in Silvo-Pastoral and Rangeland Landscapes in the Pockets of Poverty of Jordan projects in the southern highlands have helped tackle dwindling water resources. SLM has benefited 134,000 people, restored 15,000 hectares of degraded ecosystems and reduced soil erosion. GEF ID: 3932.

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## A focus on the custodians of nature: IFAD's work with Indigenous Peoples and local communities

Indigenous Peoples face discrimination, exclusion and cultural disintegration. In rural settings, they are more than twice as likely to endure extreme poverty, encountering heightened food insecurity and malnutrition.<sup>51</sup> Land and resource rights are often denied, amplifying vulnerability to climate change, environmental degradation and biodiversity loss. However, Indigenous Peoples also contribute significantly to

<sup>50</sup> GGW countries: Burkina Faso, Chad, Djibouti, Eritrea, Ethiopia, Mali, Mauritania, Niger, Nigeria, Senegal and Sudan.

<sup>51</sup> ILO, Implementing the ILO Indigenous and Tribal Peoples Convention No. 169: Towards an inclusive, sustainable and just future (Geneva: International Labour Organization, 2020).

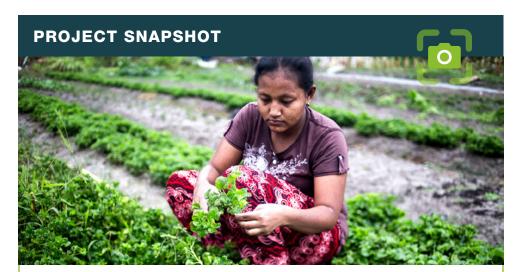
conservation and climate action. According to the IPCC, agricultural practices intertwined with indigenous knowledge have the potential to tackle climate, food and biodiversity challenges.<sup>52</sup>

IFAD has long championed Indigenous Peoples' rights, introducing a dedicated policy in 2009, recently refreshed to align with the IFAD-GEF partnership. Environmental concerns and climate change form a core principle, as IFAD supports enhancing ecosystem resilience and adaptation measures. IFAD commits to channel environmental and climate finance to Indigenous Peoples, involving them in policy development rooted in ancestral knowledge and practices.<sup>53</sup> Dialogue with Indigenous Peoples is intrinsic to IFAD's approach. The Indigenous Peoples' Forum, established in 2011, aids participation in strategic development, project design, implementation, policy dialogue and advocacy.

IFAD has invested over US\$20 billion, including co-financing, in projects targeting Indigenous Peoples. In 2022, over 70 per cent of approved projects targeted Indigenous Peoples, who constitute a significant proportion of the members of IFAD-supported rural producers in producers' organizations. IFAD has invested in over 20 knowledge products to steer its engagement, underpinned by extensive experience.

<sup>2</sup> IPCC, Summary for Policymakers. In Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems (Geneva: Intergovernmental Panel on Climate Change, 2019).

<sup>53</sup> IFAD, IFAD Policy on Engagement with Indigenous Peoples: an update (Rome: IFAD, 2022), https://www.ifad.org/en/-/document/ifad-policy-on-engagement-with-indigenous-peoples.



Global Since 2006, IFAD has implemented five cycles of the demand-driven Indigenous Peoples' Assistance Facility (IPAF), an innovative financing instrument that Indigenous Peoples' communities can use to find solutions to the challenges they face. The underlying principle is that of Indigenous Peoples' self-determined development within the framework of the United Nations Declaration on the Rights of Indigenous Peoples (2007). More than US\$5 million has been channelled to Indigenous Peoples through IFAD's IPAF. The sixth cycle (2022-2026) is supporting Indigenous Peoples in enhancing the resilience of the ecosystems in which they live and in proposing innovative solutions for advancing conservation and sustainable management of biodiversity for adaptation and resilience to climate change.

Belize During the design phase of the GCF-supported Resilient Rural Belize Programme (Be-resilient project) (2018-2026), an Indigenous Peoples Planning Framework was created, taking into consideration how free, prior and informed consent would be sought during implementation. The plans follow a series of consultations in which Indigenous Peoples' communities detail actions related to the use of communal lands and resources. For instance, communities discuss elements of the construction of facilities on communal lands, including: specific location; plans for regulating the use of the site and the facility during and after the life of the project; and measures to prevent or mitigate any potential adverse effects. The plans also identify opportunities and actions to improve the livelihoods of the Indigenous Peoples' communities and include measures to support Indigenous Peoples' engagement in the conservation and sustainable management of the natural resources on which they depend. The programme aims to build overall resilience of 5,500 households to climate change by adopting new or improved climate-resilient practices, increasing and diversifying their agricultural production and facilitating their access to commercial market chains.

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#### Investing in gender equality and women's empowerment

Women are primary actors in agricultural production and possess unique knowledge of biodiversity and SLM, but they often face unequal access to natural resources, such as land and water, and to productive assets. They also have less voice in decisions in their homes and communities and at the national level. This increases their vulnerability to climate change and environmental risks. All these challenges are further exacerbated for young and indigenous rural women, and those with disabilities.

IFAD leads in advancing gender equality within rural communities. Guided by its Policy on Gender Equality and Women's Empowerment, IFAD's investments aim to address entrenched gender inequalities at the root, fostering sustainable change. Gender dimensions extend across IFAD's strategies for the environment, climate change and biodiversity, alongside revised targeting policies and safeguards. This aligns with the GEF, Rio Conventions and other agreements. IFAD's gender marker and robust evaluation encompass qualitative aspects, offering a holistic project performance perspective. IFAD11 highlighted that women in supported households wielded 27 per cent more decision-making power than those in other households.

IFAD is committed to increasing **gender-transformative approaches** (GTAs), with a target of 35 per cent of new projects designed to transform gender norms and relations. IFAD also works with FAO and the World Food Programme to share and scale. FAD is one of the leading agencies pioneering **innovative behaviour change methodologies at the household level**. This GTA seeks to change persistent gender inequalities at the level of the household, a fundamental rural institution. It mobilizes all household members to achieve their aspirations. The results are transformational, and include greater agricultural productivity, fairer workload distribution and better nutrition. The approach is also used to improve climate resilience and environmental outcomes. IFAD also promotes GTAs to advance **women's land rights**, in partnership with the various Consultative Group on International Agricultural Research (CGIAR) organizations.

IFAD also **incentivizes good performance** in working towards gender equality through Gender Awards. Established in 2013, most awards include an emphasis on empowering women and girls in the face of climate change and environmental degradation, including the IFAD-GEF Poverty Reduction Project in Aftout South and Karakoro – Phase II in Mauritania.<sup>55</sup>

In 2022, some 70 per cent of those trained in income-generating activities and business management were women, and just over half of all those receiving services from IFAD-supported projects were women. Furthermore, almost a third of people whose ownership/user rights over natural resources were registered in national cadasters or equivalent were women.<sup>56</sup>

<sup>54</sup> Through the Joint Programme on Gender Transformative Approaches for Food Security and Nutrition, funded by the European Union. See https://www.fao.org/joint-programme-gender-transformative-approaches/overview/en.

<sup>55</sup> See GEF, Policy Development and Field Implementation: A two-way street, Global Environment Facility blog, 15 December 2017, https://www.thegef.org/newsroom/news/policy-development-and-field-implementation-two-way-street.

<sup>56</sup> IFAD, Report on IFAD's Development Effectiveness 2023 (Rome: IFAD, 2023), draft.



Global IFAD partners with the Bill & Melinda Gates Foundation in the Gender Transformative Mechanism in the context of Climate Adaptation (GTM), which supports IFAD's partner governments to increase investment in gender-transformative results at scale in rural areas. By 2030, the GTM aims to empower over 20 million rural people across 27 projects and 20 countries to achieve gender-transformative results in agriculture, strengthen climate resilience and improve rural people's well-being. In Ethiopia's Participatory Agriculture and Climate Transformation (PACT) programme, for example, the GTM will use participatory approaches and engage with men and boys to facilitate dialogue, trust and behaviour change at various levels.

**Egypt** The **Sustainable Agriculture Investments and Livelihoods Project (SAIL)** (2014-2024) is supported by both GEF and IFAD's ASAP in terms of climate finance. It seeks to expand opportunities for women and their gender roles in the window of opportunity presented by reclaiming new lands. Women comprise over half of total beneficiaries, and grants are helping women to start incomegenerating activities and diversify their incomes as a climate change adaptation measure, as well as to improve nutrition by purchasing small livestock.57 GEF ID: 6927.

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#### Targeting youth and harnessing a dividend

The growing global youth population presents challenges but also significant opportunities in rural development. Environmental degradation and climate change are making farming even harder for them, but without youth engagement in food systems, the future of food security is grim. However, with the right support, young people are also quick to take up new approaches and cleaner technologies and are interested in green agribusiness.<sup>58</sup> The International Labour Organization's *Global Employment Trends for Youth 2022* highlights the vast potential for green and blue

<sup>57</sup> See the case study in IFAD, Gender and Climate Change, ASAP Technical Series (IFAD: Rome, 2022), https://www.ifad.org/en/web/knowledge/-/asap-technical-series-gender-and-climate-change.

<sup>58</sup> For further analysis of the issues and of options to support rural youth, see IFAD, 2019 Rural Development Report. Creating opportunities for Rural Youth (IFAD: Rome, 2019), https://www.ifad.org/en/web/knowledge/-/publication/2019-rural-development-report.

economies to provide decent jobs for young people.<sup>59</sup> Now, more than ever, sustainable production practices, connectivity and technology uptake are urgently needed to engage rural youth.

IFAD harnesses the "youth dividend", bolstering rural support through an action plan and expertise. The IFAD Rural Youth Action Plan prioritizes climate-resilient technologies, aiming for 70 per cent youth-sensitive project designs by 2027.<sup>60</sup> There is now a mandatory outcome indicator to track youth employment, and the action plan has been backed up by practical tools and analysis.<sup>61</sup>

IFAD leads in **youth-centred rural transformation**. IFAD13 focuses on engaging rural youth in agriculture, envisioning rural areas as places where aspirations flourish, seizing green growth opportunities. IFAD involves youth, farmers' groups and indigenous communities in its replenishment cycle, enabling youth to shape strategy through an engagement plan. IFAD advocates for **decent work** to retain young talent in farming. Collaborating with CARE and the International Labour Organization, IFAD launched a coalition for equitable livelihoods, promoting labour rights and enhancing decent work opportunities in the agrifood sector.

Between 2019 and 2021 (IFAD11), over 5 million young people were reached with an investment of US\$108 million. Moreover, more than 95,000 young rural producers were engaged in knowledge-sharing between 2019 and 2022, and over 95,000 young farmers have benefited from the Agribusiness Capital Fund, an impact fund that prioritizes green and climate-smart projects. <sup>62</sup> In 2022, youth represented around a quarter of all those receiving services promoted or supported by projects, as well as those accessing financial services.

<sup>59</sup> See ILO, Global Employment Trends for Youth 2022: Investing in transforming futures for young people (Geneva: International Labour Organization, 2022), https://www.ilo.org/global/publications/books/WCMS\_853321/lang--en/index.htm.

<sup>60</sup> FAD, Rural Youth Action Plan (Rome: IFAD, 2019), https://www.ifad.org/en/-/document/ifad-action-plan-rural-youth.

<sup>61</sup> IFAD, Mainstreaming youth in IFAD operations: a practitioner's guide (Rome: IFAD, 2020), https://www.ifad.org/en/web/knowledge/-/publication/mainstreaming-youth-in-ifad-operations-a-practitioner-s-guide.

<sup>62</sup> See IFAD, Agri-Business Capital (ABC) Fund, https://www.ifad.org/en/abcfund.



Moldova The Inclusive Rural Economic and Climate Resilience Programme<sup>63</sup> (2013-2021) aims to increase incomes and strengthen the capacities of people in rural areas to adapt to climate change. Supported by the GEF, the project specifically targets youth, and its specially tailored financial services have made it possible for youth to start sustainable farming and apply conservation agriculture, even though they did not meet the lending criteria of the formal banking system. Young people also made up some 20 per cent of those receiving grants to apply conservation agriculture. The project also increased the climate resilience of more than 2,200 farmers by improving the soil conditions of their lands by introducing conservation agriculture and land restoration practices. GEF ID: 4366.

Chad The GEF-supported Project to Improve the Resilience of Agricultural Systems in Chad (2014-2021) contributed to the sustainable improvement of food security and income of rural households in a country set to suffer greatly from climate change, and where average temperatures are expected to increase significantly. Poor prospects in agriculture are driving young men away, leaving an increasing number of women heads of household behind, even more vulnerable than before. The project therefore targeted young people, including newly established young couples, and schools. Young families were priority recipients of support for sustainable income-generating activities to help diversify livelihoods as a climate change adaptation strategy as well as a pathway to better nutrition. The project contributed to bringing 17,551 hectares of land under improved land management practices (108 per cent of the target) and established over 2,250 more resilient small livestock systems. The successes of this project are being scaled up in the Strengthening Productivity and Resilience of Agropastoral Family Farms Project, which benefits from GCF financing. GEF ID: 5376.

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#### Building resilience: a focus on countries with fragile situations

A significant proportion of ongoing IFAD and many GEF investments are in countries with fragile situations.<sup>64</sup> Fragility is not restricted by national boundaries and often places stress on neighbouring countries, such as transboundary conflict, refugee flows, epidemic diseases and economic effects.

IFAD's strategy<sup>65</sup> is to tackle underlying drivers of fragility rather than provide humanitarian assistance. A special programme is helping countries to operationalize the strategy.<sup>66</sup>

In 2016, IFAD announced the Facility for Refugees, Migrants, Forced Displacement and Rural Stability (FARMS) to assist refugees, displaced people and their host communities in the rural areas of predominantly fragile contexts, initially in the Near East and North Africa region. And the RPSF and Crisis Response Initiative have been boosting resilience in the face of the COVID-19 pandemic and the war in the Ukraine, respectively.

In 2022, IFAD's engagement in countries with conflict-affected and fragile situations represented almost one third of IFAD's active portfolio, and around half of the RPSF countries supported to cope with COVID-19. Under IFAD's decentralization drive, nearly half of new and upgraded offices will be in countries with fragile situations, and close to 70 per cent in sub-Saharan Africa, to better address elements of fragility in project design.

<sup>64</sup> For IFAD, fragility is "a condition of high vulnerability to natural and man-made shocks, often associated with an elevated risk of violence and conflict. Weak governance structures along with low-capacity institutions are a common driver and consequence of fragile situations... [They are] characterized by protracted and/or periodic crises." Source: IFAD, IFAD strategy for engagement in countries with fragile situations (Rome: IFAD, 2016), https://webapps.ifad.org/members/eb/119/docs/EB-2016-119-R-4.pdf.

<sup>65</sup> IFAD, IFAD strategy for engagement in countries with fragile situations (Rome: IFAD, 2016), https://webapps.ifad.org/members/eb/119/docs/EB-2016-119-R-4.pdf.

<sup>66</sup> IFAD, Special Programme for Countries with Fragile Situations: Operationalizing IFAD's Fragility Strategy (Rome: IFAD, 2019), https://webapps.ifad.org/members/wgtf/TFWG8/docs/TFWG-2019-8-W-P-3-Rev-1.pdf.



Somalia Approved in 2023, the GEF-supported Adaptive Agriculture and Rangeland Rehabilitation Project (A2R2) aims to enhance the climate resilience of poor rural households in Somalia through sustainable natural resource management on multiple levels. The project will improve water resources and rangelands management, and promote eco-agriculture and climate-resilient livelihoods. Forest/habitat rehabilitation will also contribute to biodiversity outcomes. The project is part of an integrated national IFAD initiative called the Rural Livelihoods Resilience Programme (RLRP), an umbrella programme developed with the Government of Somalia, which aims to increase the participatory decision-making and productive capacities of small-scale producers and agropastoralists for sustainable, resilient and profitable agricultural livelihoods and food and nutrition security. The RLRP will also be financed by IFAD's ASAP+ and global Rural Resilience Programme (2RP) and the Global Agriculture and Food Security Programme (GAFSP). Youth groups and women will be targeted with finance for alternative income-generating activities in renewable energy for women, and youth are to make up 30 per cent of project beneficiaries. GEF ID: 10792.

**Sudan** The **Sustainable Natural Resources and Livelihoods Programme (SNRLP)**<sup>67</sup> (2019-2027) will benefit about 720,000 vulnerable smallholders, pastoralists and agropastoralists in nine states across three regions. The SNRLP will be implemented in Butana in the east, Sennar in the south-east and Kordofan in the west. It will give special attention to youth (30 per cent of participants) and women (50 per cent). This programme, supported by the GEF and the European Union, tackles unsustainable farming practices on land traditionally used by agropastoral communities. The new programme will help smallholder farmers manage natural resources to better farm their lands and improve their incomes. It will help agropastoralists gain access to better fodder and animal health services, and enable pastoralists to diversify their livelihoods through small enterprises. The programme will also introduce gas stoves to replace dependency on firewood, which will particularly benefit women. Training in better nutrition practices and promotion of rural youth involvement in crop, fodder and forestry development activities is also planned. GEF ID: 10350.

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#### Small island developing states

Small island developing states (SIDS) face distinct vulnerabilities due to their size, isolation, limited resources and exposure to climate risks. Underdeveloped value chains and imported foods contribute to malnutrition, while unemployment and migration persist. Many SIDS host vital ecosystems essential for their development, necessitating protection from unsustainable practices.

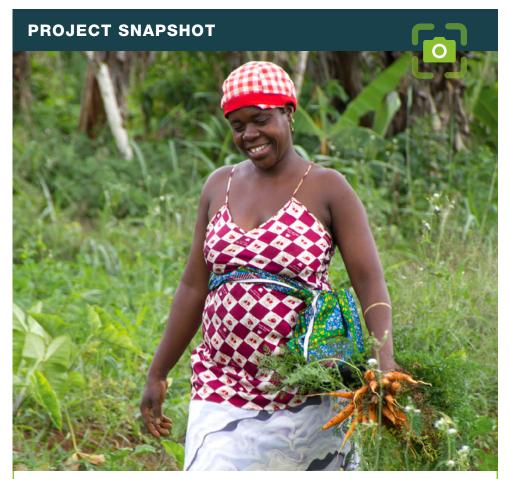
IFAD's **refreshed strategy** for SIDS, informed by experience and a learning review, aligns with the SAMOA Pathway. Strengthening resilience against climate challenges is a key goal.<sup>68,69</sup>

Balancing food security with environmental preservation is paramount. An IFAD-GEF project exemplifies this by restoring ecosystems in Comoros Islands through integrated ecosystem management. Innovation plays a central role, with strategies such as small-scale renewable energy, green bonds and diaspora remittance support post-COVID.

Since 1978, over US\$500 million has been invested in SIDS, and almost 80 projects in over 20 countries have been supported. This has benefited more than 5 million people. IFAD Member States include 38 SIDS, with a say in how IFAD engages with SIDS.

<sup>68</sup> IFAD, IFAD Strategy for Engagement in Small Island Developing States 2022-2027 (Rome: IFAD, 2022), https://www.ifad.org/en/-/ifad-strategy-for-engagement-in-small-island-developing-states-2022-2027?p\_l\_back\_url=%2Fen%2Fweb%2Fguest%2Fpolicies-and-strategies%3Fmode%3Dseesch%26page%3D4%26stest%3D7%26delta%3D5%26start%3D5.

<sup>69</sup> SIDS Accelerated Modalities of Action (SAMOA) is the key framework for sustainable development in SIDS, initiated by the United Nations in 2014.



Sao Tome and Principe Approved in 2022, the Improving biodiversity mainstreaming in the agroforestry and fishery sectors in São Tomé and Principe project aims to mainstream biodiversity conservation into agroforestry and fishery production and management, and to minimize the negative impacts on biodiversity caused by these sectors, while enhancing the contribution of ecosystem services to livelihoods. Among other actions, a gender-responsive capacity development programme will help to mainstream biodiversity conservation in sectoral regulations and policies. The project will support the delayed implementation of the Nagoya Protocol by engaging stakeholders in dialogue on implementation, updating relevant legislation and launching a national campaign on fair benefit-sharing. Biodiversity conservation will also be mainstreamed into pro-poor value chains, and the project will develop and test a sustainable fishing certification mechanism. Women will comprise half of the 7,000 targeted beneficiaries. The project also benefits from IFAD grant financing, including from its RPSF, and from the government as well as beneficiaries. GEF ID: 10570.

Cabo Verde The Rural Socio-economic Opportunities Programme (2012-2023) protected precious freshwater resources by mapping the vulnerability of water resources and identifying protection mechanisms for their conservation. Ultra-low-cost technologies such as hydroponics, photovoltaic energy and water desalination practices are reducing environmental impacts and production costs. Eco-friendly pesticides and erosion control measures are also ensuring that agricultural run-off into surrounding waters does not damage the ecosystem, while improving water quality and soil conservation. Water infiltration technologies are boosting aquifer recharge and protecting watersheds.

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#### Private sector engagement and innovative financing

In 2015, the Addis Ababa Action Agenda underscored the need to unlock the "transformative potential of people and the private sector to meet the SDGs". IFAD recognizes the critical role of the private sector in transforming rural realities by creating jobs, as responsible buyers of smallholders' sustainable goods and in reducing their environmental and climate impacts. Corporate social responsibility also offers opportunities for poor rural women and men. However, while the private sector is increasingly recognizing that smallholder farmers constitute an untapped business opportunity, it faces many challenges in engaging with them.

Since 2019, IFAD has significantly **stepped up its engagement with the private sector**, guided by a dedicated strategy.<sup>70</sup> The strategy outlines how IFAD aims to strengthen its development impact by crowding in private sector funding and knowhow to benefit small-scale producers and rural areas. The IFAD approach is that of a mutually beneficial approach for both private sector actors and rural women and men.

IFAD has forged partnerships between private value chain actors and small-scale producers through its programme of loans and grants, more than 70 per cent of which support inclusive and responsible value chain development. At the project level, IFAD typically supports contract farming schemes between private sector entities and farmers, **builds the capacities of producer organizations** to engage with private sector actors, and also supports joint ventures between smallholder organizations and the private sector.

Furthermore, IFAD connects the private sector with smallholders to gain muchneeded access to **clean energy and technology** – the Cambodia case study is a
good example. IFAD works with the private sector for **environmental monitoring**(see the Indonesia snapshot), and with private sector foundations for gendertransformative climate action (see the gender snapshot supported by the Bill &
Melinda Gates Foundation). IFAD is also advocating together with the private sector
for environmental benefits.<sup>71</sup> With GEF support, IFAD is also engaging the private
sector for win-win environmental outcomes; the Kenya case study shows how
private sector **investment in environmentally friendly livelihoods for upstream smallholders** can mean downstream benefits for them.

The private sector also represents an important source of potential **co-financing**, and IFAD has launched the Private Sector Financing Programme, a financing facility to promote increased investment in small-scale agriculture, especially targeting young women and men. It offers financing directly to operating companies and to financial intermediaries that are lending to, investing in or offering services to small-scale farmers. The facility is a concrete IFAD response to attract investors that are interested in small-scale farmers but lack the knowledge and capacity to reach them.

<sup>70</sup> IFAD, IFAD Private Sector Engagement Strategy 2019-2024 (Rome: IFAD, 2019), https://webapps.ifad.org/members/eb/127/docs/EB-2019-127-R-3.pdf.

<sup>71</sup> For example, in 2023, IFAD co-hosted, alongside the Clinton Global Initiative, a Round Table on Regenerative Agriculture and Nature-Based Solutions.

IFAD issued its first sustainable bond in June 2022 as part of a strategy to explore new funding models to channel more resources to those in need in low- and middle-income countries. It became the first United Nations Fund and the only United Nations body and specialized agency other than the World Bank Group to operate in capital markets. Over US\$220 million has been mobilized from the private sector through sustainable bonds. In 2022, almost 90 per cent of IFAD country strategies integrated private sector interventions.



Global The GCF is scaling up IFAD's Inclusive Green Financing for Climate Resilient and Low Emission Smallholder Agriculture (IGREENFIN) model to enhance access to credit and technical assistance for local farmers, farmers' organizations, cooperatives and micro and small enterprises. Building on an initiative in Niger, the initiative has now expanded in response to demand, and covers the GGW countries as well as Côte d'Ivoire and Ghana. The initiative will help them implement climate-resilient and low-emission agriculture and agroforestry by removing key barriers to farmers' access to financial and non-financial services that support the adoption of climate change adaptation and mitigation practices. It will contribute to reducing GHG emissions through the promotion of sustainable forest, land, water and energy management and use in selected agricultural value chains, as well as renewable energy technologies. Worth over US\$190 million, it is expected to lead to 5.6 million tons of avoided GHG emissions and reach 2.5 million beneficiaries.

Global The Climate and Commodity Hedging to Enable Transformation (CACHET) was established with a grant from IFAD's ASAP and supports smallholder farmers against price and climate volatility negatively affecting their revenues. Its innovative approach gives smallholders access to the protection and benefits of risk management products available on financial markets but which are normally out of their range. CACHET has a steering committee of experts from IFAD, governments, financial markets, the private sector and academia. The Multi Commodity Exchange of India Limited is a project partner; it has been collaborating on country studies in Nigeria and Senegal, and sharing its in-depth knowledge of commodity markets and smallholders with IFAD's project teams and with public and private sector operators in both countries.

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## IFAD GEF project case studies

The following case studies are from each of IFAD's regions: Asia and the Pacific (Cambodia), East and Southern Africa (Kenya), Latin America and the Caribbean (Mexico), Near East, North Africa and Europe (Morocco) and West and Central Africa (Niger). Two of the case studies are from the RFS (Kenya and Niger), four are recently closed or ending, and one of them (Mexico) is at the very beginning.

While the case studies are from different contexts and therefore follow context-specific pathways, some challenges are common to all of them – see figure 2.

Figure 2. Common challenges in the project areas



High poverty rates



Less access to inputs, heavy workloads for women, limited decision-making



Malnutrition



Youth outmigration to seek livelihoods elsewhere



High vulnerability to climate change, degraded ecosystems



Presence of Indigenous
Peoples and local
communities, with specific
capacities and vulnerabilities,
including erosion of
traditional knowledge

Note that the case studies only present some aspects of projects, which involve a much broader range of actions. Government financing figures in some case studies are via IFAD loans.



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# Cambodia: connecting local companies and farmers for renewable energy technology benefits

#### **Key facts**

GEF project Building Adaptive Capacity through the Scaling-Up of

Renewable Energy Technologies in Rural Cambodia (S-RET)  $^{72}$ 

IFAD related projects Project for Agricultural Development and Economic

Empowerment (PADEE)

Dates 2016-2021

Financing GEF: US\$4.6 million; IFAD: US\$78.93 million; government:

US\$4.5 million; private sector: US\$1 million; beneficiaries:

US\$0.2 million

#### **Challenges**

Farmers in Cambodia are already experiencing an increasingly unpredictable climate, with changing rainfall patterns and rising temperatures. Poor soil management, together with deforestation, is exacerbated by increasingly intense rainstorms, leading to the loss of soil fertility – which, in turn, spurs the increasing use of chemical fertilizers. Farmers need better facilities to avoid food loss and waste, as well as green fertilizers to halt the degradation of the natural resources on which they depend. Yet smallholder farmers, especially female household heads, lack access to clean and affordable technologies that can also help reduce GHG emissions and deforestation.

<sup>72</sup> Selected as a GEF Good Practice Brief, which provides more details. See GEF, Renewable Energy Technology for Smallholder Farmers, Good Practice Brief (Washington, D.C.: Global Environment Facility, 2021), https://www.thegef.org/newsroom/publications/good-practice-brief-renewable-energy-technology-smallholder-farmers.

Adoption barriers for farmers include limited knowledge of the benefits of renewable energy technology (RET), and high costs, while small and medium-sized enterprises (SMEs) need support to develop and market affordable, proven technologies and in-service provision.

#### The IFAD-GEF advantage

The S-RET project responded to a large unmet potential for RET for Cambodian small-scale farmers to increase their adaptive capacity through profitable, climate-resilient agribusinesses. Farmers were targeted with a range of technical support and financing, and a partnership with the Ministry of Women's Affairs enabled the effective inclusion of women to meet a 50 per cent target. Collaboration with the National Biodigester Programme gave farmers access to both energy and slurry to use as fertilizer.

Given their critical role, Cambodian SMEs were given grants, through a call for proposals, to test potential RET on farms, as well as to roll them out. This allowed them to reduce high transaction costs in rural areas and scale up their supply of affordable RETs.

Connecting with three IFAD investments enabled the project to tap into significant co-financing and engage in national policy processes. The collaboration is expected to be scaled up in GEF 8 through the Climate Resilience Enhancement for Building Adaptive Capacity in Agri-Value Chains in Cambodia project, also anchored to IFAD's Agricultural Services Programme for Innovation, Resilience and Extension (ASPIRE) successor project, and the project has also informed how IFAD scales out RET in its operations.<sup>73</sup>

#### Results

## 18,000 farmers

(49 per cent female) adopted RET

#### **OVER**

2,800 RETs

other than biodigesters installed, of which 20 per cent for female-headed households

**OVER** 

237,000 tons

of GHGs mitigated

**PROMOTING** 

**RET use in Agriculture** 

national policy drafted

<sup>73</sup> IFAD, Renewable Energy for Smallholder Agriculture (RESA) (Rome: IFAD, 2020), https://www.ifad.org/en/web/knowledge/-/publication/renewable-energy-for-smallholder-agriculture-resa-.

### Box 1. Cambodian small and medium-sized RET enterprise snapshots

The S-RET project resulted in the identification of appropriate and affordable RETs that work for smallholder farmers, such as solar dryers for food processing, portable solar water pumps to irrigate crops, biochar briquettes to heat newly hatched chicks, solar poultry incubators to heat eggs, and solar hydroponics to grow vegetables with



less water. The innovative approach of "testing" and "roll-out" grants helped to de-risk the process; testing grants supported the proofing of the technology and validation by farmers, followed by roll-out grants through a co-financing approach with companies to establish local supply chains, training and after-sales services.

**EcoSun** promoted a solar portable pump that provides access to water during the dry season for high-value crops, saving each farmer an average of 2-3 litres of fuel per day.

Lighting Energy Solutions collaborated with an Indian company to promote solar dryers, now being used by many farmers to dry beef and fish. Traditional methods of sun-drying expose fish and meat to flies, dust and other contaminants. Adopting solar dryers improves hygiene, efficiency (as seasonal barriers are eliminated, thereby increasing drying capacity) and profitability; farmers were able to sell around 6 kg of dried beef per day, with average profits of US\$20 per day. The company uses an innovative buy-back approach, buying back the dried products from the farmers and retailing them in supermarkets throughout Phnom Penh through an e-commerce platform. This encouraged numerous farmers to buy additional dryers to increase their production.

**Green Innovet Cambodia** promoted solar poultry incubators through a holistic approach, training farmers along the entire value chain. Farmers purchased a package that includes the incubator system and everything they need to raise chickens, including technical training. Thanks to the greater volumes possible, chick hatching became the main source of income for many farmers, mainly women, earning them up to US\$400 per month.

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## Kenya: Africa's first water fund

## **Key facts**

GEF project	Establishment of the Upper Tana-Nairobi Water Fund
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(UTNWF), part of GEF Resilient Food Systems IAP

(UTaNRMP)

Kenya Cereal Enhancement Programme - Climate Resilient

Agricultural Livelihoods Window (KCEP-CRAL)

Dates 2016-2021

Financing GEF: US\$7.2 million; government and local civil society

organizations: US\$11.9 million; The Nature Conservancy: US\$3 million; private sector: US\$10 million; smallholders:

US\$1.5 million

## Challenges

Forests and wetlands in the project area (Upper Tana) play an important role in maintaining water quality and quantity, providing areas where run-off water and sediment can be stored and filtered naturally. However, the growth of agriculture in the area has led to sedimentation, thereby reducing the capacity of reservoirs and increasing the cost of water treatment. Water insecurity will likely increase as climate change brings unpredictable rainfall and threatens the resilience and food security of upstream small-scale farming systems.

## The IFAD-GEF advantage

The Upper Tana-Nairobi Water Fund (UTNWF), managed by The Nature Conservancy, was implemented through a highly successful public-private-producer partnership governance model, which included public agencies, non-governmental and community-based organizations, and private sector actors. The private sector, attracted by the project's business case for investing in rural livelihoods in the Tana River headwaters, invested in conservation by smallholders. To engage future generations, the project built the environmental awareness of youth and students through school nurseries and tree-planting programmes on public lands. Furthermore, the UTNWF provided a 50 per cent subsidy on all conservation technologies to female heads of households and elderly persons.

This payment for ecosystem services (PES) model has incentivized farmers to restore degraded land and encouraged water filtration through agroforestry and other sustainable land and water management measures that also improve their livelihoods. Meanwhile, land health is assessed using the Land Degradation Surveillance Framework developed by the World Agroforestry Centre, and river gauging stations continuously log data to inform decision-making. Forest restoration was undertaken in Abendares National Park and Mt Kenya forest reserves, which are buffers to national parks and home to some of Kenya's most iconic wildlife. Wetlands were assessed for potential biodiversity benefits that improve the socioeconomic livelihoods of smallholder farmers while aiding agrobiodiversity on farms and riparian lands, and the project developed a Biological Condition Gradient to monitor the impacts of project activities on local biodiversity.

#### Results

The UTNWF is now fully independent. The flow of water to the Nairobi water supply reservoir increased by an average of 45 per cent over a five-year period, and the volume of chemicals was reduced by 13 per cent. Reduced treatment costs downstream were achieved, lowering energy costs for residents. The approach has sparked interest from other countries in Africa, and has been identified as a best practice by the Kenya Water Towers Agency. It is being scaled up, including through a new Eldoret-Iten Water Fund (E-IWF).

#### **OVER**

## 115,300 hectares restored,

and almost 1.3 million tons of CO<sub>2</sub> equivalent mitigated

#### **ALMOST**

## 143,000 farmers

receive weather information and extension support via a mobile platform

### **NEARLY**

## 190,000 farmers

involved in climate risk management, natural resource management or disaster risk reduction activities

ON AVERAGE,

a 50 per cent increase

in crop productivity achieved

#### Box 2. Esther's avocado superheroes save water in Kenya

Esther Wandia, a single mother of four, decided to set up a tree nursery on her farm in Makomboki, in a hilly area north of Nairobi known for its tea production. She began by installing a water-harvesting pan next to her chicken coop. Then, using that collected rainwater, she started growing and grafting Hass avocado seedlings for sale to neighbouring farmers. What began as a side venture has already quadrupled her annual earnings, and the 0.25 acres of her farm allocated to the avocados is now earning Wandia more money than the 1 acre she uses to grow tea.

What Wandia and her neighbours plant on their land matters, as run-off from their steep slopes leads to the water source for Nairobi. Hillside crops that lead to soil erosion can increase the amount of silt in the Tana River and other streams feeding into Nairobi's water supply.

The UTNWF therefore helped thousands of farmers in the Upper Tana catchment area to harvest water, conserve soil and introduce more sustainable and high-value crops such as Hass avocados, strawberries and macadamia nuts. In addition to raising local incomes, and improving water quality and availability in Nairobi, this transformation has helped to improve soil protection, increased

carbon sequestration and reduced pressure on forests.

The UTNWF uses funding from downstream stakeholders – including the beverage companies Coca-Cola and East Africa Breweries Ltd – to finance upstream investments in water conservation and sustainable agriculture that benefit smallholders.





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## Mexico: promoting biodiversity benefits

## **Key facts**

GEF project Agriculture and Biodiversity in Mexico (AgribioMex):

mainstreaming biodiversity in the productive activities of rural

landscapes

Dates 2023-2028

Financing GEF: US\$9.8 million; government: US\$74.8 million;

International Maize and Wheat Improvement Center (CIMMYT): US\$1.2 million; Interamerican Institute for Cooperation on Agriculture (IICA Mexico): US\$0.1 million

## Challenges

Unsustainable agricultural production based on chemical fertilizers and other agricultural inputs is negatively impacting biodiversity in this megadiverse country; increasing soil degradation and habitat loss threaten the conservation of globally important species in target landscapes. Small-scale interventions that ignore farmers' livelihoods and policy issues are simply not enough.

#### The IFAD-GEF advantage

The project will focus on "priority biodiversity areas" such as dry grasslands, pine and oak forests, and tropical dry and humid forests, and include some territories in the Balsas River basin. The selected landscapes have a high biodiversity value, but there is a need for regulations to protect biodiversity, and the natural resources in these areas

are under considerable human pressure. The project aims to mainstream biodiversity in productive landscapes by implementing sustainable policies and practices in the agriculture sector. It will support the development of agricultural policy that incorporates biodiversity and sustainable land use, as well as the development of land use plans and extension programmes that incorporate biodiversity management and sustainable land use practices. The project will also work with blended finance mechanisms in the agriculture sector to help them include biodiversity and sustainable land use criteria.

The project will help recover soil health to advance land degradation neutrality, improve conditions for endemic species, increase the presence of pollinators, small mammals and birds that disperse seeds, and recover ecosystem functions. This will be achieved through a bundle of practices, including agroforestry and farmer-managed natural regeneration. It will connect beneficiaries to the technical assistance, credit and technological innovation they need to increase their productivity and add value in an environmentally friendly way. All these activities will also contribute to reducing emissions and, in some cases, increasing carbon stocks. The project will also connect producer organizations to responsible buyers for biodiversity-friendly and sustainably produced goods. A key policy intervention will be to support the national Production for Well-being and Fertilizers for Welfare programmes to ensure that the incentives they provide apply biodiversity and sustainable land use criteria, impacting some 2.6 million hectares in the six target rural landscapes.

### **Expected results**

This project will support poor rural families to improve their livelihoods and increase incomes while reducing the agricultural footprint on their environment.

## 45,000 rural people

#### **ALMOST**

## 50 per cent

of direct beneficiaries will be women, while youth and Indigenous People account for 11 per cent and 16 per cent, respectively

### **MORE THAN**

## 889,000 hectares

under best practices for better biodiversity management

## 63,000 hectares

of degraded agricultural land restored

## 600 local decision-makers

better informed about sustainable use of land and biodiversity

## 120 producer organizations

with improved markets for their sustainably produced items

#### Box 3. The IFAD-GEF-GCF connection in Mexico

The IFAD-GEF AgribioMex project in Mexico could be further complemented by a major new initiative in the Balsas River basin to fight rural poverty by reducing small-scale farmers' vulnerability to climate change. Also implemented with the National Forestry Commission, the Reducing Climate Vulnerability and Emissions through Sustainable Livelihoods Project (Balsas Project)



will receive investment of over US\$100 million from IFAD, the GCF and the Government of Mexico. It aims to recover and conserve ecosystems and their services, and strengthen small-scale production systems in the Balsas basin.

Almost 110,000 direct beneficiaries, primarily small-scale farmers and indigenous and Afro-descendant communities living in poverty, will gain from improved livelihoods and better living standards. The participation of women and youth will be prioritized, with Indigenous Peoples comprising a significant proportion of all beneficiaries. The Balsas Project will work with their organizations in eight states – Guerrero, Jalisco, Mexico, Michoacán, Morelos, Oaxaca, Puebla and Tlaxcala – focusing on 365 municipalities with the greatest marginalization and vulnerability to climate change.

The project will put in place climate monitoring and alert systems that help small-scale farmers increase productivity and take part in sustainable and profitable agricultural value chains. The participatory formulation of ecological zoning plans will help identify the investments and technical assistance needed to restore and sustainably manage forest ecosystems and reduce GHG emissions, while strengthened multisectoral coordination at the state and basin levels will guide pro-poor public and private investments in the project area.

To achieve all this, the project will invest heavily in technical assistance focused on the conservation, restoration and sustainable management of ecosystems. It will strengthen indigenous food systems based on traditional knowledge and products, and improve access to water. The project will also foster existing partnerships between the National Forestry Commission (CONAFOR) and two national development banks, Fideicomisos Instituidos en Relación con la Agricultura (FIRA) and Financiera Nacional para el Desarrollo Agropecuario Rural Forestal y Pesquero (FND), to connect producer organizations to affordable credit.

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## Morocco: diversification and Rio Convention dividends

## **Key facts**

GEF project	Improving Productivity	and Adaptation Capacities in the

Mountain Zones of Morocco

IFAD related projects Rural Development: Rural Development Programme in the

Mountain Zones - Phase I

Dates 2015-2022

Financing GEF: US\$6.5 million; IFAD loan US\$21million; IFAD grant:

US\$2.3 million; IFAD's ASAP: US\$2 million; national government: US\$12.1 million; beneficiaries: US\$0.3 million

### Challenges

Morocco's mountain zones are fragile ecosystems under threat from erosion and desertification. Climate variability here is leading to increasingly frequent and severe periods of drought, while floods and hailstorms damage crops. All this erodes the productive capital of smallholders and livestock breeders living in mountain communities such as Séfrou and Azilal, where the project is located.

## The IFAD-GEF advantage

The project set about supporting community adaptation and improving living conditions in 32 rural communities through a package of actions to diversify and upgrade value chains based on sustainable natural resource management. The high-value honey, saffron, meat and milk supply chains were chosen for profitability, food security and nutrition, as well as to engage women and youth. A business

model developed by youth (men and women) to provide services such as pruning and planting through *Equipes-métiers* has given them a sustainable source of income through improved production techniques. Farmer field schools have given smallholders training opportunities and offered a practical platform through which to engage especially women with limited mobility. Livestock were also protected from seasonal diseases.

The project built on traditional models to manage upstream/downstream ecosystems services, and technical interventions included stone bunds, gabions and water-harvesting mechanisms to channel precious rainwater to crops and cattle, as well as protect against erosion and flooding. Bee-keeping also contributed to plant biodiversity; Morocco has suffered a particularly high bee mortality rate – possibly due to climate change impacts. The choice of saffron was also designed to reduce water stress, as it can be grown with minimal water. Carob tree grafting in particular has achieved spectacular results in terms of productivity. Automated agrometeorological stations helped farmers make better farming decisions, and clean energy access was also prioritized.

#### Results74

Although the project formally focused on climate change, like most IFAD investments, its integrated approach also contributed to biodiversity conservation land degradation goals, as well as gender and youth outcomes.

## 90,000 people

trained in climate impacts and appropriate adaptation responses (50 per cent women)

## **MORE THAN**

## 1,300 hectares

brought under climate-resilient management

## 55,000 households

reported adopting environmentally sustainable and climate-resilient practices

## **OVER**

## 100 groups

supported to sustainably manage natural resources and climate-related risks, with women making up 20 per cent of group members

## 4,500 people

had access to climate information, including 30 per cent youth

#### Box 4. Women's livelihoods diversification in the mountains of Morocco

Fatima-Zohra and her husband moved to Kandar Sidi Khiar, a rural village in the Sefrou province of northern Morocco, known for the abundance of aromatic and medicinal plants that grow in the surrounding forests. Searching a way to carve out a livelihood for herself, she decided to establish something that would give other local women a stable income and allow them to participate in the local economy while drawing on their heritage and know-how.



In 2017, with support from the GEF-supported programme in the mountain zones, she established a cooperative of 18 women with extensive experience in raising sheep and goats. They started with ewes and rams, as well as beehives from the project, and eagerly took part in a variety of training in everything from beekeeping to sheep-rearing to increase and diversify their incomes.

By 2021, their flock had grown to 400 ewes, and their bees were yielding 126 litres of honey a year. Selling the ewes and honey produced enough income for the women to improve their living conditions and those of their families. Their activities are also helping each of them become more financially independent. In 2021, Fatima-Zohra established the Arôme Agay economic interest group, whose 70 members, most of whom are women, are working on extracting, processing and selling essential oils derived from rosemary, lavender and thyme, thanks to another project grant.

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# Niger: nature-based solutions greening the Sahel

## **Key facts**

GEF project Family Farming Development Programme (Programme de

développement de l'agriculture familiale - ProDAF) in the

Maradi, Tahoua and Zinder regions

Dates 2015-2023

Financing GEF: US\$7.7 million; IFAD loan/grant: US\$88.5 million;

IFAD's ASAP: US\$13 million; IFAD's RPSF: US\$1.5 million; IFAD's DSF: US\$48.5 million, OPEC Fund for International Development: US\$15 million; Government of Italy:

US\$28.2 million; Government of Niger: US\$33.4 million;

beneficiaries: US\$11 million

### Challenges

A vast country in the heart of the Sahel, Niger is beset by a combination of humanitarian and security crises. Family Farming Development Programme (ProDAF) target areas are characterized by land degradation and high vulnerability to food insecurity, malnutrition and climate change. These areas include arable land that has been severely degraded by water and wind erosion. The dominant farming systems are extensive rainfed agropastoral production systems based on cereal crops, gardening and rangeland grazing.

## The IFAD-GEF advantage

The overall objective of ProDAF has been to contribute to sustainable food and nutrition security, and improved resilience of rural households. The project targeted households involved in agro-silvo-pastoral activities, with targets of 30 per cent women and 30 per cent youth. Livelihoods packages and nutrition-focused support have been helping families to grow more and better food for themselves and their communities, increase incomes with which to diversify their diets, and understand how to preserve nutritional content during processing and preparation. Nurseries and sales of tree seedlings gave women an additional source of income, mainly used to buy small livestock, which has a positive impact on family nutrition.

To sustainably increase farmers' incomes and build their resilience to climate-related shocks, the project has supported the rehabilitation of 22 watersheds through various nature-based solutions for soil and water conservation. A combination of mechanical treatments (water and soil conservation techniques and removal of invasive plants) and biological treatments (planting grasses and trees) was implemented to restore degraded land and improve agricultural and livestock production systems. Migrating sand dunes posed a challenge to crop production, so the project turned to dune-binding, tree-planting and half-moons, among other measures. Village committees have been supported to ensure the sustainability of these activities, and transhumance corridors were also rehabilitated to reduce the risks of conflicts between farmers and pastoralists. Farmer field schools have contributed to high adoption rates for various nature-based solutions, such as composting, biopesticide production and the promotion of local agrobiodiversity.

#### Results

The RFS project has reached over 2 million beneficiaries (43 per cent women), and immediate results include an increase in productive and pasture areas and job creation, especially for youth.

MORE THAN
125,000 households

have received support for improved nutrition

**ALMOST** 

30,000 hectares

of previously degraded land restored

**MORE THAN** 

5.25 million tons of CO<sub>2</sub>e

mitigated

ALMOST

190,000 hectares

brought under farmer managed natural regeneration

Box 5. Countering land degradation in Niger with nature-based solutions



ProDAF has supported a package of nature-based solutions to restore degraded lands, all of which have already proved highly effective in IFAD-supported projects across the Sahel. Pastoral halfmoons (see photo) involve digging semi-circular water-harvesting holes to aid biomass regeneration; they also act as a water reservoir for local species of trees that were planted

and have enabled grass regeneration. *Zaï* is a farming technique consisting of digging pits in degraded land to concentrate organic matter and capture water. Stone **bunds** and **"living fences"** or hedgerows counter erosion, as does **tree-planting** of selected species to act as windbreaks. The project has also restored **rangelands and corridors**, and **tree nurseries** created income opportunities for vulnerable women.

The relatively high adoption of these techniques by farming families (around 60 per cent for composting and 50 per cent for farmer-assisted natural regeneration) is partly due to farmer support through farmer field schools and various advisory services, but also because these techniques were also critical measures to boost food production rather than solely as measures to address land degradation.

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## Looking ahead: expanding the IFAD-GEF partnership

Moving ahead, the collaboration between IFAD and GEF leverages a strong strategic alignment between the ambitious goals of IFAD12 and the programming directions of GEF-8. These encompass critical areas such as food systems, land restoration, and sustainable land and water management to effectively address land degradation and tackle climate change. Additionally, the partnership integrates the imperative of incorporating biodiversity concerns into productive landscapes, adapting to the challenges posed by climate change, operating within fragile and conflict-affected contexts, fostering private sector engagements and promoting environmentally conscious recovery in SIDS.

IFAD is actively pursuing collaborative opportunities to fortify the enduring partnership with GEF across the GGW initiative's African countries. This endeavour encompasses both IFAD's investments and its active engagement in the Green Climate Fund (GCF) and the GEF Least Developed Countries Fund GGW Regional Support Programme. This synergy, in conjunction with GEF, GCF and GGW nations, holds substantial potential to cultivate knowledge, stimulate innovation and foster sustainable solutions. Furthermore, IFAD and FAO are poised to jointly lead the transformative GEF-8 Food Systems Integrated Programme, steering nations towards a future defined by thriving agrifood systems. Moreover, IFAD contributes to bring the GEF Challenge Programme for Adaptation Innovation to a broader scale, unlocking pivotal opportunities and propelling positive change for those grappling with urgent and interrelated crises.

IFAD's renewed strategy and reinvigorated focus on biodiversity unveil pathways for more robust involvement with the GEF. As an increasingly adept mobilizer of development finance, IFAD possesses the potential to contribute to the Global Biodiversity Framework Fund. Leveraging its proficiency in collaborating with the private sector, alongside its contemporary private sector strategy, IFAD eagerly anticipates its contribution to the GEF Non-Grant Instrument Programme.

For national governments and smallholders, the IFAD-GEF partnership will strive to offer new possibilities to move back from the brink of climate change and environmental tipping points. Together, we can deliver on global commitments for a healthy planet and healthy people.

For more information, see https://www.ifad.org/en/gef



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