CLIMATE ACTION REPORT 2019

IFAD
Investing in rural people

Headlines from recent major reports on climate change, agriculture and food security

The world is currently on track to warm by as much as 3.4°C by the end of the century, a situation that would escalate disastrous heatwaves, flooding, droughts and societal unrest. Major coral reefs and many other species face extinction.

(United Nations statement at the United Nations Climate Action Summit, September 2019)

THREATS AND OPPORTUNITIES FROM CLIMATE CHANGE FOR AGRICULTURE AND FOOD SECURITY

October 2019

Climate change is affecting the global food system in ways that increase the threats to those who currently already suffer from hunger and undernutrition. (*Global Hunger Index: The Challenge of Hunger and Climate Change*, von Grebmer et al.)

Transforming the land sector and deploying measures in agriculture, forestry, wetlands and bioenergy could feasibly and sustainably contribute about 30%, or 15 billion tonnes of carbon dioxide equivalent ($GtCO_2e$) per year, of the global mitigation needed in 2050 to deliver on the 1.5°C target. (*Nature Climate Change*, Roe et al.)

September 2019

Women, smallholder farmers and poor and marginalized communities are being put at ever greater risk from exposure to financial and environmental shocks and power imbalances that prevent them from acting with greater agency and autonomy. (*Global Consultation Report*, Food and Land Use Coalition)

August 2019

The stability of food supply is projected to decrease as the magnitude and frequency of extreme weather events that disrupt food chains increases (high confidence) .... The most vulnerable people will be more severely affected (high confidence). (*Land Report*, Intergovernmental Panel on Climate Change)

May 2019

... relating the observed yields to observed weather at each political unit from 1974 to 2008 .... we find that the impact of global climate change on yields of different crops .... In nearly half of food-insecure countries, estimated caloric availability decreased. (*Climate change has likely already affected global food production*, Ray et al.)

Climate change is already harming poor rural people and smallholder agricultural producers. They need immediate and comprehensive adaptation actions to reduce the damage, as well as assistance to realize their potential contribution to keeping global warming under 1.5°C.

IFAD and climate threats: go to page 81 to read about what beneficiaries are saying.

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Abbreviations

AF	Adaptation Fund
APR	Asia and the Pacific
ASAP	Adaptation for Smallholder Agriculture Programme
CAR	Climate Action Report
CARD	Climate Adaptation in Rural Development
COSOP	country strategic opportunities programme
ECG	Environment, Climate, Gender and Social Inclusion Division
ESA	East and Southern Africa
EX-ACT	Ex-Ante Carbon-balance Tool
FAO	Food and Agriculture Organization
GCF	Green Climate Fund
GEF	Global Environment Facility
GHG	greenhouse gas
IPCC	Intergovernmental Panel on Climate Change
KJWA	Koronivia Joint Work on Agriculture
LAC	Latin America and the Caribbean
LDCF	Least Developed Countries Fund
LULUCF	Land Use, Land Use Change and Forestry
MDB	multilateral development bank
NDC	Nationally Determined Contribution
NEN	Near East, North Africa and Europe
OPR	Operational Policy and Results
PoLG	programme of loans and grants
RIA	Research and Impact Assessment division
SCCF	Special Climate Change Fund
SDG	Sustainable Development Goal
SECAP	Social, Environmental and Climate Assessment Procedures
UNFCCC	United Nations Framework Convention on Climate Change
WCA	West and Central Africa
WFP	World Food Programme

Foreword

Climate change is no longer a problem for the future: it is happening now. Actions to tackle climate change and address the challenges it poses are paramount on the international policy agenda, as well as among IFAD priorities and commitments.

In 2018, IFAD launched the Climate Action Report (CAR) series, a yearly publication that provides an overview of IFAD's work on climate change and reports on progress, challenges and achievements in every work area where climate is accounted for within IFAD's efforts towards improving the livelihoods of poor rural people. This year's report is designed to highlight how climate change effects are considered and acted upon within the IFAD project cycle. It starts at the inception of developing country strategies and continues through the design, implementation and financing of projects to the assessment of impacts.

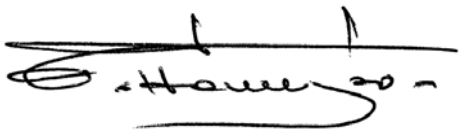
The year 2019 is a key moment in the international policy debate on climate. It is also an important year for mainstreaming climate change in IFAD's operations, with significant changes having been made in key aspects of its business model to achieve corporate-level commitments on climate change-related factors.

The 2019 CAR documents the progress and achievements made in the ongoing development and implementation of the tools and operational changes in the business model of IFAD largely triggered by the Adaptation for Smallholder Agriculture Programme (ASAP). This report includes statistical annexes describing climate-related finance provided as part of IFAD's programme of loans and grants, as well as the mobilization of supplementary climate and environmental financing. It reports the screening of client countries' Nationally Determined Contributions (NDCs) and how they feature within the country strategies

developed with IFAD, as well as providing a report on ASAP's results to date. It also includes, for the first time, detailed results from impact assessments, which explicitly integrate climate change factors into the analysis of project performance.

The magnitude and gravity of the climate change challenge can sometimes seem insurmountable, with no adequate means of addressing it. Even more so when combined with the urgent need to improve the livelihoods of poor rural people. However, there are already examples of synergies that can bring about positive change for rural people and the organizations that seek to support them. The 2019 CAR aims not only to demonstrate the impacts and achievements of IFAD's work, but also to provide examples using the words of rural people who are already facing the challenges of climate change and have benefited from IFAD's work in the field. In this report, we present eight case studies from IFAD project beneficiaries around the world, demonstrating how they are addressing climate change risks and opportunities. These stories are put into a broader context of climate change threats and responses through the use of selected excerpts from recent high-level publications on climate change, agriculture and response measures, such as the Intergovernmental Panel on Climate Change (IPCC) Special Report on Climate Change and Land of 2019. They show that climate change challenges can be successfully overcome and that the ongoing effort to overcome these challenges is paying off. They also represent the types of actions that need to be scaled up to realize the aspirations outlined at the United Nations Climate Action Summit 2019. IFAD is fully participating in the efforts to make these goals a reality and is liaising with partners such as the Global Commission on Adaptation to increase collaboration with the resilience and adaptation workstream.

IFAD hopes that this 2019 CAR serves to inform as well as inspire those in the global community and in the field working to overcome the challenges of climate change and rural poverty reduction.



GILBERT F. HOUNGBO
President of IFAD

Major achievements in climate change mainstreaming at IFAD in 2019

- IFAD's Strategy and Action Plan on Environment and Climate Change 2019-2025 approved in 2018, with the Results Management Framework approved in April 2019.
- US$244 million committed towards climate finance across 15 approved projects as of September 2019 representing 28 per cent of the total commitment made for the IFAD11 cycle. If new projects designed in 2019 and awaiting Executive Board approval in December 2019 are included, about 62 per cent of the commitment has been achieved.
- US$45.7 million mobilized in supplementary finance in 2019 from climate and environmental funds: US$44 million has been mobilized in Unrestricted Complementary Contributions to mainstream climate change concerns in the IFAD11 portfolio from the Governments of Germany, Sweden and Switzerland.
- All 94 IFAD client countries' Nationally Determined Contributions (NDCs) to the Paris Agreement on climate change screened to identify measures relevant to IFAD operations.
- 100 per cent of new IFAD country strategies include an analysis of and alignment with NDCs.
- All 48 new projects in 2019 screened for climate risk assessments using SECAP procedures: 64 per cent rated as having high climate risks (leading to mandatory further assessments and response) and 36 per cent as moderate.
- 91 per cent of IFAD projects scored 4 or higher on climate change adaptation performance, surpassing the target level of 85 per cent.
- As of 30 September 2019, the Adaptation for Smallholder Agriculture Programme (ASAP) has resulted in:
  - 3,127,000 beneficiaries, of whom 640,000 women
  - 920,538 ha under climate-resilient techniques.
  - 86,000 households having improved access to water
  - 11,300 community groups being supported in climate risk management
  - US$22 million of infrastructure being made climate-resilient
  - 17 policy dialogues being conducted on mainstreaming climate change into rural development activities
- Positive economic benefits for IFAD beneficiaries from climate change actions documented in 7 impact assessments. The results of the impact assessment initiative for IFAD10 indicate a 13 per cent increase in resilience for project beneficiaries, with an estimated 26 million people having increased their resilience, including to climatic shocks.

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Chapter 1: Setting the scene

1.1 What role for international agricultural development agencies in taking climate action?

We are no longer living in a world where climate change impacts are a projection for the future – climate change is happening now and it is already having effects on livelihoods, particularly those of the most vulnerable, and parts of the economic sector that are highly sensitive to the climate, for example agriculture.[1]

Urgent action to scale up and accelerate policies and programmes to build climate resilience needed to address food security was already called for by the State of Food Insecurity in the World, 2018. The need for urgency is further reiterated in the 2019 edition, which reports that "Climate change and increasing climate variability and extremes are affecting agricultural productivity, food production and natural resources, with impacts on food systems and rural livelihoods" (SOFI, 2018, 2019).

Food security is under threat and more difficulties are expected to arise rapidly in the coming years as the process of climate change advances. Climate change impacts all four dimensions of food security[2] and the role of agriculture in supporting them: reducing production and productivity impacts food *availability*, as well as farm incomes and the ability to *access* food; increased food prices and volatility in food markets as a result of the erratic impact of climate affects the stability of *accessing* and thus *utilizing* food; impacts on food

1 In this report we adopt agriculture in its broad sense, thereby including livestock, forestry and fisheries.

2 "Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life" (World Food Summit, 1996).

The tremendous potential of the agricultural and food sectors to play a key role in achieving global mitigation objectives is being increasingly recognized, estimated and integrated into policies and strategies

safety and storage also affect food *utilization*. Thus, any strategy for improving agriculture's performance with regard to poor people's livelihoods and food security must integrate the potential effects of climate change and the adaptation measures needed to address them.

At the same time, the tremendous potential of the agricultural and food sectors to play a key role in achieving global mitigation objectives is being increasingly recognized, estimated and integrated into policies and strategies.

Clearly, these factors have implications for international agencies working on agricultural development, which provide investments and technical and policy support to the agricultural and food sectors. Now, these actions to generate food security and poverty reduction must integrate adaptation to respond to climate hazards, as well as potential mitigation.

Currently, approximately 3 billion people, or 40 per cent of the global population, live in rural areas of developing countries and most depend on small family farms for some part of their food supply and income.[3] Poverty and food insecurity are common among this population. Evidence indicates that investment in agricultural development is the most effective means of eradicating poverty and hunger and there have been huge improvements in human well-being where this has been effectively achieved (de Janvry and Sadoulet, 2010; World Bank, 2007).

Since 1977, IFAD has been a leader in the design, financing and implementation of activities to support development in the smallholder agricultural development sector.

Currently, the challenge is to effectively integrate the risks as well as the opportunities that climate change poses for the development of the smallholder agricultural sector and rural livelihoods in IFAD's operations. The IFAD Climate Action Report (CAR) 2019 documents the ways in which IFAD is responding to the challenge of integrating climate change actions into its business model and operations, highlighting progress made since CAR 2018.

1.2 Key features of the global climate change policy and financing environment relevant for the agriculture and food sectors

IFAD's response to integrating climate change into its business model and operations is shaped by the current global climate policy and financing environment. Over recent years there have been major shifts in this area that have important implications for how the integration of environmental and climate concerns into IFAD's operations has been carried out. This section reports key climate policy and financing developments that are relevant for IFAD's operations.

3 https://www.ifad.org/en/investing-in-rural-people

The Paris Agreement

Long-term commitments: At the Paris climate conference (COP21) in December 2015, 196 countries signed a global climate agreement, which is due to enter into force in 2020 (United Nations, 2015). Parties to the Paris Agreement committed to three long-term goals:

- **Limiting the increase in global average temperatures** to well below 2° C, and ideally 1.5° C, above pre-industrial levels;
- **Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience** and low greenhouse gas (GHG) emissions development, in a manner that does not threaten food production;
- **Making finance flows consistent with a pathway towards low GHG emissions** and climate-resilient development.

Nationally Determined Contributions (NDCs): The NDCs are a new national climate change policy instrument created under the Paris Agreement (article 4, paragraph 2) that requires each country to determine and specify efforts committed to reduce national emissions and adapt to the impacts of climate change. Each party is requested to prepare, communicate and maintain successive NDCs that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions. Prior to the Paris Agreement, parties to the United Nations Framework Convention on Climate Change (UNFCCC) had already expressed their intentions to contribute to climate change adaptation and mitigation, through the instrument of the Intended Nationally Determined Contributions (INDCs). Among developing countries that specified adaptation or mitigation commitments or actions in their INDCs, more than 90 per cent refer to agricultural sectors (FAO, 2016). Many countries also identified the potential for agricultural sectors to deliver adaptation–mitigation synergies, as well as economic, environmental and social co-benefits. These are also responses to commitments made under the 2030 Agenda for Sustainable Development in September 2015, when countries clearly indicated their high-level ambitions for a hunger-free, equitable and environmentally sustainable world.

Financing: Developed countries have repeatedly committed to provide developing countries with technology transfer, capacity-building and financial support. Under the Paris Agreement (paragraph 53), developed countries expressed their commitment to continue contributing to the collective goal of mobilizing US$100 billion per year in climate finance until 2025, at which point they would set a new target using US$100 billion as a floor. The Green Climate Fund (GCF) was confirmed in its function as an operating entity of the financial mechanism of the UNFCCC, with the ambition to channel a significant portion of future climate finance from both the public and the private sector (Climate Focus, 2016). The Paris Agreement acknowledged that developed countries must continue to take the lead in mobilizing climate finance. It mandated them to report biennially on the financial support that they have provided and mobilized through public interventions in developing countries. Transparency in accounting for climate actions and finance is a major objective of the Paris Agreement. How developed countries' public finance flows are accounted for and reported, and whether a collective goal can be significantly raised in 2025, will be a crucial yardstick for the success of the Paris Agreement climate deal (Schalatek et al., 2016).

The Koronivia Joint Work on Agriculture (KJWA)

The KJWA is a historical decision that was reached at the United Nations climate conference (COP23) in November 2017, calling for a technical work programme on agriculture within the UNFCCC frameworks. The KJWA marks a very important step within climate policy as it officially recognizes the important role played by agriculture towards meeting the objectives of adaptation to climate change, as well as mitigation of GHG emissions. The work programme is being conducted by the Subsidiary Body for Scientific and Technological Advice (SBSTA) and the Subsidiary Body for Implementation (SBI). The KJWA represents a significant step forward in terms of including climate actions in the agricultural sector under the UNFCCC. The KJWA will culminate in a report back to the Conference of Parties of the UNFCCC in December 2020 (Dinesh et al.,2017).

This quick guided tour of climate policy and finance indicates considerable dynamism in the climate change policy and financing sector, which presents huge opportunities for designing and implementing agricultural development activities. It also indicates some clear delineations where accounting for climate change impacts, response measures and financing are needed. These issues drive the key features of IFAD's efforts to mainstream climate change into its operations. The following section provides an overview of these efforts, followed by more detailed analysis in subsequent chapters.

1.3 What is IFAD doing to mainstream climate change?

The Strategy and Action Plan on Environment and Climate Change

IFAD recently finalized its Strategy and Action Plan on Environment and Climate Change 2019-2025, a strategic document aimed at guiding the Fund's workstreams on climate and the environment. The core strategy was approved by IFAD's Executive Board in December 2018, whereas a more detailed Action Plan and Results Management Framework for its implementation were approved by IFAD's Board in April 2019.

The Strategy and Action Plan on Environment and Climate Change determines and illustrates a new business model for IFAD and a new approach to better integrate climate and the environment into its programme of work, starting from the very early stage of country strategies through country strategic opportunities programme (COSOP) design, or country strategy notes and continuing throughout project design and implementation to the reporting and impact assessment stages. It is important to also note that most of the current business model of IFAD, which incorporates climate and environment concerns into the entire programme of work from early stage until Impact Assessment and reporting has started from the successful Adaptation for Smallholder Agriculture Programme (see chapter 7).

Corporate-level commitments and integration of climate change and the environment into the business model

1. The starting point is represented by country strategy design, including COSOPs and country strategy notes. Country strategies provide the framework within which client governments and IFAD make strategic choices about IFAD operations in different countries, identifying opportunities for IFAD financing and facilitating management for results. To ensure strong country ownership, the COSOP is designed to be aligned with a country's poverty reduction strategy and planning framework. There are two important approaches to mainstreaming climate within the COSOP:

IFAD recently finalized its Strategy and Action Plan on Environment and Climate Change

i. Integration of **NDCs**: As of 2019, all new COSOPs developed by IFAD and its clients will analyse NDCs to help inform IFAD country strategies. Following a comprehensive analysis of a country's **NDCs**, key national climate change priorities and commitments under the Paris Agreement are being integrated into the COSOPs, ensuring that IFAD interventions help countries fulfil their goals and obligations.
ii. A thorough analysis of climate, the environment and social risks and challenges (under the **Social, Environmental and Climate Assessment Procedures – SECAP**) in a given country: During IFAD11, IFAD committed to enhance its SECAP system to better include social aspects and some missing environmental risks and assessments.

2. IFAD's **SECAP** acts as a safeguard, beginning at the country strategy stage and continuing throughout a project cycle, based on a context-specific risk assessment process but also ensuring a quality system of designing and programming. Recommendations are made based on the risk ratings of an investment, allowing for heterogeneous responses appropriate to diverse country and community circumstances. Through better risk identification, the procedures aim to avoid environmental and social harm while creating the space to identify opportunities to do good.

3. IFAD employs various tools developed **to optimize project design and monitor project effectiveness**. The CAR 2019 documents the progress of IFAD's mainstreaming of climate change throughout its operations, highlighting where and how climate change is integrated into the IFAD project cycle.

4. **Financing**: Within this model, for its eleventh replenishment cycle (2019-2021), IFAD committed to invest at least 25 per cent of its programme of loans and grants (PoLG) in "climate-focused" activities. This is being measured using the established *Multilateral Development Banks' (MDB) Methodologies for Tracking Climate Change Adaptation and Mitigation Finance*[4] (hereafter, the *MDB Methodologies*). Since early 2019, each new investment is individually screened for climate finance. Chapter 5 within this report is dedicated to presenting the cumulative results for the 15 projects thus far approved in IFAD11.[5]

IFAD has also committed to mobilizing US$500 million in supplementary climate and environment finance in IFAD11 and IFAD12 (at least US$200 million in IFAD11).

5. **Emissions**: GHG emissions are calculated through the Ex-Ante Carbon-balance Tool (EX-ACT) tool, currently being used for 75 projects, including ongoing, closed or new design projects.

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4 For more info see the Joint Report on Multilateral Development Banks' Climate Finance, 2018: https://www.ebrd.com/2018-joint-report-on-mdbs-climate-finance

5 The dedicated chapter will report on all projects approved up until the IFAD Executive Board in September 2019.

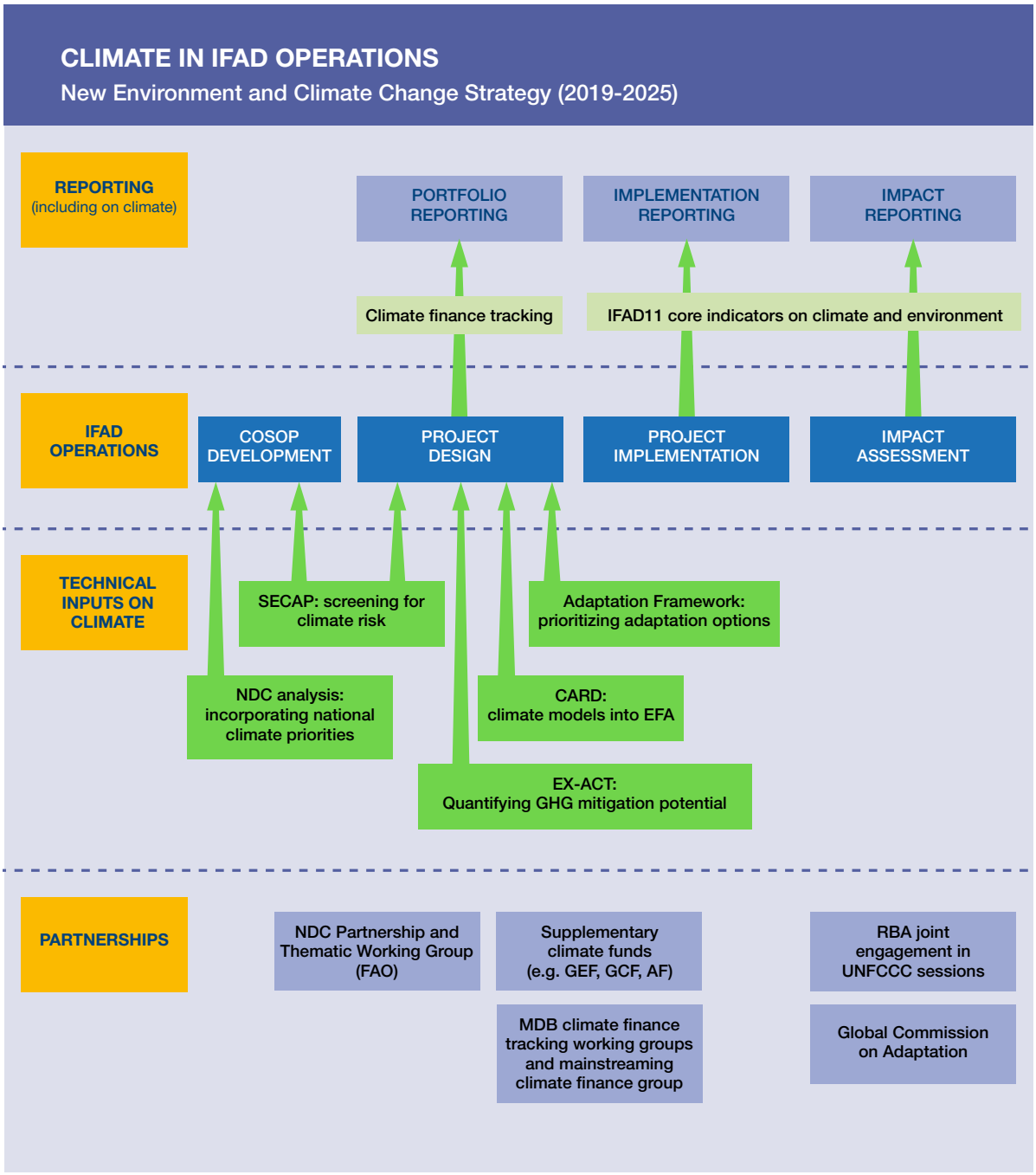
6. **Results**: The results of IFAD's work are assessed through the Impact Assessment Initiative, which focuses on a number of projects representing 15 per cent of IFAD's portfolio. For IFAD10, a total of 17 projects have been assessed; of these, seven incorporated geo-referenced climatic and agroecological variables. The initiative allows a response to IFAD's strategic objective number 1, increased production, as well as its strategic objective number 3 (SO3), increased resilience, which also responds to Strategic Development Goal (SDG)1.5.

In line with this strategic vision, the Environment, Climate, Gender and Social Inclusion Division (ECG) manages and supports projects through a number of innovative sources of finance.

The remainder of this report presents detailed descriptions, case studies, indicators of progress and assessments of next steps needed to fully realize the potential of the various measures being implemented to mainstream climate change into IFAD's operations. Each of the following chapters has a focus on a specific key point within the IFAD business model:

- Chapter 2: Mainstreaming climate change into IFAD country strategies
- Chapter 3: Corporate climate risk assessment – SECAP
- Chapter 4: Tools for integrating climate change into project design
- Chapter 5: Tracking climate finance in IFAD's programme of loans and grants
- Chapter 6: Supplementary finance for climate action
- Chapter 7: Project implementation
- Chapter 8: Impact assessment.

Figure 1. Climate in IFAD operations



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Chapter 2: Mainstreaming climate change into IFAD country strategies

2.1 Linking NDCs to IFAD country strategies

IFAD country strategies are the decision-making frameworks between IFAD and its clients, identifying investment opportunities based on national context, needs and priorities and facilitating management for results. Aligning IFAD country strategies to countries' NDC priorities, where appropriate, sets IFAD on a path to better supporting its client countries in meeting their national and international climate commitments, as well as building the resilience of its target beneficiaries. In this chapter, we provide a brief description of how IFAD is explicitly integrating priorities articulated in the NDCs into IFAD country strategies.

NDCs are the cornerstone of the fight against climate change. As national and international goals are substantiated through action on the ground, implementation support at scale is critical.

This commitment goes hand in hand with IFAD's target of investing at least 25 per cent of the IFAD11 PoLG in climate-focused activities (see chapter 5). Both commitments help track support provided to realize the goals of the Paris Agreement.

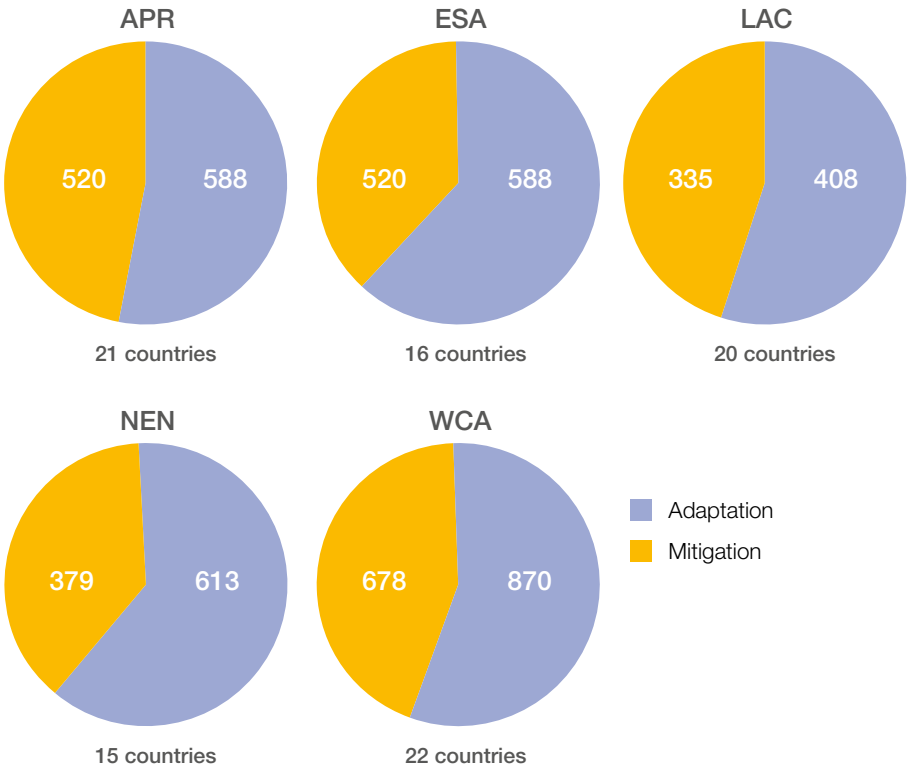
- In line with IFAD's commitment, the 11 new IFAD country strategies approved to date[6] use an analysis of priorities articulated in the NDCs for strategy development.
- Three of these countries (Burkina Faso, Rwanda and Senegal) already have approved IFAD11 investments, including climate finance investments that build on priorities expressed in their NDCs.

6 From 1 January to 30 September 2019.

Although 90 per cent of NDCs refer to agricultural sectors, they are highly heterogeneous, both in quality and detail. To build IFAD's own knowledge base towards integrating NDC analyses in new country strategies, an NDC database was developed, listing all of the measures (country priorities and commitments) included in the NDCs of all IFAD client countries in easily searchable categories (see annex I for a description of the methodology and database).

Figure 2 provides an overview of the distribution of adaptation and mitigation measures in countries' NDCs in IFAD client countries by region. The respective sizes of the pie charts indicate the number of IFAD client countries included in each regional sample. These figures indicate that all IFAD client regions prioritize adaptation measures (58 per cent of all measures) over mitigation measures (42 per cent of all measures). The numbers are reflective of the number of measures that each region has for adaptation and mitigation. Latin America and the Caribbean (LAC) countries included fewer measures in their NDCs than other countries (on average, 37 measures per country). Asia and the Pacific (APR) and LAC countries have similar distributions of adaptation and mitigation measures, whereas East and Southern Africa (ESA) and Near East, North Africa and Europe (NEN) countries prioritize adaptation over mitigation measures.

Figure 2. Distribution of adaptation and mitigation measures by region



APR, Asia and the Pacific; ESA, East and Southern Africa; LAC, Latin America and the Caribbean; NEN, Near East, North Africa and Europe; WCA, West and Central Africa.

NDCs are the cornerstone of the fight against climate change. As national and international goals are substantiated through action on the ground, implementation support at scale is critical.

2.2 What are the priorities identified in countries' NDCs and how do they relate to IFAD priorities?

To answer this question, figures 3 and 4 provide the results of the analysis of the NDC database of country NDC priorities by region.

Figure 3 depicts the number of adaptation measures mentioned in IFAD client NDCs for the eight priority sectors/areas most relevant to IFAD. Most measures featured relate to agriculture (crops and livestock production – 503 measures); this is followed by measures related to land use, land use change and forestry (LULUCF – 333 measures) across all five IFAD client regions, most notably so in ESA and WCA countries. Only in NEN countries are energy-related measures (37 measures) almost on a par with LULUCF measures (38 measures). Not surprisingly, fisheries has the strongest role in APR countries (31 measures), whereas food security and resilience is most often referenced in ESA countries (19 measures). The social inclusion priority area, which encompasses issues of gender, youth, indigenous peoples and vulnerable rural populations, may be relatively small (30 measures globally) yet is present across all regions.

Figure 4 shows the number of mitigation measures mentioned in IFAD client NDCs for the eight priority sectors/areas most relevant to IFAD. Most measures featured relate to energy (987 measures globally and a substantial 309 measures in WCA), followed once again by LULUCF (350 measures), with agriculture third across the board (237 measures). Compared with the adaptation measures shown in figure 3, measures of biodiversity/ecosystems, fisheries, food security and resilience, as well as social inclusion, have negligible shares.

So how is this information being used in the development of COSOPs? Box 1. provides an example from Rwanda.

2.3 What are the investment implications of integrating NDC priority actions into country strategies?

This is an area where IFAD experience is likely to be very important, as a large share of the NDC priority actions is not explicitly costed.

Figure 5 shows the number of measures (both adaptation and mitigation) mentioned in IFAD client NDCs for the eight priority sectors/areas most relevant to IFAD by whether they have been costed or not. A measure is considered to have been "costed" if the NDC includes an estimate of the investment required to implement its priorities. Notably, all IFAD client region NDCs list fewer costed measures than non-costed measures. However, the disparity in ESA and LAC countries (where 95 and 97 per cent of measures are not costed) is far larger than that in APR, NEN and WCA countries (where 77, 70 and 60 per cent of measures, respectively, are not costed). This information is relevant to IFAD in its efforts to track its climate investments in relation to requests for support articulated by countries in their NDCs.

Figure 3. Distribution of adaptation measures by selected sectors and regions

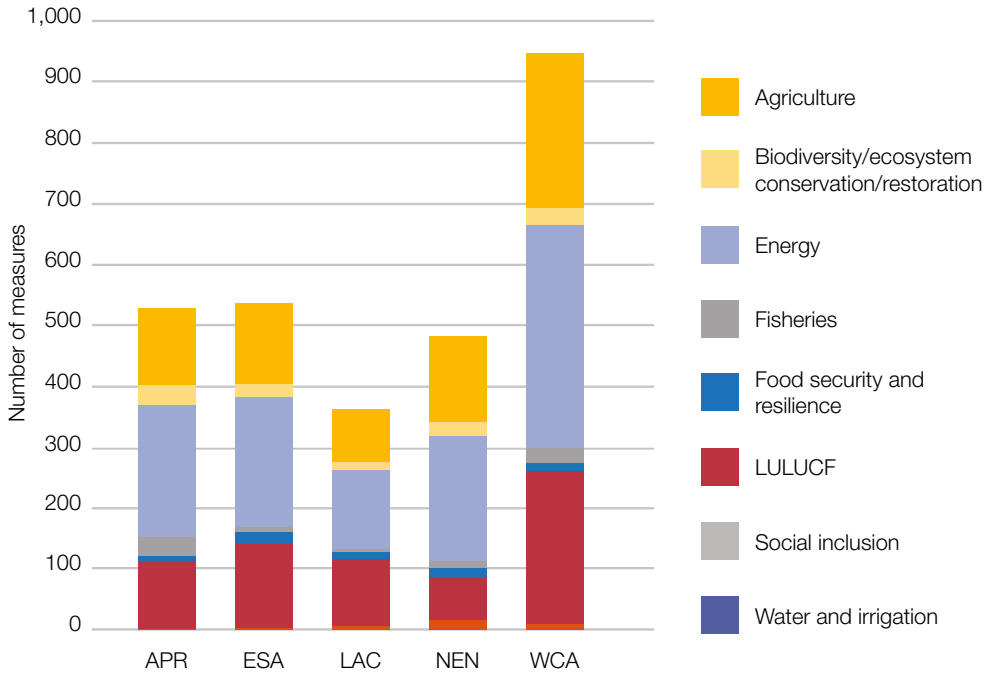
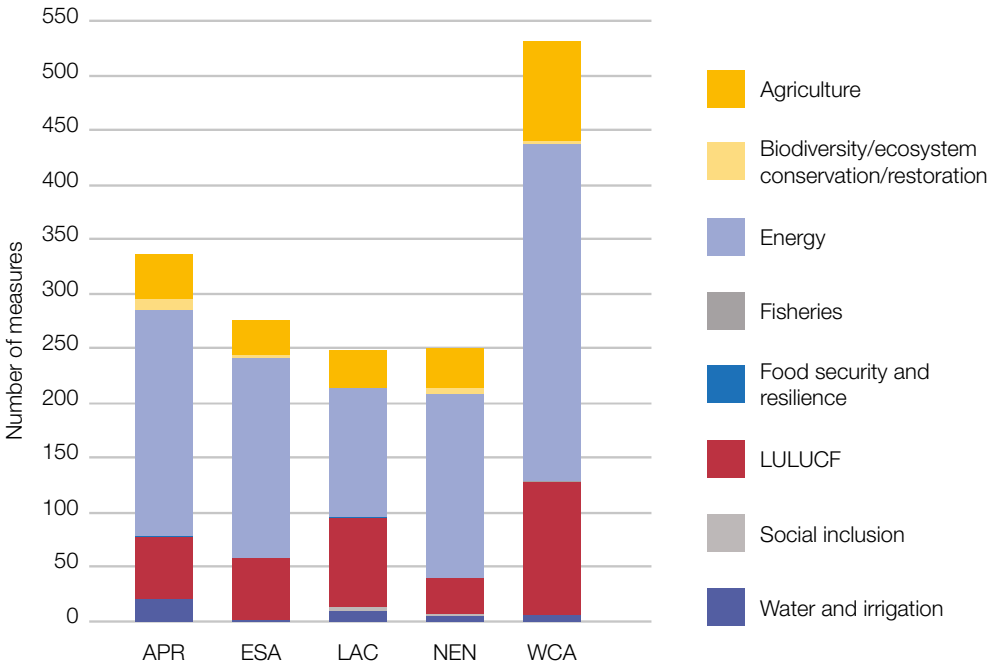


Figure 4. Distribution of mitigation measures by selected sectors and regions



2.4 Next steps and partnerships

The systematic integration of NDC priorities into IFAD country strategies is under way, laying a strong foundation for IFAD's increasing climate investments. The 11 new IFAD country strategies approved to date all include an integrated analysis of their respective NDCs. Over 40 new country strategies are planned for design and approval during IFAD11 as a whole, each of which will reflect the respective country's climate priorities on the basis of its NDC.

Box 1. Integrating NDC priorities into Rwanda's COSOP

Climate change means that Rwanda is experiencing recurrent mid-season droughts. Rainfall trends show that rainy seasons are becoming shorter, but have a higher intensity. Most rainfall models predict more extreme events with higher rainfall intensity, leading to landslides, crop and livestock product losses, health risks and damages to infrastructure. Rising temperatures and more frequent flooding could also increase the incidence of climate-related animal diseases such as Rift Valley fever, a vector-borne disease that affects small ruminants and resurges after heavy rains and flooding.

Rwanda's NDC seeks to address these increasingly pressing challenges. Rwanda's new IFAD COSOP (2019-2024) maps prospective investment areas for IFAD against the six individual actions detailed in Rwanda's NDC under its overarching programme on the sustainable intensification of agriculture. Since the approval of Rwanda's 2019 COSOP, two new IFAD investments in Rwanda have been approved. In line with the COSOP's strategic vision, both investments address climate vulnerabilities and seek to contribute to the NDC adaptation priorities for agriculture.

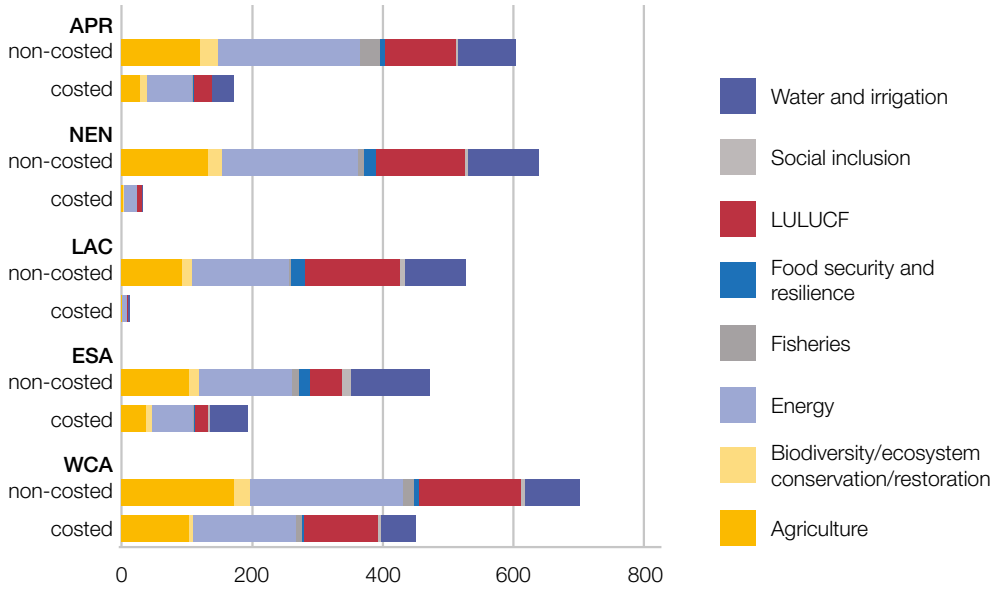
The Kayonza Irrigation and Integrated Watershed Management Project (KIIWP 1) tackles Rwanda's vulnerability to climate-exacerbated drought through investments in catchment rehabilitation, infrastructure development, the establishment of efficient infrastructure management institutions and the promotion of climate-smart agriculture for irrigated and rainfed lands. US$8,263,000 or 46 per cent of IFAD's investment in KIIWP 1 has been validated as IFAD adaptation finance.

The Partnership for Resilient and Inclusive Small Livestock Markets (PRISM) responds to the NDC's aim to increase the share of households applying agroforestry to 100 per cent by 2030 and lists "utilizing resource recovery and reuse through organic waste composting and wastewater irrigation" as one of the six action areas under its programme on agriculture. The project strengthens epidemiological surveillance systems and disease contingency planning to enable a rapid and adequate response in case of outbreaks of climate-sensitive diseases such as Rift Valley fever. Climate-focused finance from IFAD for PRISM amounts to US$1,335,000 or 9 per cent of IFAD's investment.

Rwanda's 2019 COSOP foresees several further investment areas between now and 2024, and in each case explores their alignment with NDC priorities. For example, building on the outcomes of KIIWP 1, further climate support will be provided in a second phase of the project (KIIWP 2).

To actively support countries in the implementation or revision of their NDCs at the level of policy dialogue and technical assistance, IFAD joined the NDC Partnership in 2019. The NDC Partnership is a network of countries and major international institutions and non-state actors that allows developing countries to request support in priority areas. Requests are matched and coordinated with suitable implementing partners. In the framework of the NDC Partnership and its new Climate Action Enhancement Package (CAEP), IFAD is at the inception stage with regard to the "Support to the NDC Partnership to deliver focused expertise on the Agriculture, Forestry and Other Land Use (AFOLU) sector" project. Financed under the Adaption for Smallholder Agriculture Programme (ASAP2) technical assistance facility, eight IFAD client countries will be supported in implementing existing and articulating new climate priorities in agriculture and rural development. IFAD also continues to engage with the Thematic Working Group on Agriculture, Food Security and Land Use, a country-led peer-to-peer network facilitated by FAO, in particular with regard to financing pro-poor climate action in agriculture.

Figure 5. Distribution of costed and non-costed measures by selected sector and region



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Chapter 3: Corporate climate risk assessment – SECAP

SECAP is an acronym for IFAD's Social, Environmental and Climate Assessment Procedures. These procedures essentially combine two complementary functions:

1. assessment of the nature and degree of risks, potential impacts and opportunities of relevance to IFAD programming in any given project development context; and
2. formal classification of the level of risks and potential impacts, together with specification of risk-mitigating measures to be taken.

Compliance with these measures is monitored throughout the lifetime of a project. Since 2016, it has been obligatory for all projects to undergo climate risk screening, ensuring that all projects from IFAD10 onward are climate mainstreamed. The SECAP process is fully incorporated into the quality enhancement process for IFAD-financed programmes/projects given that, through its implementation and the monitoring it requires, it also ensures that climate, environment and social concerns are thoroughly incorporated into IFAD's COSOPs, as well as project designs. In other words, the SECAP is also a system for ensuring that all mainstreaming dimensions are accurately taken into account.

In its eleventh replenishment cycle, IFAD committed to further enhance the SECAP to better incorporate environmental, nutritional and social dimensions and make it more effective at supporting country strategy plans, project design and project implementation, a process that has already started and is ongoing.

3.1 Why is it important?

Development is inherently a risky business and, in order to contribute maximum impact to achieve the SDGs and meet IFAD's commitments, it is important to undertake a risk assessment and identify responsive mitigation measures, as well as monitor the performance of the risk mitigation measures. The Environmental and Social Standards (ESS) are one such mitigation measure that are embedded in the SECAP.

The climate risk assessment focuses on the existing and changing climate-related risks to the proposed project activities and outputs, typically at the national scale and using a wide set of parameters, at the stage of development of a country strategy (COSOP). In this regard, the need for clear and robust risk identification and mitigation measures is increasingly important, especially in light of the importance of SECAP in supporting the targeting function in project design (following the recently approved targeting strategy).

As the project cycle moves forward, with project locations and the types of investment options narrowed down, a more detailed climate analysis is undertaken. This can specifically inform the nature and types of investments or at least the way that they are undertaken, for example the need for "climate proofing" of infrastructure. This has cost implications that are reflected in the project budgeting.

The level of climate risk and its implications for a proposed project, elaborated by environment and climate experts under the responsibility of the ECG Division, are assessed and validated independently within IFAD by the Operational Policy and Results (OPR) Division. This can result in the reclassification of the climate risk rating, with an associated requirement to undertake an in-depth climate risk analysis.

The SECAP is an approach that brings together information from various sources to assess climate risks relevant to IFAD project investments. Since its introduction in 2015, several significant updates to the data, tools and procedures have been undertaken, improving the quality of the approach.

3.2 How does it work?

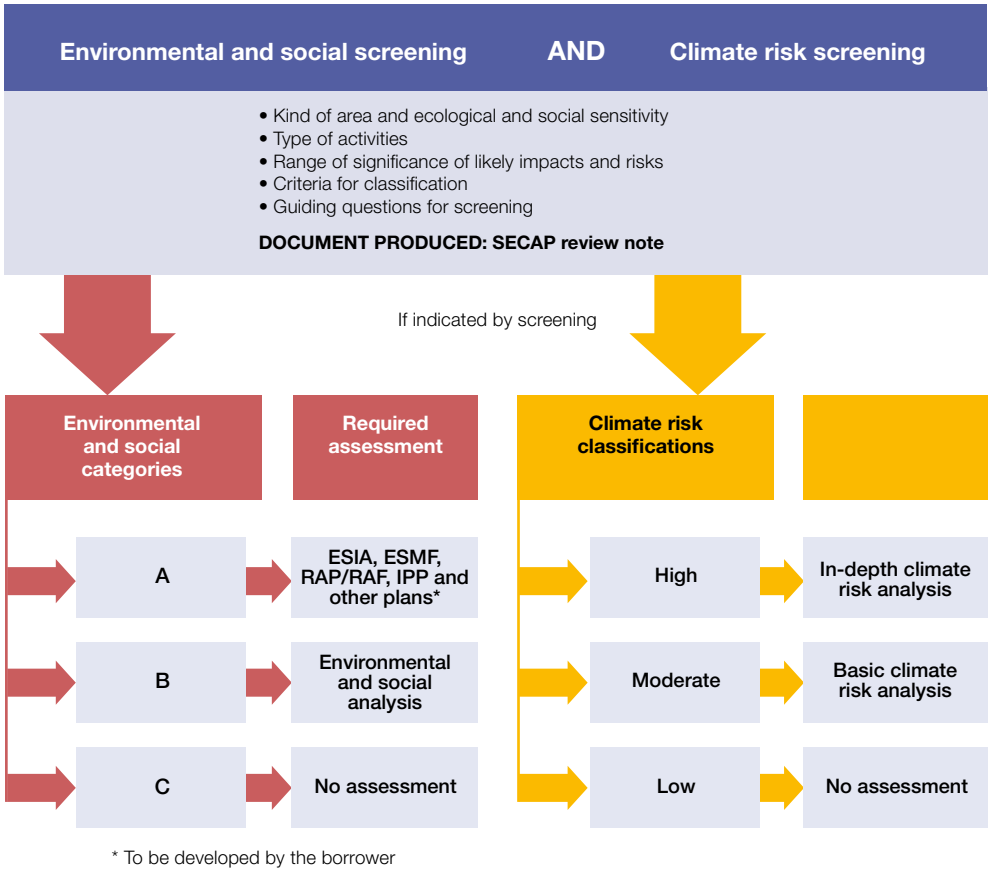
The SECAP is applied at the country strategy development, project design and project implementation stages. IFAD screens projects at the concept stage with respect to climate, environment and social issues in a given country and assesses the risks. The purpose of this screening is to identify the main social, environmental and climate risks and potential impacts associated with a project, define the necessary steps for further analysis and identify the relevant measures to enhance opportunities, address challenges and minimize potential risks. The potential impacts are screened with respect to a project's area of influence. The screening exercise is also used to determine the exposure and sensitivity of the project's objectives to climate-related risks based on available information about historical climate hazard occurrences, current climate trends and future climate change scenarios. In cases in which climate risk studies may already have been carried out for a project, IFAD reviews the work and determines whether any additional climate studies are required. The project is assigned one of three climate risk classifications: high, moderate or low.

The investments and contexts most commonly related to projects with a climate risk rating of "high" are (i) agricultural activities that have increasing sensitivity to extreme climatic events such as flooding and droughts; (ii) investments on floodplains and low-lying areas; (iii) heavy dependence on scarce water resources exacerbated by frequent droughts and rising temperatures; and (iv) smallholders with limited capacity and coping strategies

to increase their general resilience to the effects of climate change. This requires that project designs are informed by (i) a deeper risk assessment at the design stage and (ii) a better understanding of interconnections between climate, people and wider landscapes.

With regard to compliance with ESS screening, a project is categorized as "A" if it is likely to have significant adverse environmental and/or social impacts that are irreversible, cumulative or unprecedented. The impacts (i) may affect an area larger than the sites or facilities subject to physical interventions and (ii) are not readily remediated by preventive actions or mitigation measures. For category A projects, an Environmental and Social Impact Assessment (ESIA) or Environmental and Social Management Framework[7] (ESMF) and other documents[8] are prepared. The ESIA/ESMF examines a project's potentially negative and positive environmental and social impacts, compares them with those of feasible alternatives and recommends any measures needed to avoid, minimize, mitigate or compensate for adverse impacts and improve the environmental and social performance of the project. The draft ESIA/ESMF and relevant documents are disclosed on IFAD's website and in an accessible place in the project area, at least 120 days before the respective Executive Board session.

Figure 6. Snapshot of the SECAP screening process in the context of the larger SECAP screening-for-classification process[9]



7 Prepared when the zone of impact of subprojects and affected communities cannot be determined during the design stage.

8 Resettlement Action Plan (RAP)/Resettlement Action Framework (RAF), Free Prior and Informed Consent (FPIC)/Implementation Plan, Indigenous Peoples Plan (IPP) and documentation of the consultation process.

9 For more information see IFAD's Social, Environmental and Climate Assessment Procedures (SECAP) https://www.ifad.org/en/document-detail/asset/39563472

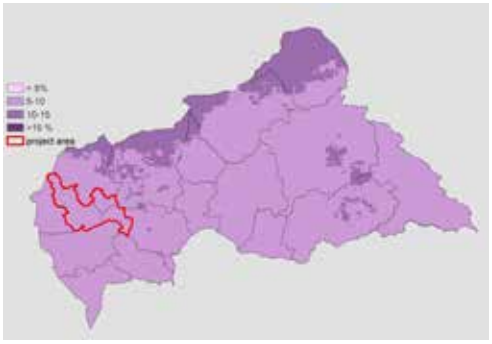
The screening also assesses the likelihood of a programme or project increasing the vulnerability of the expected target populations to climate hazards and includes an examination of the potential development opportunities that arise from a better integration of climate, environmental and social issues. Guiding questions for climate risk classification can be found in annex 3 of the SECAP.[10] The screening guiding questions are related to the frequency of extreme events, climate scenarios and climate vulnerability of the beneficiaries and the proposed investments (including the larger value chains).

The climate risk analyses conducted vary according to the availability of data and analyses, as well as the nature of the risks present. An example from the Central African Republic illustrates the power of mapping the actual or expected climate-related trends through the use of geospatial tools as part of the climate risk analysis for the SECAP background study (figure 7).

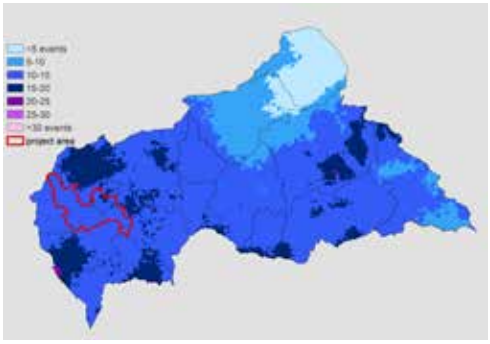
The analysis allows for changes in space over time to be examined, as the degree of change may be different or even opposite in different agroecological zones or parts of a country. This example was generated by IFAD's internal geospatial capacity in partnership with the IFAD-World Food Programme (WFP) Climate Analysis Partnership. This helped influence some decisions taken by the design team. The same geospatial team also produced thematic maps of other variables related to IFAD's other mainstreaming themes, such as environment, gender, youth and nutrition.

Figure 7. SECAP background study for the Central African Republic COSOP

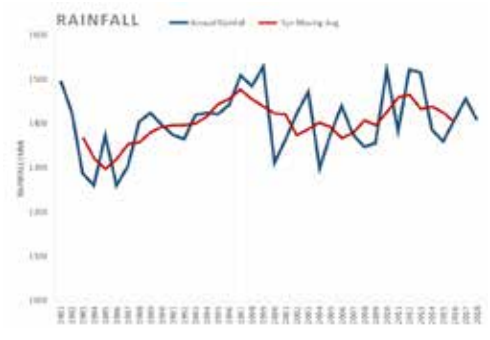
Annual rainfall variability 1981-2018



Annual heavy rains events 1981-2018



Annual rainfall trend 1981-2018



The red polygon represents the previous project area.

10 https://www.ifad.org/en/document-detail/asset/39563472

Climate risk analysis at the project design stage has also been combined with use of a tool developed by IFAD – the CARD assessment tool – to incorporate costs, benefits and climate considerations into alternative crop choices. An example and further description is provided in chapter 4.

3.3 The SECAP in 2019: analysis and results

One effect of the SECAP has been the standardization of the risk identification and assessment process. The proportion of project teams classifying climate risk as "high" has increased significantly and this has accelerated in quarter 2 of 2019. Of 30 SECAP review notes accompanying project concept notes and project design documents, two thirds have self-classified as "high". This includes two projects that had their climate risk classification upgraded and one that had its climate risk classification downgraded.

This "independent assessment function", introduced in mid-2018 with the creation of the OPR Division, uses standardized international climate risk sources together with contextual interpretation to help ensure an accurate classification. This is important because the climate risk classification of "high" triggers the requirement for a detailed climate risk assessment, which will investigate in depth the climate risk mitigation needs and recommendations. This detailed assessment must be presented for quality assurance/peer review, together with the full project design document; hence, it represents a process checkpoint and an opportunity for constructive feedback on how to ensure that sufficient climate risk management is mainstreamed into IFAD project investments. Finally, compliance with the SECAP-related requirements during the project implementation phase is monitored through regular supervision missions; the reports of these missions are also monitored in turn by the OPR Division and regularly reported on.

Table 1. Climate risk classification in the IFAD portfolio and pipeline: trends in climate risk ratings in IFAD projects

	Type	Climate risk high	Climate risk moderate	Climate risk low	Climate risk classification N/A[a]	Total
Portfolio	Number	29	111	7	83	230
	Percentage	12	48	3	36	100
Pipeline	Number	19	15	1		35
	Percentage	54	43	3		100
	Total number	**48**	**126**	**8**	**83**	**265**
	Total percentage	**19**	**47**	**3**	**31**	**100**

a This classification refers to projects designed before the SECAP system was in place or when the project is cofinanced and IFAD uses the safeguards of leading agency.

The SECAP is an approach that brings together information from various sources to assess climate risks relevant to IFAD project investments.

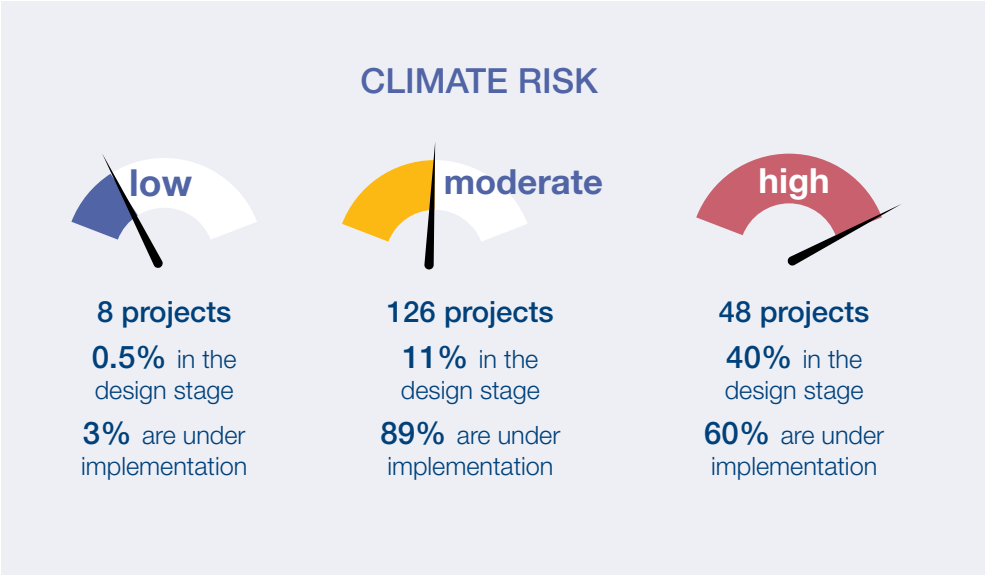
IFAD began piloting climate risk screening in 2015 and screening was fully implemented in 2016. Since July 2017, IFAD has instituted a more rigorous process for conducting compliance reviews of project concept notes, project design documents and supervision reports, to ensure that its operations conform to sound environmental and social safeguards, as laid out in the SECAP and other relevant policies and strategies.

Table 1 provides an overview of climate risk classifications in the IFAD portfolio and pipeline (under design or just designed), reflecting the now universal categorization and the tenfold increase in the percentage of project teams identifying their programming environment as having a high climate risk. "Portfolio" refers to active projects, which includes projects preceding and following the introduction of the SECAP.

The distribution of assessed levels of climate risk in project design contexts across the portfolio also varies by region:

- climate risk classification "high": 48 projects have this classification; 40 per cent are in the design stage and 60 per cent are under implementation;
- climate risk classification "moderate": 126 projects have this classification; 11 per cent are in the design stage and 89 per cent are under implementation;
- climate risk classification "low": eight projects have this classification; 0.5 per cent are in the design stage and 3 per cent are under implementation.

Figure 8. SECAP-screened projects in 2019 (as at 30 September)



The tremendous potential of the agricultural and food sectors to play a key role in achieving global mitigation objectives is being increasingly recognized, estimated and integrated into policies and strategies

Figure 8 reports the projects that have been assessed, approved and validated for the SECAP during the course of 2019 until 30 September.

The application of the SECAP has contributed to a more comprehensive and systematic approach to identifying and managing environmental, social and climate risks and their impacts. Alignment with SECAP requirements emphasizes the value of adhering to IFAD's policies, strategies and priorities.[11]

3.4 Next steps and partnerships

Extensive training on the SECAP took place in 2015 and 2016 and an updated training programme is already being planned and will be rolled out in 2020 to the recently decentralized IFAD. It is expected that there will be greater convergence as a result, while still reflecting the variation in geographical contexts and project interventions.

In addition, IFAD has established some key institutional partnerships to enable access to and application of specific climate-related data/tools/approaches/expertise, including with WFP, FAO, the Consultative Group on International Agricultural Research (CGIAR) and the European Space Agency (among others) at a global level and with others in more specific contexts.

Building on this experience and lessons learned, IFAD is in the process of revising the SECAP for 2020, with an initial focus on the safeguards dimension. It is anticipated that greater clarity will be provided in the guidance in terms of applying the SECAP to assess and anticipate the consequences of climate change in a multidimensional manner. The ongoing enhancement of the SECAP has the main objective of addressing existing gaps. This will ensure that SECAP safeguard policies, guidance and instruments reflect current global good practice on specific standards of MDBs, GEF, GCF/other climate financiers. It will also provide additional clarity between the assessment and the safeguard functions of the SECAP, while ensuring that they are aligned and mutually reinforcing.

Furthermore, as IFAD aspires to "co-mainstream" climate resilience, environmental sustainability and social inclusion through its projects and policy engagement, there will be more focus on the explicit interactions between climate trends on the one hand and specific impacts in terms of gender, youth and nutritional status on the other hand.

IFAD is expanding the capacity to use tools such as geospatial mapping to facilitate the SECAP. Although this will never be able to substitute for expertise on both the mainstreaming themes and the country development context, to ensure relevance and

11 Applicable IFAD policies, strategies and procedures include the land policy, indigenous peoples policy, environment and natural resource management policy, disclosure policy, climate change strategy and complaints procedures.

interpretation in terms of targeting (geographic, social) and investment choice, it represents a strong starting point to identify the risks and challenges to address in countries where strategies are being discussed and projects are being designed. Furthermore, this human capacity needs to be located as close as possible to the projects, including, importantly, within the project management units. Finally, the SECAP (both as a process and a toolkit) should be used in future throughout the project cycle – which is already happening through supervision missions, during which risk ratings are validated and monitored – as well as more explicitly with beneficiary populations. The SECAP lends itself to participatory project planning and scenario development in light of differential climate impacts on different crop choices, types of water use, infrastructure, locations, etc. This potential, using various tools and approaches but possibly tied together through the SECAP, still needs to be developed in IFAD operations. In this regard, it is envisaged that regular reviews of SECAP ratings to assess compliance and to report on actions to manage risks will be regularly undertaken during project implementation. In addition, analytical work is being conducted to ensure the use of more objective criteria and assessment of risk screening.

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Chapter 4: Tools for integrating climate change into project design

4.1 The Climate Adaptation in Rural Development resilience tool

How does climate change affect crop yields in proposed project areas?

This is the question that the CARD tool seeks to answer. Launched in March 2019 by IFAD's ASAP, the CARD tool is primarily conceived for public and private investors and decision makers willing to better account for climate risks in their investments and decisions. The CARD tool (previously called CREFA or Climate Risks in Economic and Financial Analysis) is a tool that can be used to explore the potential yields of different crops under the effects of climate change in a given agroecology. The climatic scenario taken into account is based on the representative concentration pathway RCP8.5, which is a "baseline" scenario that does not include any specific climate mitigation target and is based on the Intergovernmental Panel on Climate Change (IPCC) A2 scenario. The tool is also intended to support the quantitative integration of climate-related risks in agricultural and rural development investments and strategies, including economic and financial analyses.

How does it work?

The general idea underlying the CARD tool is to use an ensemble of global gridded crop-climate models, in the same climate scenario (https://www.ifad.org/en/web/knowledge/publication/asset/41085709), in order to explore a number of possible levels of risk in the same warming scenario. The range of future crop yields from the model ensemble is then summarized into simpler statistical indicators (e.g. the median) in the Excel interface.

The tool provides data for 17 major crops in nearly all African countries. It is currently available for North Africa, West and Central Africa, and East and Southern Africa. It is expected that it will become available by early 2020 for all IFAD regions.

How is it being used in IFAD project design?

1. To support the identification of the most vulnerable value chains on which to target adaptation interventions, which is particularly relevant at the country strategy stage. For example, in Madagascar, CARD analysis indicated a current reduction of about 6 per cent of rice yield down to 12 per cent by 2040 as a consequence of climate variability and change.
2. To support the decision to shift from one crop to another as a consequence of a specific crop vulnerability, during discussions at the project concept note stage. For example, CARD analysis indicates that, for rice production in some regions of Mali, the impacts of climate change on yields are so high (up to 40 per cent) that it raises the question of whether or not it makes sense to invest in this value chain, considering the potentially very high level of investment that would be required to enable production to become resilient (figure 9).
3. To provide estimates of the impacts of climate variability and change on yields, the CARD tool provides the necessary inputs to revise economic and financial analysis projections. In particular settings, the integration of climate risks in the economic and financial analysis, resulting from the use of data provided by the CARD tool, has led to a significant decrease in the financial indicators of a project.

Since March 2019, the CARD tool has been used in six IFAD project designs and four country strategy developments. In addition, it has been used by a wide range of users outside IFAD, including government representatives, business leaders, large international NGOs and consultancies.

An interesting example of its utilization is reported in figure 10. In this case, it has been used to estimate the additional irrigation requirements for an irrigation project under consideration in light of the best data available from downscaled climate projections. This can have considerable effects on the choice of crop and type of irrigation system and the economic rationale.

Next steps: the CARD tool

Although the CARD tool has already contributed to facilitating the integration of climate risks, the tool in its current set-up is not adequate to make investments resilient to climate change. Further action in four major areas is needed to realize the full potential of the tool:

1. **Continuing CARD tool development**. The CARD tool is a work in progress. As climate change progresses and affects crop yields, CARD's database will be enriched through data updates, which will add value. New data and information from peer-reviewed studies will be added as they become available, to improve the accuracy of data displayed in the tool.
2. **Expand the coverage of the tool** beyond Africa to all IFAD regions (available in quarter 1, 2020); add about 10 new crops, which are the most relevant consumption-wise and export-wise for each country individually (available in quarter 2, 2020); and establish a new module on finance to test the resilience to climate shocks of rural

financial institutions. New financial support provided by the French Development Agency is making these new activities possible (available in quarter 4, 2020).

3. **Build capacity for effective use**. CARD is a tool that requires sufficient technical capacity to interpret its results in a specific context and to respond to the results with adequate adaptation measures. Additional effort towards capacity-building is therefore required and foreseen within IFAD and among external users of the tool.
4. **Going from impact to solutions.** The CARD tool is not the solution for all problems and risks, but rather is a tool that can help project designers and decision makers think through potential alternative options and alternative solutions given the risks posed by climate change. To further enrich the potential of the tool, there is a need for an additional step to identify possible response measures. One way of achieving this will be through implementation of the Adaptation Framework (AF), described in the following section.

Figure 9. Rice yield potential in Mali given different climatic scenarios

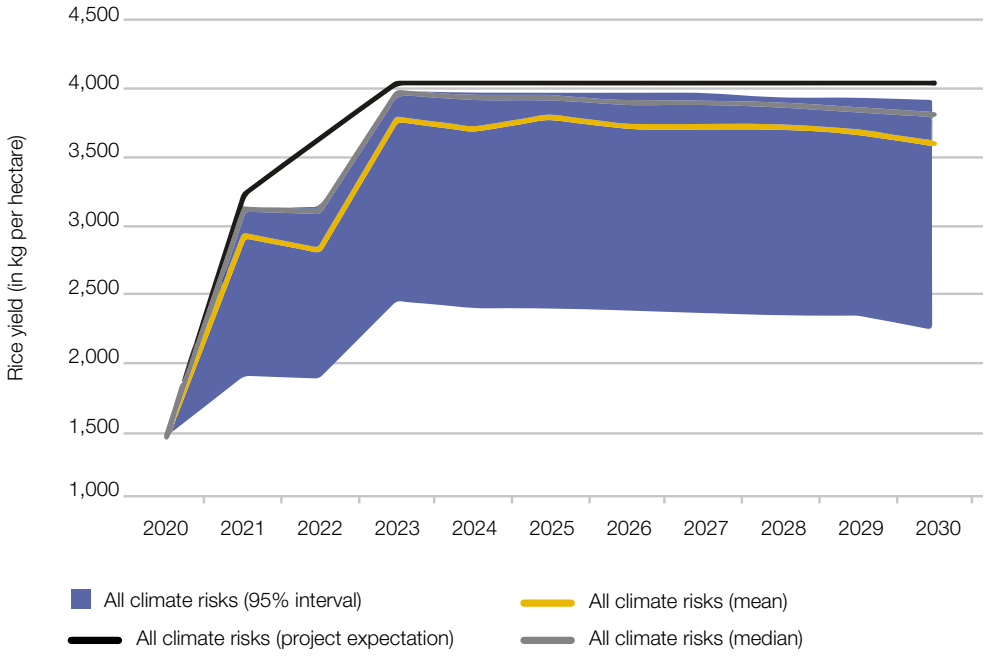
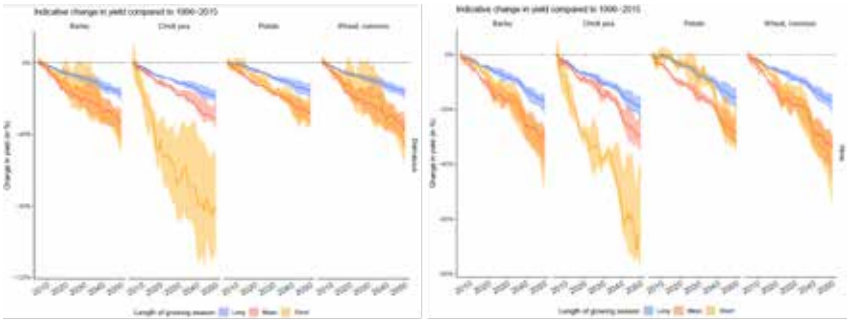


Figure 10. Irrigation requirements for various crops of different growing season lengths in a semi-arid environment as a result of climate change



4.2 Adaptation Framework

What are feasible adaptation options that respond to climate risks facing IFAD projects?

This is the question that the Adaptation Framework seeks to answer. The framework is a tool that IFAD is developing to facilitate and standardize the process of assessing and selecting adaptation options in IFAD projects to respond to climate risks and impacts identified through the SECAP process.

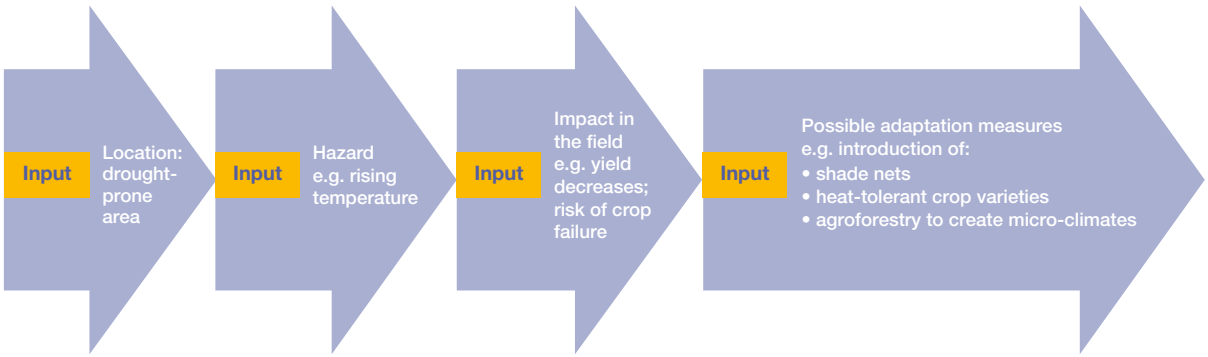
How does it work?

The Adaptation Framework synthesizes good practices and lessons learned from adaptation actions, including from IFAD's ASAP I programme, and will articulate the approach to adaptation for IFAD and provide steps to be followed by project design teams.

Adaptation Options System. A semi-automated system has been developed to assist IFAD staff with the identification and prioritization of adaptation options. The system uses a database of over 120 adaptation options, which are filtered according to the subsector of the project being assessed. This provides a shortlist of possible adaptation options, which can then be assessed using tailored multicriteria analysis. Criteria used in the multicriteria analysis include, among others, the cost-benefit ratio, technical feasibility, the degree to which climate risks are addressed by different options and complementarity to other cross-cutting IFAD themes such as gender equality. Mitigation co-benefits are also taken into account in the analysis. Specific guidance on how to score options has been developed to enable IFAD staff to make informed choices about the adaptation measures to include in a project design.

The Adaptation Framework provides information on potential adaptation options that project design teams may consider as a response to climate hazards and their related impacts for a specific project location and risks. These options are developed from the state of knowledge on adaptation from the literature and also IFAD project experience.

Figure 11. Using the Adaptation Framework: an example for drought-prone areas



4.3 Ex-ante carbon-balance tool

How much potential and actual mitigation benefits do IFAD project generate?

This is the question that EX-ACT seeks to answer. EX-ACT is a tool developed by FAO (http://www.fao.org/tc/exact/carbon-balance-tool-ex-act/en/) and now used in partnership with IFAD to generate ex ante estimates of the mitigation potential of agriculture and forestry development projects and estimate the net carbon balance from GHG emissions and carbon sequestration.

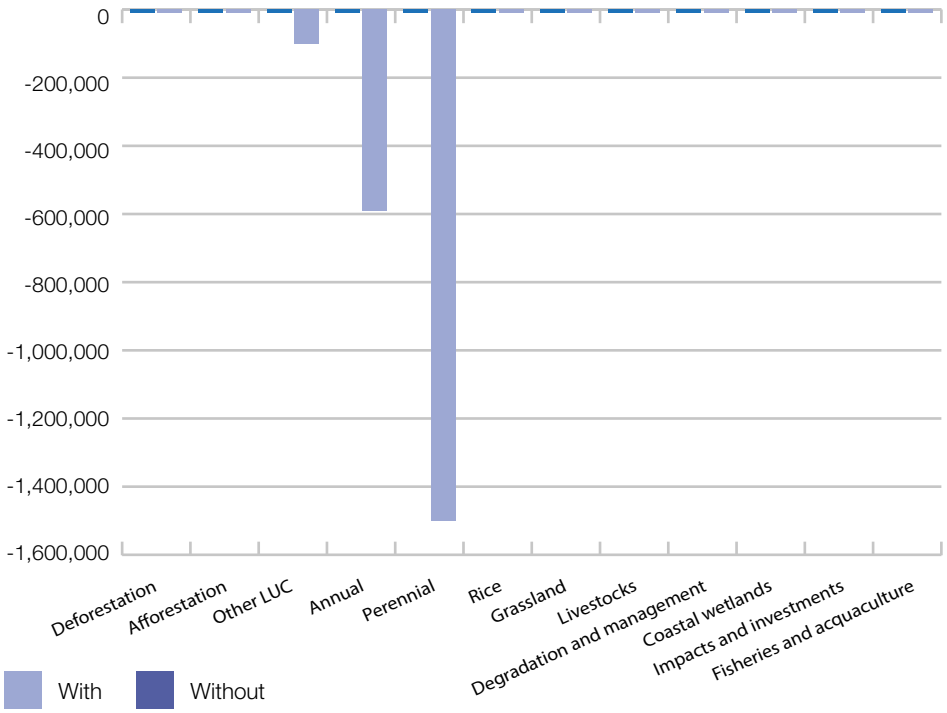
How does it work?

EX-ACT is a land-based accounting system, measuring carbon stocks, stock changes per unit of land, and CH_4 and N_2O emissions, expressed in tCO_2e per hectare and year. The main output of the tool is an estimation of the carbon balance associated with adoption of alternative land management or land use options, compared with a "business as usual" (or baseline) scenario. EX-ACT is primarily built on the tier 1 estimates of mitigation from agriculture provided in IPCC 2006, complemented by other existing methodologies and augmented with the 2013 wetlands supplement to the IPCC 2006 guidelines (IPCC, 2014), as well as other publications and data as relevant.

How is it being used in IFAD project design?

EX-ACT supports project designers to estimate potential mitigation benefits from planned projects. The amount of GHG mitigation estimated can also be assigned an economic value and used as part of the economic analyses and justification for mitigation financing.

Figure 12. Example of EX-ACT analysis of with and without project GHG emissions for the Niger PRECIS project



IFAD and the FAO EX-ACT team initiated a partnership in March 2019 on “mainstreaming ex ante greenhouse gas accounting into investments in agriculture and their economic and financial analysis”.

EX-ACT has been used to estimate the mitigation benefits from adaptation projects implemented under ASAP, as summarized in chapter 7.

An example of how the tool is being used in the design of the PRECIS project in Niger to strengthen the resilience of rural communities is shown in figure 12. This project was approved in September 2019, with a total investment cost of US$195.86 million, of which IFAD contributed US$88.38 million. The project includes a component that involves scaling up of sustainable agricultural practices to increase ecosystem resilience. EX-ACT was used to analyse the potential mitigation benefits from the planned project activities. As shown in figure 12, the “with” project analysis indicates a significant mitigation benefit from changes in both annual and perennial cropping that the project will promote. This analysis is important to enable donors and multilateral organizations to have confidence in the mitigation potential of IFAD interventions.

Next steps and partnerships: EX-ACT

IFAD and the FAO EX-ACT team initiated a partnership in March 2019 on “mainstreaming ex ante greenhouse gas accounting into investments in agriculture and their economic and financial analysis”. This three-year collaboration aims to identify low-carbon solutions that are compatible with agricultural development investments, including estimating mitigation co-benefits from adaptation options.

Seventy-five projects, at various stages in the project cycle, will be analysed with EX-ACT to quantify their carbon mitigation potential in tCO_2e, in addition to the amount invested in climate-focused activities. Of the 75 projects screened under the partnership, 15 will use the tool at the end of the project cycle, to compare the actual achieved mitigation with the mitigation potential estimated at project design. Under the agreement, in addition to estimating the EX-ACT GHG mitigation benefits for new projects coming to the IFAD Board later in 2019 and in 2020, a large effort to build capacity within IFAD and among its clients in partner countries is foreseen.

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Chapter 5: Tracking climate finance in IFAD's programme of loans and grants

5.1 IFAD's adaptation and mitigation investments

IFAD has committed to investing a quarter of its PoLG (2019-2021) in climate-focused activities. To monitor progress towards this target and to facilitate IFAD Board members in reporting their climate finance flows in compliance with the Paris Agreement, IFAD adopted the *MDB Methodologies* in 2019. Climate finance tracking in IFAD11 builds on the IFAD10 commitment to ensure that climate risk is mainstreamed in 100 per cent of IFAD's operations. It also carries forward the IFAD11 commitment to ensure that all new IFAD country strategies include an analysis of countries' NDCs under the Paris Agreement (see chapter 2), by helping to quantify how IFAD has materialized support towards the priorities communicated in countries' NDCs.

International financial institutions, as sources of climate finance and conduits for sovereign finance, are important actors in this context. Annually since 2011, six major MDBs[12] have jointly reported on their programmed climate finance using the *MDB Methodologie*s. Between 2011 and 2018, they cumulatively committed an estimated US$237 billion in climate finance. Using harmonized methodologies to produce collective data enhances

12 African Development Bank (AfDB); Asian Development Bank (ADB); European Bank for Reconstruction and Development (EBRD); European Investment Bank (EIB); Inter-American Development Bank (IaDB); Islamic Development Bank (IDB).

comparability across institutions and minimizes the potential for double-counting. The accuracy of reporting against shared goals is also enhanced.

In dollar terms, IFAD11 has committed to investing at least US$875 million in climate-focused finance (at least 25 per cent of a US$3.5 billion investment portfolio). As of 30 September 2019, IFAD11 has committed about US$244 million in climate finance across 15 approved projects. This means that, accounting for projects designed from 1 January 2019 to 30 September 2019, IFAD is a promising 28 per cent of the way towards achieving its climate finance commitment (Figure 13). Of this total, US$213 million has been identified as adaptation finance and about US$31 million as mitigation finance.

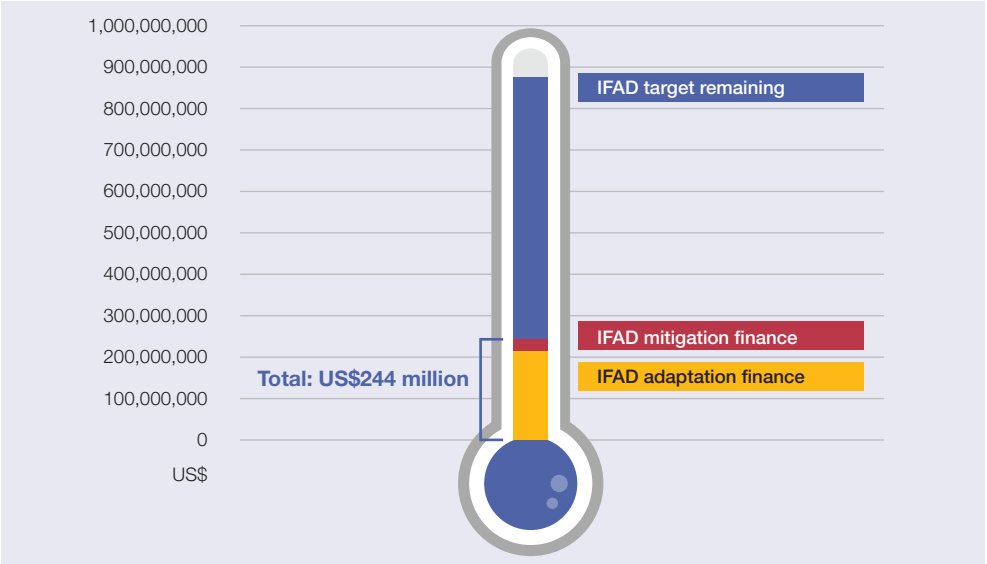
IFAD's key adaptation investments to date include:

- **Capacity-building**, e.g. for improved climate risk management and training in locally appropriate climate-smart agricultural practices;
- **Infrastructure**, e.g. irrigation investments in contexts of climate-induced water scarcity and rehabilitation and protection of climate-exposed roads and buildings;
- **Financial services**, e.g. climate risk-based insurance and specific targeting of climate-vulnerable beneficiaries to receive financial services; and
- **Research and development**, e.g. relating to climatic trends and adaptive varieties or technologies.

IFAD's mitigation investments to date fall under the following MDB-eligible activities:

- **Reduction in energy use in traction**, e.g. efficient tillage, irrigation and other agricultural processes;
- **Livestock projects that reduce methane or other GHG emissions**, e.g. manure management with biodigesters and improved feeding practices to reduce methane emissions; and
- **Reduction of non-CO_2 GHG emissions from agricultural practices and technologies**, e.g. paddy rice production, reduction in fertilizer use.

Figure 13. IFAD climate finance "thermometer"



The systematic adoption of the *MDB Methodologies* is positively influencing the quality of IFAD11 designs from a climate perspective. To be eligible for climate-focused investments, projects must now include a clear climate rationale on the basis of a robust, location-and sector-specific climate vulnerability context and designate clear budget allocations for adaptation and mitigation.

5.2 Status of IFAD11 climate finance

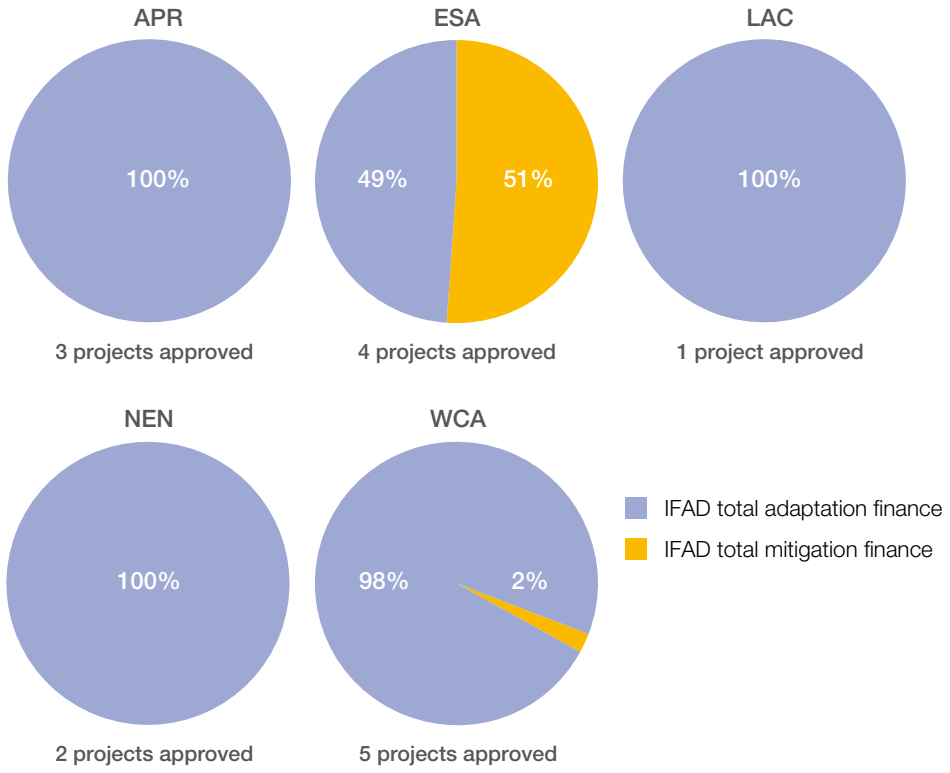
Figure 14 shows the 15 projects (in 14 countries) approved under IFAD11 as of 30 September 2019. Circles indicate the proportionate size of IFAD climate finance as a share of the total IFAD investment. In order of magnitude, the highest shares of climate finance are found in Cambodia, Morocco, Rwanda, Lao People's Democratic Republic and Burkina Faso. Where possible, the map also indicates specific project sites. The individual climate change adaptation and mitigation finance amounts per project are reported in annex II.

Figure 15 provides an overview of the distribution of adaptation and mitigation finance in IFAD projects across regions. In total, 87 per cent of IFAD climate finance to date supports adaptation activities. Only two projects include mitigation finance to date (Ethiopia and Liberia). The LAC climate finance share is currently still low, as the sample includes only one approval for this region to date.

Figure 14. IFAD11 approvals and their climate finance shares

Figure 16 classifies IFAD projects by MDB adaptation sector and corresponding subsector.[13] Projects are attributed to the subsector corresponding to IFAD's core interventions. To date, most of IFAD's adaptation investments (US$106.5 million, corresponding to about 44 per cent of the total climate finance investments) are concentrated in the "crop production and food production" sector. Investments in the "other agricultural and ecological resources" sector (US$62 million in total, about 25 per cent of total climate finance investments) are distributed across four subsectors. In order of magnitude, these are ecosystems/biodiversity (US$23.8 million, about 10 per cent of total climate finance investments), agricultural irrigation (US$18.4 million, about 8 per cent of total climate finance investments), fisheries (US$13.4 million, or 5 per cent of total climate finance investments) and livestock (US$6.4 million, or 3 per cent of total climate finance investments). Although livestock has received a lower share of IFAD's adaptation investments than other agricultural subsectors, it

Figure 15. Total IFAD climate change adaptation and mitigation finance by region



13 MDB adaptation subsectors have been taken from the *2016 Joint Report on the Multilateral Development Banks' Climate Finance*, which includes "examples of potential adaptation activities in some sectoral groupings". The MDBs jointly report on their climate finance at sector level; however, for IFAD's specialized mandate, also considering these subsectors allows for more granular reporting.
https://publications.iadb.org/en/2016-joint-report-multilateral-development-banks-climate-finance

has also received IFAD mitigation finance, as described below. In line with IFAD's specialized mandate, its adaptation investments in the MDB sector of "industry, manufacturing and trade" exclusively flow to food processing, distribution and retail (US$44.8 million).

Figure 17 shows considerable regional diversity in the priority areas for adaptation investment. WCA countries notably prioritize crop and food production activities (to the tune of US$78.1 million), as do LAC countries, in which this is the only area with investment to date (US$3.4 million). APR and WCA countries are currently the only countries to feature adaptation investments in industry, manufacturing and trade (as explained in figure 16, this relates to food processing, distribution and retail). ESA and NEN countries show "other"

Figure 16. IFAD adaptation investments by MDB adaptation sector and subsector

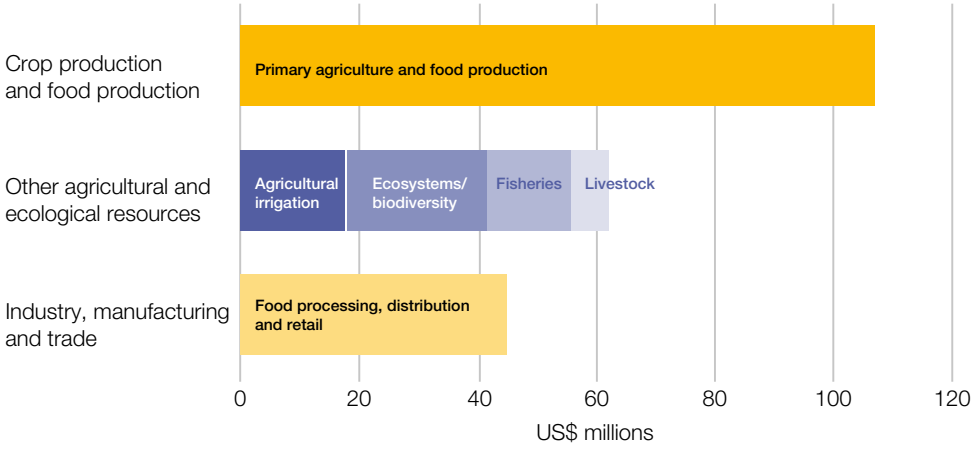
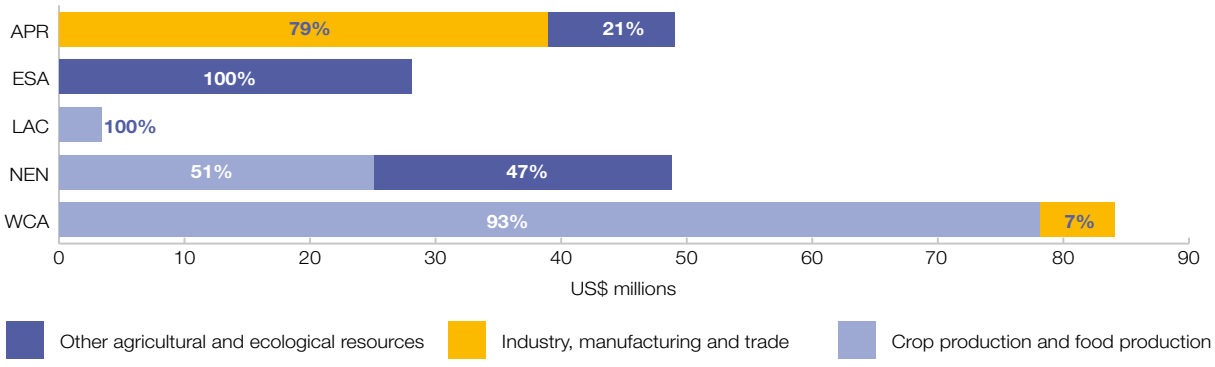


Figure 17. IFAD adaptation investments by MDB adaptation sector and region



35 per cent of the total IFAD11 investments approved to date have been validated as being climate-focused.

agricultural and ecological resources as the priority, which encompass agricultural irrigation, forestry, livestock production, fisheries and ecosystems/biodiversity.

In terms of mitigation activities in which IFAD has invested, as defined by the *MDB Methodologies* and matched against the ex ante GHG reductions estimated for each respective activity in projects' EX-ACT analysis,[14] the largest share (US$19.6 million) is reported for reduction in energy use in traction, followed by livestock projects that focus on increased productivity while reducing methane emissions (equivalent to about US$9.6 million) and reduction of non-CO_2 GHG emissions from agricultural practices and technologies (about US$1.7 million).

5.3 Next steps: tracking climate finance

Based on the 15 approvals under IFAD11 to date, US$244,188,000 in IFAD PoLG investments have been validated as climate finance, of which 87 per cent (US$213,356,000) has been identified as adaptation finance and the remaining 13 per cent (US$30,832,000) as mitigation finance. All investments to date include some, even if low, level of adaptation finance, whereas only two investments (in ESA and WCA) include mitigation finance. The two APR approvals have both the highest (71 per cent) and the lowest (0.4 per cent) share of climate finance. In dollar terms, WCA has programmed the highest amount of climate finance to date (US$85,846,000). This is unsurprising given that WCA already has five approvals compared with LAC's one, NEN's two, APR's three and ESA's four.

Although it is still early in the IFAD11 investment cycle, 35 per cent of the total IFAD11 investments approved to date have been validated as being climate-focused. Although individual projects' climate finance shares vary considerably, this early overall share is promising for the IFAD11 pipeline as a whole.

14 Given that, in most cases, mitigation comes as a co-benefit with adaption, currently only two IFAD projects [the Lowland Livelihood Resilience Project (LLRP) in Ethiopia and the Smallholder Agriculture Transformation and Agribusiness Revitalization Project (STAR-P) in Liberia] carry IFAD mitigation finance. LLRP is anticipated to achieve net reductions of 9.9 million tCO_2e over a 20-year period and STAR-P is anticipated to achieve reductions of 2.3 million tCO_2e over a 20-year period.

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Chapter 6: Supplementary finance for climate action

6.1 Role and importance of supplementary finance

TO DATE, IN 2019

gef

US$4.9m

ADAPTATION FUND

US$20.5m

GREEN CLIMATE FUND

US$18m

Supplementary funds are grant (and in some cases also loan) resources received from external donors (e.g. international organizations and funds, bilateral partners, foundations, the private sector) and managed on conditions agreed between IFAD and the associated financing partner. The resources are allocated outside IFAD's performance-based allocation and grant allocation systems and are typically used as cofinancing for specific initiatives, such as studies, capacity-building and technical assistance associated with IFAD investments. In many cases, these funds fill financing gaps and target mainstreaming environment and climate change considerations into the design of the technical components of a project to ensure the sustainability and climate resilience of the investment. They also aid IFAD in financing innovations and best practices directly associated with sustainable and climate-resilient agriculture and rural development that support member countries to contribute to the SDGs and to their NDCs.

Mobilizing resources from supplementary funds is a proven instrument for leveraging additional cofinancing to support IFAD's lending programme and deliver multiple sources of finance through a single channel, simplifying administration processes and reducing transaction costs and the burden on recipients. Such resources are a particularly important means of scaling up interventions in IFAD's target countries, supporting engagement in fragile situations and enhancing engagement with smallholders and rural communities, including with the private sector and rural finance institutions.

IFAD has committed to mobilizing US$500 million in supplementary climate and environmental finance by 2025 (at least US$200 million in IFAD11). To achieve these commitments, IFAD's new Strategy and Action Plan on Environment and Climate Change (2019-2025) specifically calls for the mobilization of supplementary resources from global climate and environmental funds such as the GCF; the GEF Trust Fund and the GEF-managed Special Climate Change Fund (SCCF) and the Least Developed Countries Fund (LDCF); and the AF.[15] IFAD is also striving to develop new partnerships with a range of climate finance mechanisms.

This chapter will present the IFAD's partnerships with key financing mechanisms and highlight achievements in 2019 and future directions.

6.2 Partnerships with international environmental and climate finance mechanisms

IFAD's strategy for supporting developing countries' planned actions to address climate impacts on agriculture includes targeting use of its own resources (see chapter 7), as well as developing strategic partnerships to leverage and effectively use supplementary funds.

One of the earliest of these partnerships has been with the GEF, to which IFAD was accredited in 2002. Since then IFAD has developed a close and productive partnership with the GEF Secretariat, which manages the GEF Trust Fund, the LDCF and the SCCF. While continuing to cultivate this very important partnership, and in order to achieve its IFAD11 commitments, the ECG has made concerted efforts in 2019 to increase its collaboration with the AF and to initiate its partnership and build a programme with the GCF. The result has been a growth in its portfolio of AF projects and the approval of two GCF projects in 2019. New partnerships with bilateral funds and innovative climate finance mechanisms have also been explored.[16]

GEF Trust Fund and LDCF and SCCF

IFAD's significant portfolio of projects funded by the GEF has largely been financed with resources from the land degradation focal area. Activities supported are primarily sustainable land and water management, watershed/ecosystem management, rangeland management and similar projects that improve the food security and livelihoods of smallholder farmers and pastoralists. These projects are often complemented with resources from other GEF focal areas, such as biodiversity and climate change mitigation, and/or LDCF/SCCF resources. Although the GEF does not finance adaptation directly, sustainable land management projects generate multiple benefits, including strengthening resilience to climate change and reducing/avoiding carbon emissions. IFAD is promoting adoption of climate-smart agriculture and food security through many of its GEF projects.

IFAD has also developed a solid portfolio of LDCF and SCCF projects, whose objectives are to strengthen the resilience of smallholders and poor rural people to climate change.

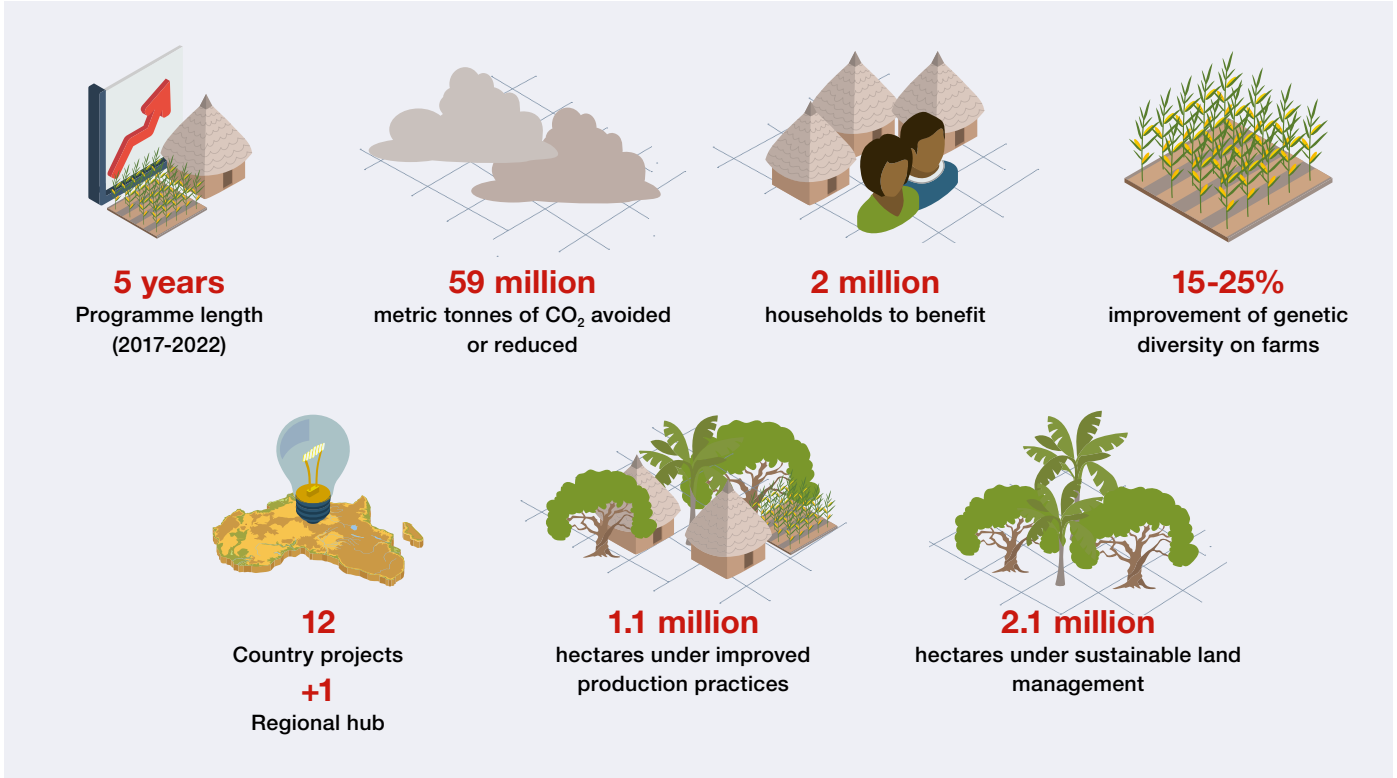
The GEF Trust Fund was replenished with US$4.1 billion for the period July 2018 to June 2022, and the new investment cycle, known as GEF-7, has begun. During 2019, IFAD

15 See annex III for more information.

16 These include, among others, the International Climate Initiative (IKI) funding mechanism (https://www.international-climate-initiative.com/en/about-the-iki/iki-funding-instrument/) and the private sector window of the GCF and, more recently, the GEF.

Figure 18. Map of IFAD supplementary finance (as at November 2019)

Figure 19. Success factors of the Integrated Approach Pilot



BOX 2. Adaptation Fund and the Talent Retention for Rural Transformation Project

Climate adaptive and environmental benefits are at the basis of the Talent Retention for Rural Transformation Project in Moldova, made possible through AF support to provide a range of climate-resilient investments in rural areas. The AF is fully integrated into the IFAD project. It will complement the IFAD investments by further strengthening climate-resilient infrastructure, on-farm climate adaptive water management and conservation agriculture activities, building the capacity of the academic institutions to teach conservation agriculture techniques in Moldova. The AF proposal was developed thanks to ASAP-2 funding.

has largely been engaged in developing a pipeline of projects for the GEF/LDCF/SCCF, supporting countries to develop Project Identification Forms for eventual GEF Council approval, while also implementing the significant portfolio of GEF-6 projects. Potential GEF-7 projects have been identified in close consultation with the line ministries and national GEF Operational Focal Points at the COSOP stage, during the design of an IFAD investment when a funding gap is identified or in response to a country request for support. Approval of the fully prepared projects is expected in the second half of the GEF-7 period.

Integrated Approach Pilot

The Resilient Food Systems programme is one of the three Integrated Approach Pilots funded by the GEF. Implementation is led by IFAD, in collaboration with 12 African countries and several regional partners. The five-year programme is committed to fostering sustainability and resilience for food security in sub-Saharan Africa, contributing to a paradigm shift in the continent's agriculture, one that emphasizes the importance of natural capital and ecosystem services to enhance agricultural productivity.

Adaptation Fund

IFAD was accredited to the AF in 2010 as a Multilateral Implementing Entity (MIE), enabling it to support vulnerable member countries that are parties to the Kyoto Protocol to mobilize resources to meet their urgent adaptation needs in agriculture, disaster risk management and rural development. In the period 2012-2018, only two IFAD projects (Lebanon, Iraq) were submitted to and approved by the AF Board. The low level of collaboration with the AF was partly the result of a limitation of AF resources that could be accessed by an MIE to 50 per cent and to the US$10 million cap per country. In 2019, IFAD has made a significant investment in enhancing its collaboration with the AF, resulting in three new projects approved for Sierra Leone, Moldova and Georgia, with an estimated total value of US$20.57 million.

Green Climate Fund

IFAD became an Accredited Entity of the GCF in 2016 and signed the Accreditation Master Agreement in September 2018, which opened the door for IFAD to submit funding proposals to the GCF. IFAD is accredited for medium-sized projects up to US$250 million (inclusive of cofinancing) with a category B or C environmental risk rating. IFAD has been accredited to apply for both loans and grants.

IFAD's first GCF project, Resilient Rural Belize (Be-Resilient), with a budget of US$8 million, was approved by the GCF Board in February 2019 (box 3). The complementarity of the IFAD loan, targeting productive development, and a GCF loan and grant that promotes increased resilience and directly addresses climate change threats has encouraged Belize to commit to an innovative approach to agricultural development that can significantly change the development path for rural smallholders.

The GCF Board approved IFAD's second GCF project, Niger: Inclusive Green Financing for Climate Resilient and Low Emission Smallholder Agriculture, with a budget of US$10 million, at its November 2019 meeting. This is an innovative pilot project that has the potential to lead to a larger programme in the WCA region. Building on an active IFAD portfolio in Niger, the project aims to remove key barriers to accessing financial and non-financial services in order to support farmers to build the resilience of their agricultural and water resource management practices. The project will further promote renewable energy technologies, thereby reducing GHG emissions from energy use within the agricultural value chain.

IFAD has been on a steep learning curve in 2019 to understand the GCF policies, procedures and funding proposal requirements. Much effort has also been dedicated to developing draft IFAD-GCF procedures for internal consultations, as well as to preparing a Work Programme for 2019-2023, which is a GCF requirement for all Accredited Entities. This has been carried out through a consultative process. Through an ASAP project that financed three workshops (Abidjan, Nairobi and Johannesburg) on climate-resilient and low-emission smallholder agriculture in Africa, potential GCF project ideas were discussed with the National Designated Authorities (NDAs), who are responsible for coordinating collaboration with the GCF in their countries.

Box 3. Belize Be-Resilient GCF project

Project size: **US$20 million** **GCF contribution:** **US$8 million**

Results areas: Increased resilience of the most vulnerable people and communities, well-being, and food and water security; and improvements in infrastructure and the built environment.

The project directly supports 30,000 smallholder farmers and up to 29 per cent of the population of Belize to adopt climate-resilient agricultural practices and improved market access for their produce. The objective is ensuring food security, even under the stress of climate change and extreme climatic events. Be-Resilient will initially work in 23 communities clustered in five priority districts and activities will focus on the development of value chains of horticultural products.

The project entails transformation of agricultural extension services through building capacity and tools to value climate change as a main criterion for planning and decision-making, Two complementary and mutually reinforcing components are envisioned: (i) climate-resilient value chains and (ii) climate-resilient rural infrastructure and assets development. Both components are supported by cross-cutting activities including participatory planning for increased ownership, development of a culturally adequate and readily available climate information system, and research and development to support policy engagement on index-based insurance and ecosystem services payments.

Mobilizing resources from supplementary funds is a proven instrument for leveraging additional cofinancing to support IFAD's lending programme and deliver multiple sources of finance through one single channel.

Next steps with multilateral environment and climate funds

In recognition of the important role that agriculture plays in Africa and its vulnerability to climate change impacts, with ASAP2 support IFAD has collaborated with the Africa Sustainability Centre (ASCENT) in organizing three workshops to engage with authorities responsible for climate finance. The purpose of the workshops was to build linkages with the national focal points responsible for the GCF, AF and GEF, increase awareness of the significance of agriculture in African economies and the need to channel climate finance to this sector, familiarize the focal points with IFAD's business model and in-country operations, and support the focal points in programming climate finance. These workshops have been instrumental in building a rapport with the national focal points and in identifying priorities that enhance IFAD investments in Africa and support countries to contribute to the SDGs and to their NDCs.

Looking to the future, IFAD will continue to develop its GEF-7 portfolio.[17] Concerted efforts will be made to consult with national partners and Operational Focal Points on LDCF project ideas in light of the US$160 million in new funding to the LDCF that was pledged at the United Nations Climate Week in September 2019.

As for the AF, the per-country cap is expected to be raised to US$20 million in the near future. IFAD has initiated consultations with the Designated Authorities, particularly in Africa, through the above-mentioned series of climate finance workshops, with a view to developing a healthy project pipeline. There is reason for optimism that at least three projects, with a total value of US$30 million, will be approved in 2020.

For the GCF, during the replenishment meeting in October 2019, 27 countries pledged US$9.776 billion to replenish the GCF for the next four years. It is expected that at least three funding proposals, which have already been endorsed by the NDAs, will be submitted for funding to the GCF in 2020. Four to six project concepts, which have been identified in the IFAD GCF Work Programme, are also under preparation for submission in 2020.

The GCF is unique in its ability to engage directly with both the public sector and the private sector. The GCF engages directly with the private sector through its Private Sector Facility (PSF). Currently, IFAD is the only United Nations agency that is accredited to the GCF for on-lending, and consultations with the PSF have identified collaboration with the GCF on private-sector initiatives as a potential niche for IFAD. The approval by the IFAD Executive Board of the private sector strategy will be the first important step towards opening

17 The current pipeline consists of three approved PIFs, for which the full projects are under preparation, with a total value of US$16 million, and nine pipeline projects.

collaborations between IFAD and the GCF in this area.

6.3 Developing new partnerships

As highlighted throughout this report, the ECG is in the process of strengthening its capacities and developing tools to support countries to access resources to deliver their climate actions in the agricultural sector. IFAD continues to explore collaborations with different sources of climate finance, for example the bilateral climate funds, such as the German Government's International Climate Initiative (IKI), the private sector and foundations.

IFAD and the Global Innovation Lab for Climate Finance (the Lab) launched a new partnership in September 2018[18] whose purpose is to help build the resilience of African smallholder farmers to combat climate change through developing and scaling up innovative financial instruments. Following the special call for ideas that target sustainable agriculture for smallholders in the WCA region, two instruments were selected: Blockchain Climate Risk Crop Insurance and the West African Initiative for Climate Smart Agriculture. IFAD is a member of the Advisory Committee and will be monitoring the instruments for possible use in IFAD investments. IFAD has partnered with the Lab because business solutions are important for addressing issues related to the increasing climate impacts on smallholder farmers and agriculture in Africa. The Lab's innovative mechanisms show the tremendous opportunity there is for the private sector to take a more central role in accelerating sustainable agriculture, particularly in the WCA region, home of many of the world's fastest growing economies and where further synergies such as those already reported in this chapter can be strengthened and expanded further.

18 https://www.ifad.org/web/latest/news-detail/asset/40784901

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Chapter 7: Project implementation

7.1 Progress on adaptation and environmental management in IFAD's projects

IFAD has recently revised its project design approach so that a much stronger focus is placed on background documentation to support the SECAP system. This requires a Project Delivery Team that includes a team leader expert on the main focus of the project and the inclusion of a Climate and Environment expert, among others. Project designs are approved through a dedicated meeting with all experts, with quality control and validation including a strong focus on climate- and environment-related matters.[19]

The Report on IFAD's Development Effectiveness 2019 notes that IFAD's country-based projects met or exceeded their targets for adaptation to climate change overall and that IFAD10 climate change adaptation targets were significantly exceeded.

The table below summarizes information from the project report from the Operational Results Management System (ORMS)[20] scoring of ongoing projects on climate change adaptation (CCA) and environment and natural resources management (ENRM). Overall, 91 per cent of IFAD's ongoing projects have attained a score of 4 or above for CCA, thus surpassing the target level of 85 per cent; 84 per cent of projects scored 4 or above on ENRM indicators, just 6 percentage point below the target level. For projects closed in 2019 both objectives are met.

19 As indicated in chapter 3, the validation function of the SECAP is implemented at this stage by the OPR Division of IFAD.

20 Up to 28 October 2019.

7.2 The Adaptation for Smallholder Agriculture Programme

The implementation experience from IFAD's ASAP provides some important insights into how mainstreaming climate change concerns can unfold in the field with project implementation. IFAD established ASAP in 2012 with the support of 12 donors. Under the programme, a trust fund was set up, which provided grants focusing on adaptation in agriculture, linked to the IFAD loans, to promote development in the small-scale agricultural sector. ASAP is based on a theory of change that calls for developing a deeper understanding of climate risks facing a specific project context as a first step, followed by a process of identifying suitable responses to such risks through a consultative process on the ground to develop action plans, which are then supported through innovative financing models that include grants and links to climate finance. In this chapter, we focus on the second step, that is, how ASAP facilitated participatory consultation to identify suitable responses to climate risks.

In terms of potential adaptation actions, ASAP has a major focus on "multiple benefit approaches". Essentially, these approaches focus on the potential to improve natural resource management as a co-benefit of adaptation practices. Based on a significant body of literature on ecosystem management in agriculture, the expectation is that improving natural resource management in agricultural production and rural spaces is an integral (but not sole) component of enhancing the resilience of poor rural people to climate change. Improving the management of natural resources through the adoption of improved agricultural practices is expected to increase productivity in agriculture, enhance non-market benefits to rural households (access to water for household use, for example) and reduce vulnerability to shocks, which have long-term impacts on income growth. Widespread scaling up of these agronomic practices is expected to generate multiple benefits in the form of poverty reduction, biodiversity conservation and reductions in GHG emissions.

Table 2. IFAD projects in 2019: climate change adaptation (CCA) and environmental and natural resources management scores (ENRM) (as at October 2019)

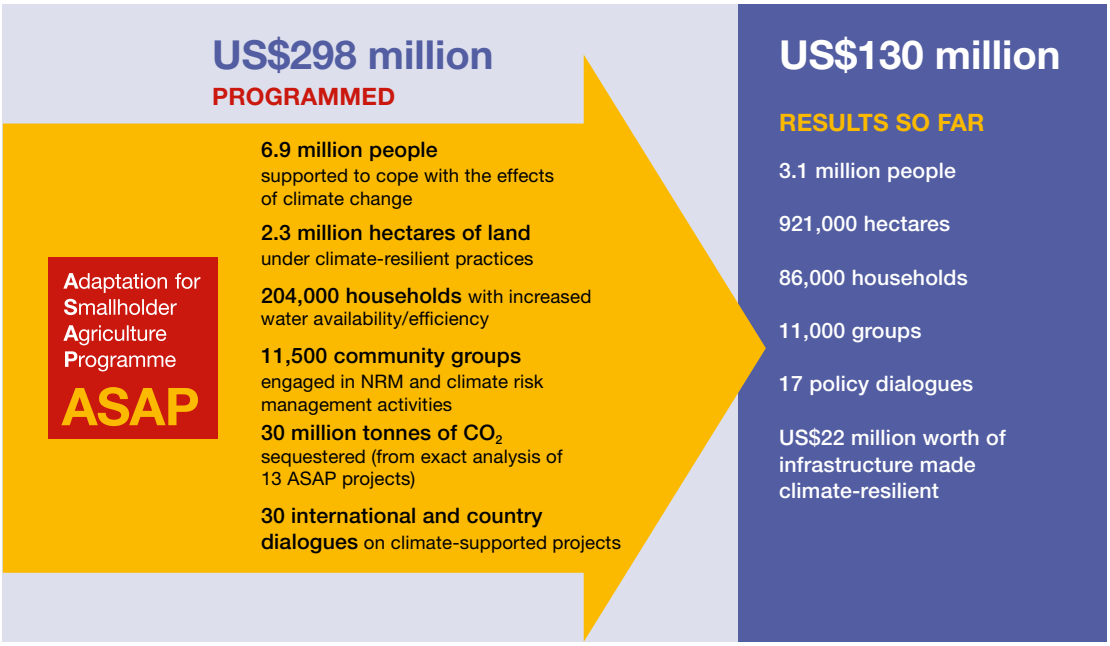
	Ongoing projects (total = 186)	Projects closed in 2019 (total = 39)
No. reporting on CCA	184	39
No. scoring 4 or above on CCA	168	38
No. reporting on ENRM	176	39
No. scoring 4 or above on ENRM	153	36
% of IFAD11 commitments attained for CCA (target = 85% scoring 4 or above)	91	97.2
% of IFAD11 commitments attained for ENRM (target = 90% scoring 4 or above)	84	92.3

Box 4. Scaling up multiple benefit approaches in Mali

The Fostering Agricultural Productivity Project (PAPAM/ASAP) in Mali is a good example of how participatory consultation fostered upscaling. Mali is one of the Sahelian countries that has been hardest hit by climate change. Observed climate changes and projections in Mali indicate deteriorating conditions with (i) an increase in the average temperature across the country, with a corresponding potential increase in evapotranspiration; (ii) a progressive decrease in rainfall, with an irregular spatial distribution; and (iii) an increase in the frequency and magnitude of climate extremes (droughts, floods, high winds). A loss of agricultural production of about 17 per cent is envisaged by 2050. Use of fuelwood for energy was a major driver of deforestation in the area, which in turn led to land degradation that increased vulnerability to drought and floods. The PAPAM/ASAP project was funded by IFAD through a loan of US$40 million and an ASAP grant of US$9.9 million.

A primary feature of the adaptation component was a dedicated effort to involve all relevant actors in the identification of causes and finding solutions to the climate vulnerability of people and ecosystems. The development of household-managed biogas digesters was a key innovation identified from a participatory mapping exercise conducted under project implementation. These were included in the development municipal adaptation plans, which identified priority adaptation actions based on analysis of vulnerabilities and ecosystem conditions. The municipalities were given direct responsibility and financial support for the implementation of the plans. Household biogas digesters were initially envisioned as a small add-on component to the overall project, but through participatory mapping exercises they emerged as an intervention with high demand and thus became a major feature of the project. Given the positive experience with biogas digesters in the ASAP project, the country is now scaling up the use of biogas digesters in subsequent projects. Lessons learned from PAPAM/ASAP implementation have been integrated into a new IFAD loan of US$40 million for the Multi-énergies pour la résilience et la gestion Intégrée des Terroirs (MERIT) project.

Figure 20. ASAP: planned and achieved (as at October 2019)



The ASAP model focuses on building conditions to achieve wide deployment of the response measures, which includes the development and dissemination of relevant evidence, as well as enhancing the capacity of users and empowering them. The assumptions underlying this action element are that participatory involvement of the full range of stakeholders involved in achieving effective adaptation – from the farmers to the policymakers at local, national and international levels – is key to achieving impacts at the desirable scale. Box 4 provides details of how this process worked in one of the ASAP projects.

7.3 Expanding climate change in IFAD's project portfolio implementation

The lessons learned from the ASAP project implementation experience are being incorporated into the broader IFAD project portfolio. Other chapters in this report detail the mainstreaming of the climate risk assessment process and mobilization of climate finance. In addition, we can see examples of how on-the-ground consultations and focus on multiple benefit approaches are being implemented. For example, IFAD is piloting the Gender Action Learning System (GALS), which has been modified to include climate change aspects in projects being implemented in Rwanda and Madagascar. It includes using the traditional GALS tools with an integrated climate component. This approach can help identify differences in the ways that men, women and youth can contribute to climate change adaptation and mitigation, in the ways that they respond to climate risks and in how they are able to shift from short-term coping mechanisms to resilience. The technique includes the use of visual materials and diagram tools to encourage people taking part to think about their current life situation and to start planning and visualizing their future. In the case of Rwanda, it has been helpful in identifying areas of change at the household level to build more climate resilience and selecting specific champions from the rural communities to share their learning and train others. The GALS methods also encourage the uptake of climate-smart techniques, which the smallholder farmers might already be aware of but have not yet implemented. The GALS pilot in Rwanda is part of a wider IFAD intervention under the joint programme, Accelerating Progress towards the Economic Empowerment of Rural Women. This is a joint initiative by FAO, IFAD, WFP and UN Women, with the overarching goal of securing rural women's livelihoods and rights in order to achieve sustainable development in Ethiopia, Guatemala, Kyrgyzstan, Liberia, Nepal, Niger and Rwanda.

7.4 Participatory mapping

IFAD has a long history of deploying participatory mapping tools and approaches. The resilience of local communities to the effects of climate change is strongly reliant on access to and control over livelihood assets. These include both tangible (natural, physical and financial) and intangible (human and social) capital. The joint display and interpretation of a physical landscape, which has been accompanied by designated training and expert facilitation, has allowed many community members to better understand the sensitivity of the asset base and identify possible joint actions to ensure its continued protection. These processes have strengthened natural resource conservation and introduced alternative livelihood systems, and have contributed to reducing vulnerability, strengthening resilience and building adaptive capacity in areas prone to climate hazards.

Many IFAD projects have used participatory mapping of climate adaptation impacts. For example, the Kirehe Community-based Watershed Management Project (KWAMP) and the Support Project for the Strategic Plan for the Transformation of Agriculture (PSTA) in

Rwanda adopted participatory mapping to develop participatory watershed management plans. The combination of community maps with a geographical information system (GIS) clarified the relationship between human and climate-related pressures.

7.5 Renewable energy technologies

With respect to renewable energy technologies (RETS), over the past decade, IFAD has deployed renewable energy activities in over 18 countries. In Nigeria and Rwanda, IFAD has introduced energy-efficient processing and storage technologies such as solar heating, cooling, drying and energy-saving appliances, whereas in other countries, such as Mali, China, Mozambique and Rwanda, IFAD has enhanced and diversified access to clean energy sources through the promotion of household biogas digesters, solar home systems and solar photovoltaic pumping systems. IFAD has promoted hybrid solar/wind mini-grids in India for village electrification and solar mini-grids and multi-purpose water mills in Nepal for grinding, hulling and pressing. More recently, in Morocco, biomass-based energy systems have been promoted for the recovery of olive waste to use as heat and processing oil.

Most of the examples cited above, however, have been promoted on an ad hoc basis without an approach for scaling up projects at the national level or across a region. Currently, however, with the advent of the ASAP, a more strategic approach to integrating renewable energy technologies into projects is being pursued. The promotion of "multiple benefit" approaches together with a scaling-up strategy has been piloted in a few countries, leading to larger-scale investment projects being developed subsequently (as in box 4). Both the ASAP and the GEF grants have encouraged governments to invest in testing innovative renewable energy technologies that they would otherwise be averse to funding with loan financing.

So far in 2019:

4 projects worth

US$153m

include RETS

©IFAD/Petterik Wiggers

Chapter 8: Impact assessment

8.1 The IFAD approach to impact assessment

IFAD assesses the impact of its projects using scientifically sound approaches that entail creating a counterfactual to determine attribution. This is achieved by comparing a representative sample of project beneficiaries (treatment group) with a similar group of individuals not exposed to the project intervention (control group). The outcomes of the individuals in the control group provide, on average, a good approximation of the outcomes that beneficiaries would have obtained had they not received the intervention. Therefore, by comparing the outcomes of the two groups, it is possible to assess the changes (impacts) that are attributable to a project.

IFAD has established rigorous methods of data collection and complementary statistical analysis, as well as careful quality control procedures, for attributing impacts and ensuring the reliability of results.

Corporate reporting includes measuring key indicators, which are linked to the IFAD strategic goals and objectives, namely economic mobility, improved productive capacities (strategic objective 1), improved market participation (strategic objective 2) and greater resilience to climate change (strategic objective 3). These indicators complement specific impact indicators identified for each project based on its theory of change.

Given the high dependence of agriculture on rainfall patterns and temperature, Impact Assessments have been expanded to include geo-referenced climatic variables in addition to the large number of socio-economic, agricultural production, land and agroecological data. This expansion of data collection has been possible thanks to the support received from ASAP2 funding, which triggered a further collaboration between the Research and Impact Assessment (RIA) and Information and Communications Technology (ICT) Divisions of IFAD.

IFAD has established rigorous methods of data collection and complementary statistical analysis, as well as careful quality control procedures, for attributing impacts and ensuring the reliability of results.

8.2 Geo-referenced climatic and agroecological data

Using Global Positioning System (GPS) technology before and during data collection, farm plots, agricultural fields, irrigation sites, roads, markets and other physical infrastructure have been geo-referenced to obtain granular information on key climate, weather and biophysical measures that are relevant for the specific type of project under assessment.

In the impact assessments conducted under this initiative and completed in 2019, geo-referenced data have been used for one or more of the following purposes:

- **Support the design of the sampling strategy**. Geo-referenced data, such as those on long-term biophysical characteristics, presence and accessibility of physical infrastructure and weather shock occurrences since project inception, have been used to help select suitable control areas to create a solid counterfactual.
- **Improve understanding of what determines project outcomes**. Using geo-referenced data, it is possible to evaluate which climate and weather variables are either fostering or inhibiting the attainment of intermediate outcomes, such as adoption of various crops, fisheries and livestock practices, improvements in natural resource management, adoption of practices to reduce post-harvest losses or improve nutrition outcomes, to name but a few. This generates valuable information that can be used to inform future project design or to apply changes during implementation to ensure that the original objectives are met in the cases in which IA is undertaken during the course of the project.[21]
- **Provide evidence on resilience and on outcome indicators**. Once relevant climate and weather variables are identified, it is possible to assess whether and to what extent the estimated project impacts on the outcomes of interest vary under specific climate or weather conditions. In addition, it is possible to assess whether the self-perceived ability to recover from shocks complies with outcomes obtained when climate shocks or anomalies are measured using climatic data (see following case studies). The results of this type of analysis provide key evidence on different elements of resilience.

The next sections provide details of projects in which climate and environmental geo-referenced variables have been used to either support the sampling selection or undertake the analysis, accounting for variations in climatic patterns, as well as in environmental variables.

21 For example, this is the case in Malawi, where mid-term impact assessment has been conducted.

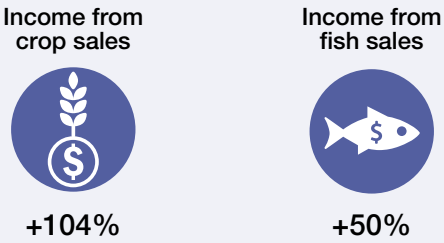
BANGLADESH: Coastal Climate-Resilient Infrastructure Project (CCRIP)

The Coastal Climate-Resilient Infrastructure Project (CCRIP) was implemented between 2013 and 2019 in three divisions of south-west Bangladesh. The project aimed to improve the livelihood opportunities and capacities of remote rural households by constructing improved markets and market-connecting roads that were designed to be resilient to seasonal flooding. The project also aimed to improve women's empowerment by employing them through labour contracting societies to build the infrastructure. The analysis undertaken measured the impacts on resilience controlling for occurrence of climatic shocks.

Targeted population: poor households located in areas highly affected by climatic shocks, particularly by floods.

Results:

ECONOMIC IMPACTS



Income from crop sales increased even in the monsoon season (**+70%**), indicating that the accessibility of markets and roads was effectively improved, contributing to resilience

Total income (including impacts on wage): +11%

RESILIENCE

Beneficiaries more resilient than the control group for each climatic shock with different levels of severity.

ETHIOPIA: Participatory Small-Scale Irrigation Development Programme I (PASIDP I)

The Participatory Small-Scale Irrigation Development Programme I (PASIDP I) was designed and implemented to improve food security, nutrition and income in four drought-prone and food-deficit areas in Ethiopia. Implemented between 2008 and 2015, PASIDP I resulted in the construction of 121 irrigation schemes. Investment in irrigation was combined with institution-building through the creation of water-user associations and an agricultural development component that provided training on improved farm practices and encouraged water conservation and, for women, home garden construction.[22]

Targeted population: poor rural households living in drought-prone and food-deficit areas in Amhara, Oromia, Tigray and the Southern Nations, Nationalities and Peoples' Region (SNNPR).

Use of climate geo-referenced variables: sampling and estimation; stratification by precipitation level.

Results:

ECONOMIC IMPACTS

	Productive assets	Grain crop yields	Crop sales revenue
DRY SEASON:	+22%	+51%	+213%
SHORT RAINY SEASON:	+15%	+47%	+77%

ENVIRONMENT AND RESILIENCE

Beneficiaries more resilient and less likely to engage in negative coping strategies.

22 The SPEI (Standardized Precipitation Evapotranspiration Index) is a multiscalar drought index based on climatic data. It can be used for determining the onset, duration and magnitude of drought conditions with respect to normal conditions in a variety of natural and managed systems (e.g. crops, ecosystems, rivers, water resources) and has been used as a covariate in the estimation of impacts.

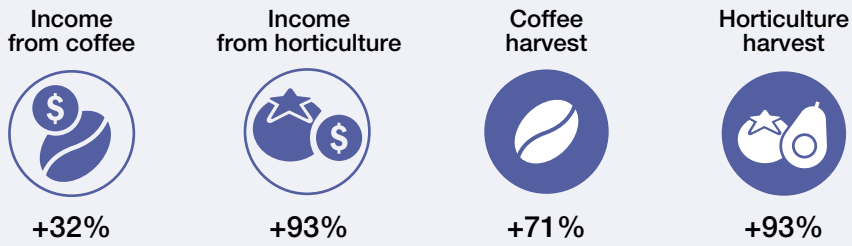
RWANDA: Project for Rural Income through Exports (PRICE)

The Project for Rural Income through Exports (PRICE) is an IFAD-financed project in Rwanda that was designed to achieve sustainable and increased returns for farmers from export-driven value chains. The project pursued this objective by helping farmers gain access to financing through matching grants, in addition to increasing market linkages, production and the quality of their cash crops. PRICE focused on five value chains, namely (i) coffee, (ii) tea, (iii) silk (sericulture), (iv) horticulture and (5) financial services.

Targeted population: unproductive coffee cooperatives, horticulture producers.

Results:

ECONOMIC IMPACTS



RESILIENCE

- Resilience to drought: +26 per cent
- 93 per cent of the households that encountered climate shocks reported having the ability to recover.

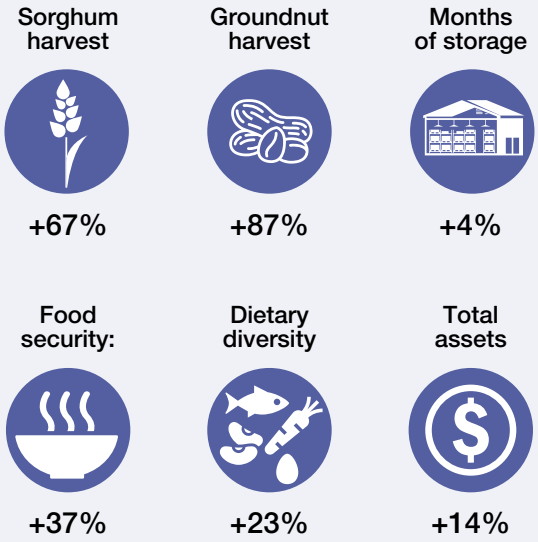
CHAD: Rural Development Support Programme in Guéra (PADER-G)

The Rural Development Support Programme in Guéra (PADER-G) is an IFAD-funded project that was implemented to improve the food security and livelihoods of poor rural households in the Guéra region of Chad. The main objective of PADER-G was to manage the risk of food shortages and food insecurity among smallholder communities by improving cereal storage through construction, management and use of community cereal banks. To achieve effective management of the community cereal banks, the project established community committees (COGES) and trained them on how to manage and operate their committees and cereal banks. An impact assessment was conducted to measure the impact of PADER-G on food security and resilience to climate-related shocks, controlling for precipitation and temperature.

Targeted population: poor rural households in the Guéra region of Chad.

Results:

ECONOMIC IMPACTS



RESILIENCE

- Livestock assets: +17 per cent
- No impact on resilience to drought or dry spells.

TAJIKISTAN: Livestock and Pasture Development Project (LPDP)

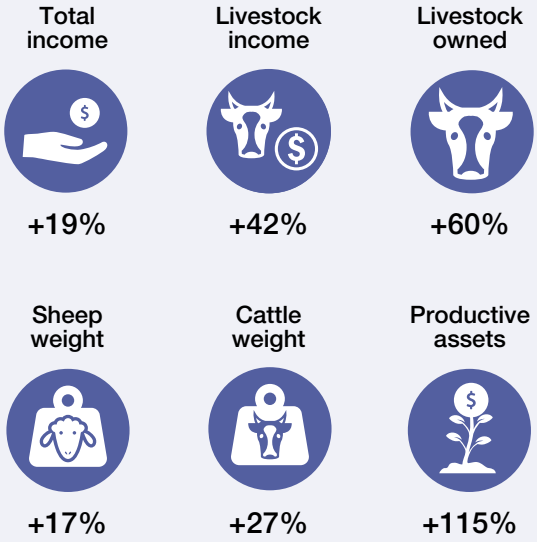
The Livestock and Pasture Development Project (LPDP) was designed to increase the nutritional status and incomes of poor rural households in the Khatlon region of Tajikistan by boosting livestock productivity through improvement of the productive capacity of pastures and through breeding and mating techniques combined with easier access to water. The project developed institutional capacity at the village level by creating a managerial structure and social cohesion in managing pastureland, with the aim of improving livestock husbandry practices and increasing livestock productivity. The project activities, which started in August 2011 and were completed in 2017, included the implementation of a rotational plan for pasture that was expected to restore pastureland and reduce degradation, thereby increasing land for grazing in the long run.

The project aimed to ensure pastureland restoration by adopting and ensuring compliance with a pasture rotational plan, to compensate which animals should receive feed from fodder cultivated plots.

Targeted population: poor rural households in the pasture-degraded areas of Khatlon.

Results:

ECONOMIC IMPACTS



ENVIRONMENT AND RESILIENCE

- Drought-affected household beneficiaries: +13 per cent income
- No impact on the Normalized Difference Vegetation Index for pasture.

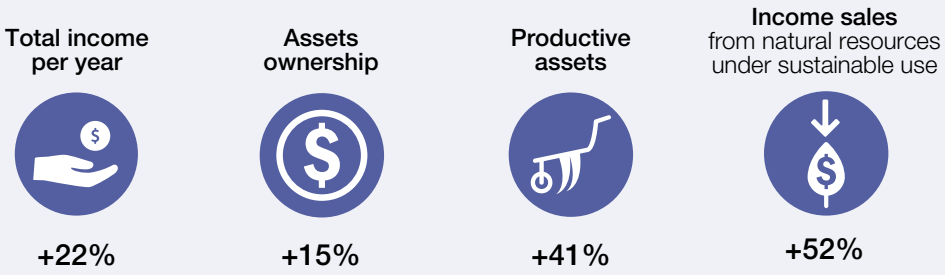
MEXICO: Community-based Forestry Development Project in Southern States (DECOFOS)

The Community-based Forestry Development Project in Southern States (DECOFOS) in Mexico aimed to address and overcome problems linked to deforestation and forest degradation in rural communities of marginalized forest areas in Campeche, Chiapas and Oaxaca. The project was carried out through the restoration and reforestation of degraded areas, together with the provision of technical and financial support for the development of microenterprises and sustainable production initiatives.

Targeted population: poor rural communities living in marginalized and forested areas in Campeche, Chiapas and Oaxaca affected by deforestation and forest degradation.

Results:

ECONOMIC IMPACTS



ENVIRONMENT AND RESILIENCE

- Use of natural resources from common land: +37 per cent
- Normalized Difference Vegetation Index: +3 per cent; controlling for precipitation
- Resilience: +17 per cent.

MALAWI: Sustainable Agricultural Production Programme (SAPP)

The Sustainable Agricultural Production Programme (SAPP) is a nine-year programme being implemented by the Ministry of Agriculture, Irrigation and Water Development to address the need for more resilient and productive agriculture in Malawi. By supporting agricultural research, better-quality extension services and the adoption of good agricultural practices (GAPs), SAPP aims to reduce poverty, through higher and more stable agricultural income, and increase food security in six districts of Malawi (Blantyre, Chiradzulu, Balaka, Lilongwe, Nkhotakota and Chitipa).

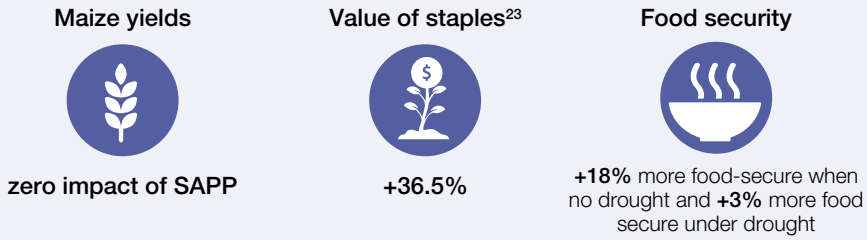
A baseline survey of 1,800 households was implemented in 2014 that included 1,050 surveys in SAPP districts and 750 surveys in control districts. In 2015, the household survey was complemented by a community-level survey implemented in all communities where baseline household respondents resided. In 2018, midline surveys were collected for the same group of households and communities.

The midline analysis focused on the programme's main component, that is, the adoption of GAPs, and asked a number of relevant questions to assess the programme's progress against its theory of change and the logic of intervention:

- Is the adoption of GAPs increasing among SAPP farmers? Is adoption actually driven by GAPs being effective at alleviating climate shocks?
- Are crop production and food security levels increasing among SAPP farmers as a result of the adoption of GAPs?
- Is SAPP contributing to make farmers more resilient to climate shocks?

Results:

ECONOMIC IMPACTS:



RESILIENCE:

- Adoption of good agricultural practices range between 6 and 19 per cent
- Weather shocks have significant direct negative impacts on maize yields (approx. -60 per cent) and the value of production per hectare of staples (approx. -30 per cent)
  Value of staples: -18 per cent for SAPP beneficiaries under drought
  Food security: +2 per cent for SAPP beneficiaries under drought
- Limited evidence that weather shocks are driving the adoption of GAPs: legume adoption: -18.5 per cent in areas facing high temperature shocks.

23 Staple crops include maize, sorghum and legumes.
24 This corresponds to a 18 per cent lower chance of running out of the staple crop before the next harvest for beneficiaries compared with control households.

Projections meet the expected target and amount to 26 million beneficiaries who have increased their resilience.

8.3 Resilience to climate

Are IFAD investments making poor rural people more climate-resilient?

This is one of the questions that IFAD's impact assessment work is seeking to answer, not only at the project level but also more broadly at the aggregate level. Resilience (strategic objective 3) has been measured in the IFAD10 impact assessments using the self-perceived ability to recover from shocks, as well as diversification indices. Results from an aggregation of the estimates from individual impact assessments are positive and significant, indicating that beneficiaries are 13 per cent more resilient to multiple shocks inclusive of climate change than farmers in comparison groups.

As far as the projected strategic objective 3 impacts of IFAD-supported projects in the overall portfolio are concerned, we found that projections meet the expected target and amount to 26 million beneficiaries who have increased their resilience.

8.4 Next steps: impact assessment

Including long-term geo-referenced climatic variables and other key agroecological indicators in IFAD impact assessments proved to be a useful and important strategy to better assess outcome indicators in agriculture and provide solid evidence on objective measures of shock for resilience.

The results of the analyses conducted show overall positive impacts on adaptation and/or resilience as a result of investments supported by IFAD.

The way forward, triggered by this initiative, includes systematic incorporation of geo-referencing at the household or plot level to facilitate the use of high-resolution climatic variables and agroecological indicators, which are becoming easier to obtain as a result of the increasing availability of earth observation data. Further analyses are currently being undertaken to provide a more specific assessment of impacts and determinants of agricultural production and productivity, given agroclimatic conditions, to complement the impact assessment analyses summarized above. Moreover, the RIA Division, in collaboration with the OPR Division, is in the process of piloting the incorporation of geo-referencing into project monitoring and evaluation cycles to enable better project monitoring, as well as improved impact assessment, in the future.

Finally, the RIA Division of IFAD is currently making an effort to incorporate more specific and solid indicators of adaptation for impact assessments that will be conducted under IFAD11.

Conclusion

This report describes and documents how the entire IFAD business model is being adapted to respond to the new, rapidly increasing and urgently important aspects of climate change and to the need of incorporating it into IFAD's programme of work to ensure its capacity to be effective in improving the livelihoods of poor rural people.

As can be seen from the statistics, diagrams and stories presented, much progress has been achieved in 2019. However, a long pathway still lies ahead of us. IFAD is aware of the need and importance of continuing along this path and of moving further in meeting the current corporate commitments on climate change, but it is also contemplating the need for more ambitious commitments in the near future and building the capacity to meet them. We are living in a period where unexpected and previously underestimated effects of climate change are being witnessed and documented daily, and the realization of the huge degree of change required in all human systems: those affecting agriculture, food systems and food security are becoming increasingly clear and dismaying. The challenges ahead and need for more ambitious responses were recently highlighted in the UN Climate Action Summit of 2019.

IFAD's experience in mainstreaming climate change into its programming shows that measures to address climate change are highly synergistic with rural poverty problems. To push forward in the effort of eradicating rural poverty while responding to climate change, we need to continue and expand innovative means of incorporating the risks and opportunities of climate change into rural development and poverty eradication strategies. IFAD's experience in this space so far has shown that this aspiration is quite feasible. But it will take increased investments – in building technical capacity in IFAD and among its partners to facilitate policy dialogue and coordination between agriculture, food security and climate change actions; to design and implement projects on the ground; and to develop knowledge and technology – to achieve it. The demand for greatly enhanced efforts was well recognized in the recent UN Climate Action summit and most relevantly for IFAD in the Climate Adaptation and Resilience Action Track as well as the Global Commission on Adaptation Action Track on Food Security and Rural Livelihoods. IFAD is an active and committed participant in these efforts and the experience of the Organization in mainstreaming climate change is providing important lessons on how best to do that.

In coming years and future IFAD climate action reports, we hope to be able to show such ongoing and expanded efforts – and the positive results they generate for poor rural people.

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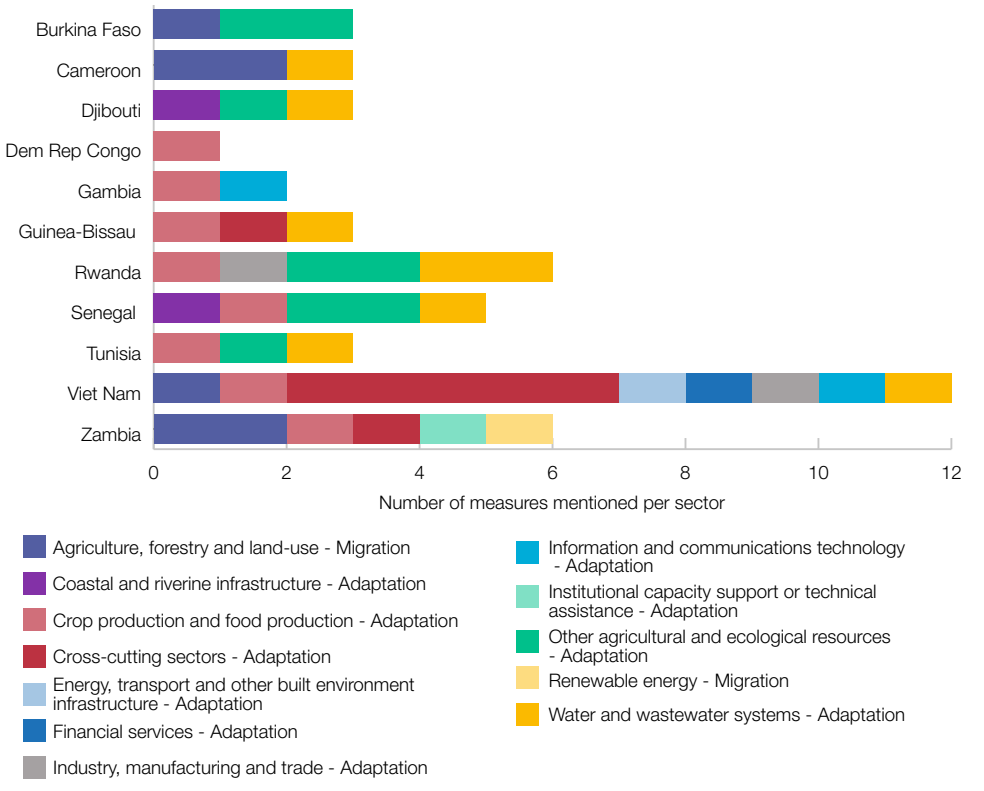
ANNEX I:
IFAD NDC analysis database: notes on the dataset

The analysis presented in the *Integrating NDCs in IFAD country strategies* chapter draws on a purpose-built NDC analysis database. The database identifies almost 5,400 measures across the 94 IFAD client countries, listing all of the measures (country priorities and commitments) included in the NDCs of all IFAD client countries in easily searchable categories.

Figure 21 shows the 11 country strategies approved to date under IFAD11 and the main NDC priorities included. NDC priorities have been classified according to the adaptation and mitigation sectors used for reporting under the *MDB Methodologies* for tracking adaptation and mitigation finance in chapter 5, in order to build a solid dataset for a sound and integrated analysis and policy drive.[25] Although Viet Nam's country strategy mentions the widest range of priority sectors in its NDC analysis (eight in total), the greatest depth of detail on NDC priorities is actually provided in Rwanda's country strategies (described in box 1). Overall, 10 adaptation sectors are referenced, compared with only two mitigation sectors. Crop and food production is the most commonly mentioned adaptation sector,

Figure 21. IFAD11 COSOPs integrating NDCs



25 "Other agricultural resources" encompass agricultural irrigation, ecosystems/biodiversity, fisheries and livestock production, whereas "cross-cutting sectors" encompass education, health, policy and disaster risk management. Further details on the MDB sector definitions can be found in chapter 5.

featuring across eight country strategies, closely followed by water and wastewater systems, which is mentioned in seven country strategies. The most commonly mentioned mitigation sector is agriculture, forestry and land use, featuring in four country strategies.

Each measure is categorized and searchable by region; country; priority sector(s)/area (see table 3); whether or not a numerical target has been quantified for the measure (Y/N); whether or not it has been costed (US$/N); whether its implementation is conditional/unconditional on the receipt of international climate finance; whether or not partners have been identified (names/N); if a time frame for its implementation has been specified (dates/N).

Table 3 provides descriptions for the types of measures classified according to the 16 overarching priority sectors/areas in IFAD's NDC analysis database. The fields highlighted in blue represent the priority sectors/areas considered to be of highest relevance to IFAD's specialized mandate and are presented in greater detail in figures 3-5.

Table 3. Priority sectors/areas in NDCs and category description

Priority sector/area	Category description
Agriculture	Covers both crop and livestock production
Biodiversity/ecosystems	Includes measures referring to the restoration, conservation and management of biodiversity and/or ecosystems
Climate knowledge	Encompasses a range of related activities, including assessment, monitoring, research, capacity-building and awareness-raising on climate change
Coastal zones	Covers the management and maintenance of coastal areas, for instance with regard to rising sea levels or flood risk
Disaster risk reduction	Includes measures aiming to reduce the risk of disasters, for instance the preparation of contingency plans or the establishment of early warning systems
Energy	Covers a broad range of measures relating to sources of energy (e.g. switch to renewables) or improved energy efficiency
Finance	Measures drawing on financial/economic components to address climate change, such as risk insurance
Fisheries	Covers both fisheries and aquaculture
Food security and resilience	Encompasses measures referring to food security, poverty reduction and strengthened livelihoods
Health	Measures referring to human health, in particular climate-related and vector-borne diseases
LULUCF	Covers emissions and removals of GHGs resulting from direct human-induced land use, such as settlements and commercial uses, land use change and forestry activities
Social inclusion	Measures relating to marginalized groups, such as indigenous and/or rural populations, youth and women, as well as issues of gender more broadly
Tourism	Encompasses all aspects of tourism, ranging from ecotourism to disaster risk reduction, for instance in areas of celebrated yet fragile natural beauty
Transport	Covers both urban and non-urban transport
Waste	Addresses all aspects of waste management
Water and irrigation	Covers all aspects related to water management, including water for drinking, sanitation and agricultural irrigation

Figure 22 contextualizes figure 3 in chapter 2. It shows the adaptation measures classified according to the 16 priority sectors/areas originally used to classify the NDC dataset (rather than only the eight sectors deemed to be of highest relevance to IFAD's specialized mandate, as in figure 3). The highest share of adaptation measures is classified as water and irrigation (18 per cent), closely followed by agriculture (16 per cent), climate knowledge (15 per cent) and LULUCF (11 per cent). Of these, all but climate knowledge were considered in greater detail in figure 3.

Figure 22. Distribution of adaptation measures by sector

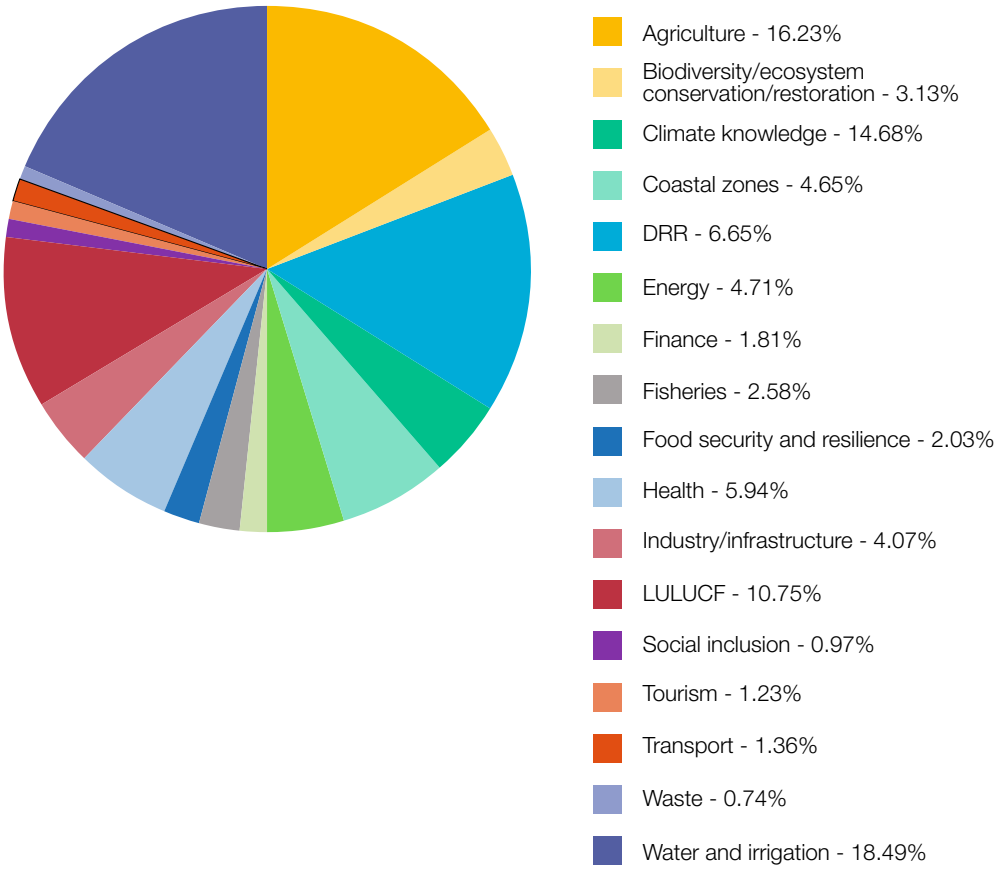
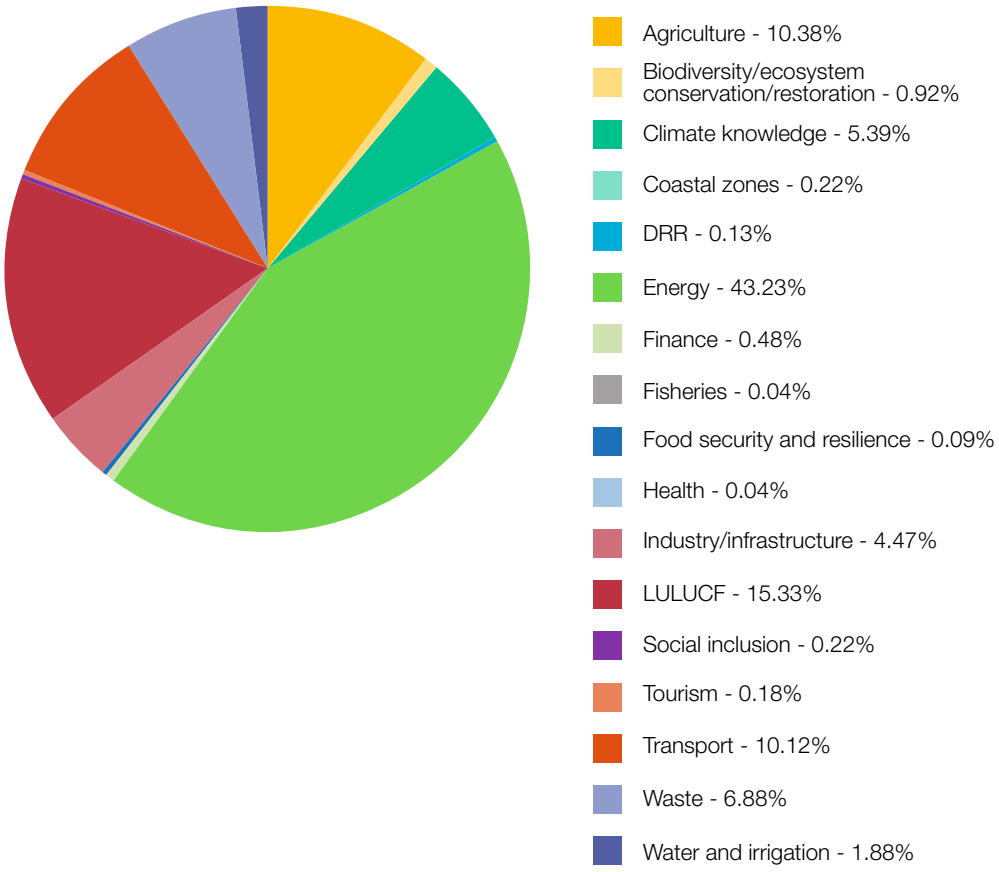


Figure 23 contextualizes figure 4 in chapter 2. It shows the mitigation measures classified according to the 16 priority sectors/areas originally used to classify the NDC dataset (rather than only the eight sectors deemed to be of highest relevance to IFAD's specialized mandate, as in figure 4). Energy has the highest share of measures (43 per cent), followed by LULUCF (15 per cent, a similar if slightly higher share than in figure 23 on adaptation measures) and agriculture and transport (10 per cent each). Again, all but one of these prominent sectors (in this case, transport) are considered in greater detail in figure 4.

Figure 23. Distribution of mitigation measures by sector



ANNEX II:
Tracking IFAD's climate finance: methodology, project-level values and notes

Why MDB Methodologies?

There is not one methodology for tracking climate finance, but two. This is because climate change adaptation and mitigation interventions are fundamentally different, requiring individual methodologies to capture the preconditions and eventual outcomes for each type of intervention.

MDB methodology for tracking adaptation finance

Adaptation interventions and their outcomes are context- and location-specific by nature; in other words, there is no universal adaptation solution. Similarly, there is no universal unit of measure; instead, proxy indicators are required to track results. These proxies have to account for a complex mix of socioeconomic, agronomic and environmental factors, which can blur the lines between adaptation finance and investments in sustainable development more generally.

Therefore, adaptation finance is tracked only if the following three steps are fully integrated into a project's logic:

1. The vulnerability context of the project is clearly set out;
2. An explicit statement of intent to address climate vulnerability as part of the project is made;
3. A clear and direct link between the climate vulnerability context and the specific project activities is established.

In addition, the adaptation methodology foresees the application of the principles of granularity and conservativeness:

Granularity: Reported climate finance covers only those components or proportions of investments that directly contribute to or promote adaptation.

Conservativeness: When an estimate of the incremental cost for adaptation is not available, a conservative percentage of the total financing for a component or activity is assigned.

MDB methodology for tracking mitigation finance

Unlike adaptation, mitigation results are global, and GHG emissions avoided or reduced can be expressed in a common unit of measure, usually tonnes of carbon dioxide equivalent (tCO_2e). Mitigation finance can therefore be identified on the basis of a positive list of eligible mitigation activities by investment sector.

Box 5. How about tracking climate finance in dual-benefit projects?

Despite their differences, many climate interventions, and especially those involving nature-based solutions, can deliver adaptation and mitigation benefits alike (also known as co-benefits). To capture this, 2018 was the first year in which the *Joint Report on Multilateral Development Banks' Climate Finance* reported on dual-benefit finance (US$47 million, or 13 per cent of the MDBs' total climate investments programmed in 2018). However, IFAD also requires eligible mitigation activities to state their anticipated emissions reductions. Investments that fulfil this requirement are therefore counted purely as mitigation finance. Any adaptation investment with the potential for mitigation co-benefits (but that remain unquantified) is counted as adaptation finance, yet is flagged for its mitigation co-benefit potential. During implementation, a project may wish to calculate and pursue these mitigation co-benefits.

IFAD has further stipulated that, to count mitigation finance, projects must quantify the GHG emissions reduction potential of their eligible activities (e.g. by including an EX-ACT analysis) to ensure that emissions will really be reduced/sequestered.[26]

In view of IFAD's specialized mandate, its climate-related investments almost exclusively address the agricultural sectors (crops, livestock, fisheries and aquaculture, as well as forestry). Although the *MDB Methodologies* were designed with all economic sectors in mind, IFAD's climate investments concentrate primarily on the following MDB sectoral categories:

- Adaptation sector: *crop and food production*;
- Adaptation sector: *other agricultural and ecological resources;*
- Mitigation sector: *agriculture, aquaculture, forestry and land use.*

Given the Fund's specific technical focus, alongside its comparatively smaller portfolio, an additional effort to track investments at a more granular level than foreseen by the *MDB Methodologies* is both desirable and possible. IFAD has therefore developed a tracking tool that applies the principles and rules of the *MDB Methodologies,* while also undertaking IFAD's own, deeper screening. An analysis of the aggregated screening results for the 15 IFAD11 projects approved to date is presented in Chapter 5. As the dataset grows, it will be possible to establish an increasingly detailed picture of IFAD programming on climate change.

This annex provides additional details on the climate change adaptation and mitigation finance in the 15 IFAD11 projects approved as of 30 September 2019 and sheds light on conventions applied when establishing and harmonizing the estimates included in the dataset. All new IFAD PoLG designs are systematically screened for climate finance. Initial estimates produced by project teams are validated by a small quality assurance group in the OPR Division (in close technical collaboration with the ECG) to ensure consistent reporting across the organization.

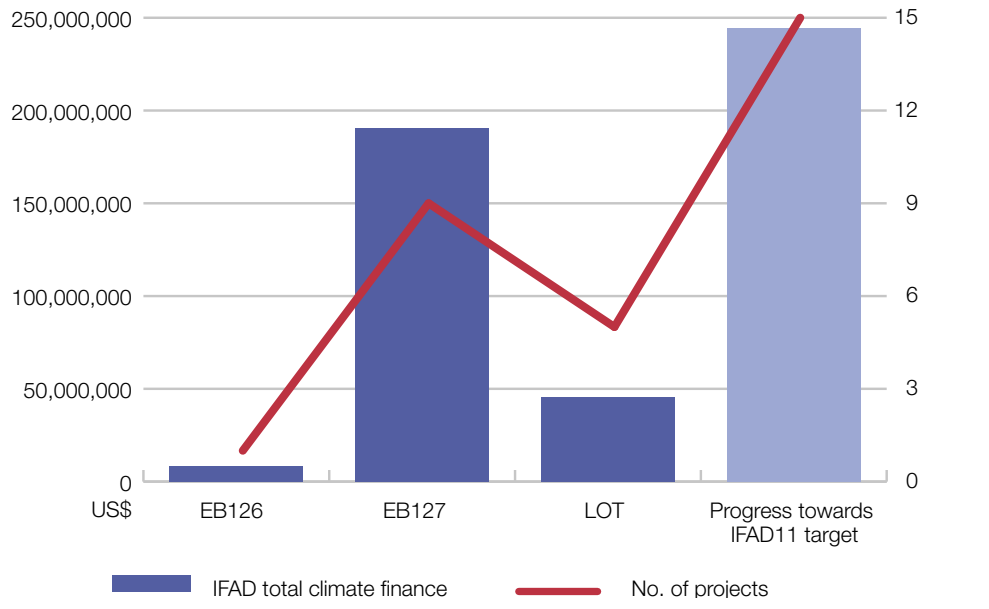
26 At present, although most MDBs undertake GHG impact analyses for their mitigation investments, presenting the results of a GHG calculation for specific activities is not a precondition for quantifying mitigation finance under the MDB methodology for mitigation. However, a review of the MDBs' eligible list of activities for mitigation is under way and more specific eligibility criteria are under discussion. IFAD is contributing to the review of the eligible activities for agriculture, forestry and land use.

Notes on the dataset

- IFAD climate finance estimates are based on the latest available Costab, available before internal clearance for approval. Project costs available at the time of climate finance screening and on approval may be subject to variation.
- Values are rounded to the nearest US$1,000. This may lead to small inconsistencies in totals.
- Although all new IFAD PoLG designs are systematically screened for climate finance, additional finance requests to supplement projects that were originally designed before IFAD11 are screened only if they are equal to or greater than US$25 million. This threshold was established in order to capture the more substantial amounts of climate finance contained in larger requests while managing the additional effort required to screen for climate finance in projects that did not require the degree of climate mainstreaming currently mandated.
- Selected IFAD investments are costed in euros. For aggregation purposes, euro to United States dollar conversions are based on United States dollar values reported in the Operational Results Management System (ORMS).

Figure 24 shows IFAD climate finance investment by approval type. The red line indicates the number of projects contributing to the climate finance totals presented in the bars. The final bar shows IFAD's total progress against its goal of investing a quarter of the IFAD11 PoLG in climate-focused activities.

Figure 24. IFAD climate finance by approval type and progress towards the 25 per cent goal



EB126, Executive Board 126 in May 2019; EB127, Executive Board 127 in September 2019; LOT, projects approved through the simplified lapse of time procedure.

Table 4. IFAD climate finance by project, as of 30 September 2019 [27]

Country by region	Project acronym	Total approved amount ($)	IFAD total approved amount ($)	Validated IFAD climate finance ($)	IFAD climate finance share (%)	IFAD total adaptation finance ($)	IFAD total mitigation finance ($)
Asia and the Pacific (APR)							
Bangladesh	RMTP	200 000 000	80 999 000	302 000	0.4	302 000	–
Cambodia	SAAMBAT	146 844 000	54 386 000	38 622 000	71	38 622 000	–
Lao People's Democratic Republic	PICSA	30 066 000	21 036 000	10 127 000	48	10 127 000	–
East and Southern Africa (ESA)							
Ethiopia	LLRP	451 000 000	90 000 000	34 077 000	38	5 032 000	29 045 000
Mozambique	PRODAPE	49 017 000	43 008 000	13 429 000	31	13 429 000	–
Rwanda	KIIWP 1	24 727 000	17 798 000	8 263 000	46	8 263 000	–
Rwanda	PRISM	45 642 000	14 904 000	1 335 000	9	1 335 000	–
Latin America and the Caribbean (LAC)							
Cuba	PRODECAFE	63 651 000	15 501 000	3 370 000	22	3 370 000	–
Near East, North Africa and Europe (NEN)							
Morocco	PRODER-Taza	92 971 000	36 691 000	25 024 000	68	25 024 000	–
Sudan	SNRLP	86 051 000	62 945 000	23 793 000	38	23 793 000	–
West and Central Africa (WCA)							
Burkina Faso	PAFA 4R	139 655 000	69 655 000	32 738 000	4	32 738 000	
Liberia	STAR-P	61 888 000	22 991 000	6 520 000	28	4 732 000	1 788 000
Niger	PRECIS	195 863 000	88 381 000	34 924 000	40	34 924 000	–
Senegal	AGRI-JEUNES TEKKI NDAWI	93 284 000	51 863 000	5 931 000	11	5 931 000	–
Sierra Leone	AVDP (AF)	57 062 000	28 500 000	5 733 000	20	5 733 000	–
	Total	**1 737 721 000**	**698 658 000**	**244 188 000**		**213 355 000**	**30 833 000**

27 Values are rounded to the nearest US$1,000. This may lead to small inconsistencies in totals.

ANNEX III:
Key features of multilateral, public-sector climate and environment finance agencies that IFAD partners with

Table 5. IFAD sources of climate finance

Funding entity	Objective	Financing modality	Accreditation: who can access funds?
AF	Adaptation activities that reduce the adverse effects of climate change facing communities, countries and sectors	Grants only	National, regional and multilateral implementing agencies accredited to the AF
LDCF	Addresses the adaptation needs of the 48 least developed countries that are particularly vulnerable to the adverse impacts of climate change	Grants	Through GEF-accredited agencies
SCCF	To support adaptation and technology transfer projects	Grants	Through GEF-accredited agencies
GEF (GEF-4, GEF-5 and GEF-6)	Funds the costs of measures to achieve global benefits in the areas of climate change mitigation, land degradation, biodiversity, international waters, sustainable forest management, chemicals and waste	Grants, non-grant instruments	Through GEF-accredited agencies
GCF	Promotes the paradigm shift towards low-emission and climate-resilient development pathways	Loans and grants	Through accredited national, regional and international entities
ASAP	To channel climate and environmental finance to smallholder farmers, scale up climate change adaptation in rural development programmes and mainstream climate adaptation into IFAD's work	Grants	Linked with IFAD baseline investment

Eligibility: who can receive funds?	Pledged/disbursed total US$ millions as of 11/2018	Funds mobilized by IFAD
Developing countries must be parties to the Kyoto Protocol and particularly vulnerable to the adverse effects of climate change	755/305.62	Up to 2018: US$16.4 million 2019 to date: US$20.5 million
All least developed countries are eligible. Country National Adaptation Programmes of Action must be in place before financing can be accessed	1371/531	GEF-4 LDCF: US$6.1 million GEF-5 LDCF: US$30.5 million
All non-Annex 1 countries are eligible to apply. Focus on the "additional costs" imposed by climate change on the development baseline	371/186	GEF-4 SCCF: US$3.5 million GEF-5 SCCF: US$21.6 million GEF-6 SCCF: US$12.4 million
Developing countries and countries with economies in transition that have ratified the UNFCCC, United Nations Convention to Combat Desertification (UNCCD), United Nations Convention on Biological Diversity (UNCBD) and Stockholm Convention, as relevant	3352.55/1670.08	GEF-4 Trust Fund amount totalled US$69.8 million GEF-5 Trust Fund amount totalled US$12.5 million GEF-6 Trust Fund amount totalled US$79.9 million[US$4.9 million was secured in 2019; figure also includes the food security Integrated Approach Pilot (IAP)]
All developing country parties to the UNFCCC are eligible to receive resources from the GCF	10392/391	US$18 million (2019 onward)
Based on IFAD Programme Management Department	316/130[28]	ASAP1 Trust Fund mobilized US$316 million (2012 onward) ASAP2 Trust Fund mobilized US$14.5 million (2016 onward)

28 All information for external funds taken from Climate Funds Update (www.climatefundsupdate.org; accessed 4 November 2019). Information for ASAP taken from IFAD internal documents.

RESPONSES TO CLIMATE THREATS AND OPPORTUNITIES

AND EXAMPLES OF HOW THEY ARE BEING IMPLEMENTED IN IFAD PROJECTS

THREAT: October 2019

Climate change is affecting the global food system in ways that increase the threats to those who currently already suffer from hunger and undernutrition (*Global Hunger Index Report)*.

- Near-term action to address climate change adaptation and mitigation, desertification, land degradation and food security can bring social, ecological, economic and development co-benefits (high confidence). Co-benefits can contribute to poverty eradication and more resilient livelihoods for those who are vulnerable (high confidence) (*Land Report*, Intergovernmental Panel on Climate Change, p.39).
- The adoption of sustainable land management and poverty eradication can be enabled by improving access to markets, securing land tenure, factoring environmental costs into food, making payments for ecosystem services, and enhancing local and community collective action (high confidence) (*Land Report*, Intergovernmental Panel on Climate Change, p.32).

RESPONSE

The Gambia: National Agricultural Land and Water Management Development Project

Fatima Seckan is a 24-year-old smallholder farmer who lives in Darsilameh village. Fatima works in the local community garden, where she is responsible for trading the vegetables produced by the 267 members of the garden's association. The garden was established in 2018 with IFAD support. Community gardens have become a model of sustainable small-scale agriculture in the Gambia, helping rural people to cope with droughts, erratic rainfall and limited access to water through improved water management systems. With the help of IFAD-sponsored training on techniques such as fertilization and transplanting, productivity has surged. Fatima grows over five times what she produced in her family's garden prior to the IFAD intervention, amounting to more than 100kg of various vegetables per week, resulting in record revenues. With her additional income, Fatima is undertaking a 9-month information technology course at a local institute and funding her younger sister's education.

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With the support of IFAD's ASAP, the National Agricultural Land and Water Management Development Project project has established 33 such community gardens across the Gambia, with another 17 under construction. In total, more than 10,000 people will benefit, most of them women.

Peru: Conservation and Sustainable Use of High-Andean Ecosystems through Payment for Environmental Services for Rural Poverty Alleviation and Social Inclusion Project

Susana Ele Gamion Zarate is a 34-year-old single woman who cultivates 3 hectares of land in the community of Vilca, Huancaya district. She is one of the beneficiaries of the Conservation and Sustainable Use of High-Andean Ecosystems through Payment for Environmental Services for Rural Poverty Alleviation and Social Inclusion Project. The objective of the project is to protect and sustainably use the high Andean ecosystems that provide environmental services, especially water, by establishing a mechanism whereby downstream beneficiaries of ecosystem services remunerate the upstream rural populations providing them. Susana and other project beneficiaries were trained in reforestation and afforestation to improve ecosystem service provision from the upstream areas. The project also provided support and training in establishing the payment for ecosystem services mechanism. According to Susana, the main objective of improving ecosystem services in the Cañete River basin has been achieved. It has also prompted the community to contemplate future livelihoods and consider moving from livestock rearing to diversified production systems.

THREAT: September 2019

Women, smallholder farmers and poor and marginalized communities are being put at ever greater risk from exposure to financial and environmental shocks and power imbalances that prevent them from acting with greater agency and autonomy (*Global Consultation Report*, Food and Land Use Coalition).

RESPONSE

The effectiveness of decision-making and governance is enhanced by the involvement of local stakeholders (particularly those most vulnerable to climate change, including indigenous peoples and local communities, women, and poor and marginalized people) in the selection, evaluation, implementation and monitoring of policy instruments for land-based climate change adaptation and mitigation (high confidence) (*Land Report*, Intergovernmental Panel on Climate Change, p.34).

Sudan: Butana Integrated Rural Development Project

Fatma Mohamed is a 64-year-old woman who lives in a household of six family members in the Butana society in Sudan. Her village was characterized by very limited involvement of women in decision-making, including income-generating activities. Prior to the IFAD project, she had no opportunities for training and engagement in income-generating activities. With the commencement of the IFAD Butana Integrated Rural Development Project in 2012, Fatma joined the Subagh Women Jubraka group. She received training on

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vegetable cultivation, literacy, health and nutrition. She also became a member of the village savings and credit group. Currently, she participates in meetings with Project Management Unit staff, who encouraged the group to express themselves confidently, assume leadership positions in groups, and grow vegetables in the 10 feddan near the village *hafir* (water pond) that was established by the project and is managed by the village water users committee. She says: "Providing healthy food to our children and selling the extra production, we feel socially and economically empowered. In addition to my financial empowerment through access to savings and credit group financing and engagement in income-generating activities, I am much more accepted by men in my village in decision-making groups, such as our village development committee."

Paraguay: Inclusion of Family Farming in Value Chains Project

Dominga Estela Parra de Barreto is a 72-year-old agricultural producer who lives in Ciudad Oviedo in Paraguay. She is the president of the Women's Producers Association and received support from IFAD's Inclusion of Family Farming in Value Chains Project to formulate an investment plan for poultry production that included technical support for problems faced by producers. The producers in Dominga's group are experiencing higher temperatures and more days of extreme heat, which increases the incidence of poultry diseases. Veterinarian assistance to address the problem is therefore one of the components of Dominga's investment plan. The project not only supports Dominga and her group in developing marketing and investment plans, but also provides technical assistance to ensure the continuing productivity and profits of her group's poultry production under climate change.

India: Jharkhand Tribal Empowerment and Livelihoods Project

Poverty rates are very high among Scheduled Tribes in Jharkhand in the East Indian plateau. To tackle this problem, the Jharkhand Tribal Development Society has been implementing the IFAD-supported Jharkhand Tribal Empowerment and Livelihoods Project since 2007.

This project adopts a community demand-driven approach based on the concept of 4Ps (public-private-producer partnerships). One example of how the project works comes from the Maa Saraswati Youth Group in Hathisiring village, Saraikela Kharsawan district. In 2016, the group received Rs40,000 under the project to start a small seed shop in the village. The shop sells a wide range of goods and also purchases products from local producers. With robust planning and execution, in a one-year period sales reached Rs292,000, with a net profit of Rs144,000. The group has also received another grant of Rs25,000 from the government and is now planning to expand its business.

OPPORTUNITY: October 2019

Transforming the land sector and deploying measures in agriculture, forestry, wetlands and bioenergy could feasibly and sustainably contribute about 30%, or 15 billion tonnes of carbon dioxide equivalent ($GtCO_2e$) per year, of the global mitigation needed in 2050 to deliver on the 1.5°C target (*Nature Climate Change*, Roe et al.).

RESPONSE

Sustainable land management, including sustainable forest management, can prevent and reduce land degradation, maintain land productivity and sometimes reverse the adverse impacts of climate change on land degradation (very high confidence). It can also contribute to mitigation and adaptation (high confidence) (*Land Report*, Intergovernmental Panel on Climate Change, p.24).

Tajikistan: Livestock and pasture development project

Mirahmadov Fathiddin is a 59-year-old livestock producer. Under the IFAD-supported livestock and pasture development project, he received support to improve animal husbandry and his household's income generation, benefiting from individual and community technical support and training. The project has significantly improved the condition of the community's pasturelands, which had been degraded in the past because of mismanagement, overgrazing and the impacts of climate change. Mirahmadov says: "Thanks to the support of the IFAD project, we established a pasture users union, through which we have been applying pasture management planning, rotational grazing, improvement of fodder production and reduction of pasture degradation. Over the last two years, the situation in our pasturelands has improved; we have been supported with the introduction

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of more productive and resilient breeds of small ruminant livestock and cattle, as well as new generation of seeds for fodder crops. I am being trained by the IFAD project on mitigation and response measures against climate change risks in the agriculture sector. As a result of this technical support, I can secure the main sources of income for my household."

THREAT: August 2019

The stability of the food supply is projected to decrease as the magnitude and frequency of extreme weather events that disrupt food chains increase (high confidence)…The most vulnerable people will be more severely affected (high confidence) (*Land Report*, Intergovernmental Panel on Climate Change, p.16).

RESPONSE

Eradicating poverty and ensuring food security can benefit from applying measures promoting land degradation neutrality (including avoiding, reducing and reversing land degradation) in rangelands, croplands and forests, which contribute to combating desertification, while mitigating and adapting to climate change within the framework of sustainable development. Such measures include avoiding deforestation and using locally suitable practices, including management of rangeland and forest fires (high confidence) (*Land Report*, Intergovernmental Panel on Climate Change, p.23).

Senegal: Support to Agricultural Development and Rural Entrepreneurship Programme

Abou Sambadoro is a 60-year-old nomadic pastoralist who regularly travels from Mauritania to Senegal in search of water and pasture for his livestock during dry times. Abou brings his livestock to Malandou, a small village in Senegal's Matam region. He migrates there for periods of approximately a month until the rains arrive at home. In Malandou, he and other local and migrant herdsmen pay to use water troughs. In West Africa, increased desertification and erratic rainfall have affected seasonal migration patterns. The dry period, usually from October to June, is becoming increasingly volatile and unpredictable.

In the Support to Agricultural Development and Rural Entrepreneurship Programme (PADAER), a water tower and other related structures, such as boreholes, pipelines and reservoirs, have been built to turn Malandou into the centre of a pastoral unit – a hub for neighbouring villages, whose nearly 7400 inhabitants have acquired much easier access to water, as well as other benefits, including fodder and vaccination services. "Here there is always sufficient water for my animals", says Abou. Locals and migrants have also benefited

from the creation or reinforcement of 28 pastoral units across the semi-arid lands of Matam, which have led to health improvements for people and animals.

THREAT: May 2019:

...relating the observed yields to observed weather at each political unit from 1974 to 2008.... we find that the impact of global climate change on yields of different crops.... In nearly half of food-insecure countries, estimated caloric availability decreased (*Climate change has likely already affected global food production*, Ray et al.).

RESPONSE

Solutions that help adapt to and mitigate climate change while contributing to combating desertification are site and regionally specific and include inter alia: water harvesting and micro-irrigation, restoring degraded lands using drought-resilient ecologically appropriate plants; agroforestry and other agroecological and ecosystem-based adaptation practices (high confidence) (*Land Report*, Intergovernmental Panel on Climate Change, p.22)

Egypt: On-farm Irrigation Development in Oldlands Project

Saleh Atteya is a farmer with six household members and 2.3 feddan of land. Thanks to the IFAD On-farm Irrigation Development in Oldlands Project, he has upgraded his on-farm irrigation system. A water user association (WUA) was established under the project in July 2018. The project installed an electric pumping station and the pipeline network and trained WUA members on the operation of the system. The installation of the station enables Saleh and the other farmers in the area to save time, energy and money when cultivating their lands. The new system allows for a faster flow of water. This in turn leads to decreased waiting times, particularly for those who are located at the end of the water channels. In the past, Saleh used to wait for hours to obtain enough water for his plots. The system also ensures improved allocation and distribution of irrigation water. In addition, replacing the old, inefficient diesel pumps with the new electric pumping station reduces pollution and emissions, ensuring healthier conditions for the farmers and their families. Saleh saves E£65 per feddan per month with the new system compared with the old diesel-powered pumps.

HISTORY OF CLIMATE MAINSTREAMING IN IFAD

2012

Adaptation for Smallholder Agriculture Programme (ASAP) is launched with more than US$296 million programmed for 5.5 million smallholders, becoming one of the world's largest climate change adaptation programmes with a specific focus on smallholders.

2013

ASAP receives United Nations Framework Convention on Climate Change (UNFCCC) Momentum for Change Lighthouse Activity award for innovative financing.

2014

Social, Environmental and Climate Assessment Procedures (SECAP) replaces IFAD's Environmental and Social Assessment Procedures after rigorous review and consultation process.

IFAD approves the 10-point climate mainstreaming plan to deliver on IFAD's tenth replenishment (IFAD10) commitments to mainstream climate change into 100 per cent of project designs and COSOPs by 2018.

IFAD enters Learning Alliance for Adaptation in Smallholder Agriculture with CGIAR to produce evidence for science-based decisions in the context of climate change.

2015

IFAD's fifth Strategic Framework (2016-2025) adopts "strengthen the environmental sustainability and climate resilience of poor rural people's economic activities" as one of three objectives in achieving "inclusive and sustainable rural transformation" for smallholders, including contributions to SDG 13 (climate action), SDG 14 (life under water) and SDG 15 (life on land), as well as to NDCs under the 2015 Paris Agreement.

2015

IFAD appointed as lead agency for the five-year GEF Integrated Approach Programme (IAP) on Fostering Sustainability and Resilience for Food Security in Sub-Saharan Africa, a US$106.4 million (total cost US$911.7 million with cofinancing) multi-agency programme in 12 African countries.

2015

Analysis of 13 ASAP projects using Food and Agriculture Organization of the United Nations (FAO) Ex-Ante Carbon-balance Tool (EX-ACT) indicates the potential mitigation co-benefits of up to 30 million tonnes of CO_2 equivalent sequestered/avoided over a 20-year time frame.

2016

Climate-related indicators are integrated into new core indicators of IFAD's Results and Impact Management System.

IFAD is accredited to the Green Climate Fund.

2019-2021
IFAD's eleventh replenishment (IFAD11) commitments

See major achievements.

2019

Environment and Climate Division becomes Environment, Climate, Gender and Social Inclusion Division to intensify integrated mainstreaming.

Gender assessment and learning review of ASAP highlight corporate mechanisms and increased learning as key to making climate-sensitive projects transformative in terms of gender outcomes.

IFAD and Green Climate Fund sign an Accreditation Master Agreement, opening the door for IFAD to submit funding proposals.

Updated IFAD Strategy and Action Plan on Environment and Climate Change 2019-2025 to be approved by the IFAD Executive Board.

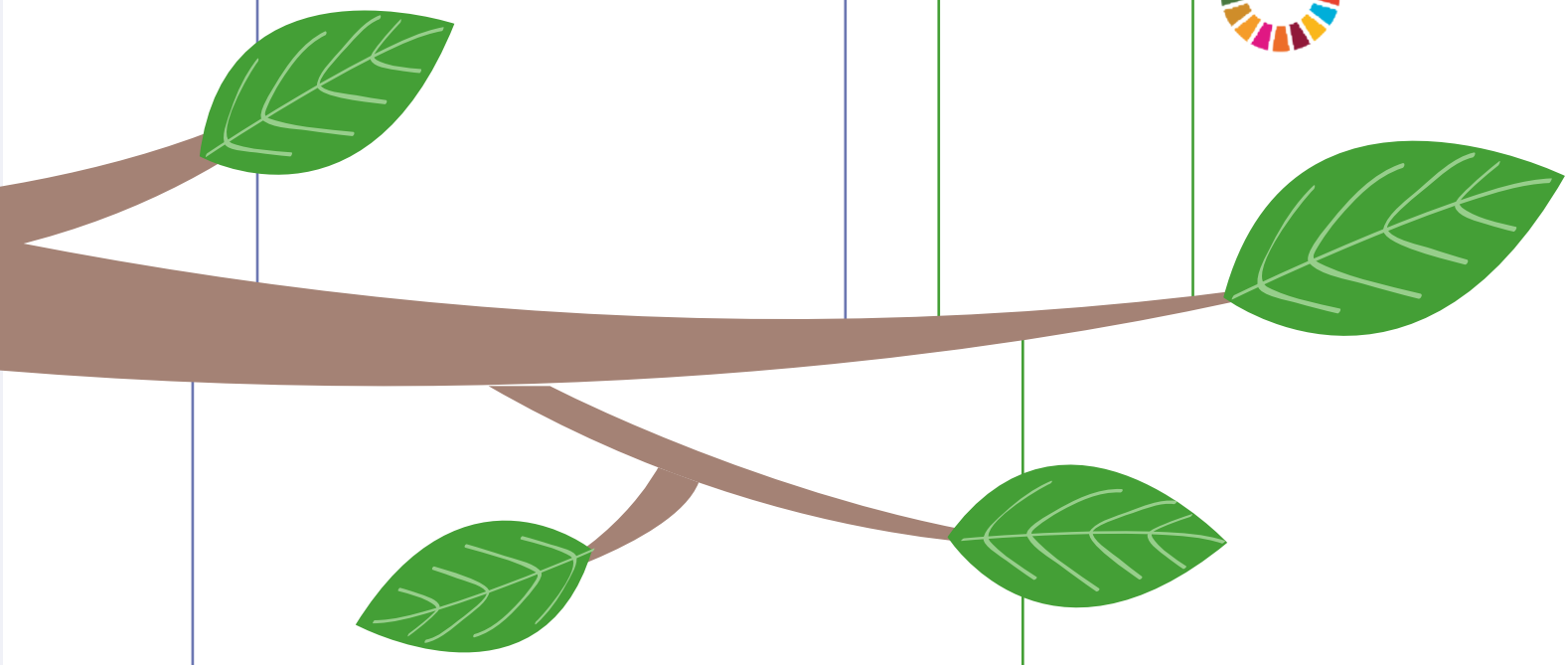
2018

25 per cent of IFAD loans and grants to be "climate-focused".

2021

The world needs to meet all 17 SDGs by

2030



2017

100 per cent COSOPs and CSNs screen for climate risks based on application of SECAP.

ASAP2 launched to help poor rural household members to cope with the effects of climate change through upstream technical assistance.

SECAP updated with more guidance and to integrate mainstreaming themes.

2025

24 million smallholders' resilience, including climate resilience, to be increased.

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