

# THEMATIC EVALUATION OF IFAD'S SUPPORT for Smallholder Farmers' Adaptation to Climate Change



**IOE**



Investing in rural people

Independent Office of Evaluation





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# Abbreviations and acronyms

ABC	African Banking Corporation
ACCESOS	Economic Inclusion Programme for Families and Rural Communities in the Territory of Plurinational State of Bolivia
ADB	Asian Development Bank
AD2M	Project to Support Development in Menabe & Melaky Regions
AF	Adaptation Fund
ANAS	Agência Nacional de Água e Saneamento
APR	Asia and the Pacific Division of IFAD
ARRI	Annual Report on Results and Impact of IFAD Operations
ASALs	arid and semi-arid lands
ASAP	Adaptation for Smallholder Agricultural Programme
ASHA	Adaptation for Smallholders in Hilly Areas Project
CA	conservation agriculture
CAR	community access roads
CARD	Climate Adaptation in Rural Development
CATIE	Centro Agronómico Tropical de Investigación y Enseñanza
CBD	Convention on Biological Diversity
CBINReMP	Community-Based Integrated Natural Resources Management Project
CBO	community-based organization
CCA	climate change adaptation
CCRIP	Coastal Climate Resilient Infrastructure Project
CIF	Climate Investment Fund
CLP	Core Learning Partnership Group
COI	Core Outcome Indicator Measurement Guidelines
COP	Conference of Parties
COSOP	country strategic opportunities programme
CReLIC	Climate Resilient Local Infrastructure Center
CSN	country strategy note
DAC	Development Assistance Committee
DFID	now the Foreign Commonwealth and Development Office (FCDO) (formerly Department for International Development)
DSF	Debt Sustainability Framework
EBA	ecosystem-based adaptation
ECD	Environment and Climate Division of IFAD
ECG	Environment, Climate, Gender and Social Inclusion Division of IFAD
ENRM	environment and natural resource management
ESA	East and Southern Africa Division of IFAD
ESAP	Environmental and Social Assessment Procedures
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FFS	farmer field school
GCF	Green Climate Fund
GEF	Global Environment Facility
GIS	geographic information system
GPR	Global Engagement, Partnerships, and Resource Mobilization Division of IFAD
GT	geospatial technologies
HR	human resources

<b>HTDN</b>	how-to-do notes
<b>IAMDP</b>	Integrated Agricultural and Marketing Development Project
<b>ICIMOD</b>	International Centre for Integrated Mountain Development
<b>ICRAF</b>	International Centre for Research in Agroforestry
<b>IDB</b>	Inter-American Development Bank
<b>IFI</b>	international financial institution
<b>INDCs</b>	Intended Nationally Determined Contributions
<b>IOE</b>	Independent Office of Evaluation of IFAD
<b>IPCC</b>	Intergovernmental Panel on Climate Change
<b>IRECR</b>	Inclusive Rural Economic and Climate Resilience
<b>ISABU</b>	Institute of Agricultural Sciences of Burundi
<b>KCEP-CRAL</b>	Kenya Cereal Enhancement Programme - Climate Resilient Agriculture Livelihoods Programme
<b>KFW</b>	German Credit Institution for Reconstruction
<b>KM</b>	knowledge management
<b>LAC</b>	Latin America and the Caribbean Division of IFAD
<b>LAPA</b>	local adaptation plan for action
<b>LDCF</b>	Least Developed Countries Fund
<b>LGED</b>	Local Government Engineering Department
<b>LLRP</b>	Lowlands Livelihoods Resilience Project
<b>LMDP</b>	Livestock and Market Development Programme
<b>LMRP</b>	Livestock Marketing and Resilience Programme
<b>L-FFS</b>	livestock farmer field school
<b>MEEF</b>	Ministry of Environment, Ecology and Forests in Mali
<b>MINAGRI</b>	Ministry of Agriculture and Animal Resources in Rwanda
<b>MIS</b>	management information system
<b>MTR</b>	midterm review
<b>M&amp;E</b>	monitoring and evaluation
<b>NAP</b>	national adaptation plan
<b>NAPA</b>	national adaptation programme of action
<b>NDC</b>	nationally determined contribution
<b>NDMA</b>	National Drought Management Authority
<b>NEN</b>	Near East, North Africa and Europe Division of IFAD
<b>NICADAPTA</b>	Adapting to Markets and Climate Change Project in Nicaragua
<b>NRM</b>	natural resources management
<b>OECD</b>	Organization for Economic Cooperation and Development
<b>OPR</b>	Operational Policy and Results Division of IFAD
<b>PAPAM</b>	Fostering Agricultural Productivity Project
<b>PARSAT</b>	Project to Improve the Resilience of Agricultural Systems in Chad
<b>PASADEM</b>	Food Security and Development Support Project in the Maradi Region
<b>PASIDP</b>	Participatory Small-Scale Irrigation Development Programme
<b>PASP</b>	Climate Resilient Post-Harvest and Agribusiness Support Project
<b>PASSIP</b>	Participatory Small-Scale Irrigation Development Programme
<b>PCDP</b>	Pastoralist Community Development Programme
<b>PCR</b>	project completion report
<b>PDR</b>	project design report
<b>PMI</b>	Sustainable Production, Markets and Institutions Division of IFAD



<b>PoLG</b>	programme of loans and grants
<b>POSER-C</b>	Rural Socio-Economic Opportunities Programme
<b>PPE</b>	project performance evaluation
<b>PRECIS</b>	Project to Strengthen Resilience of Rural Communities to Food and Nutrition Insecurity
<b>PRELNOR</b>	Restoration of Livelihoods in the Northern Region
<b>PRODAF</b>	Family Farming Development Programme in Maradi, Tahoua and Zinder Regions
<b>ProDAF-Diffa</b>	Family Farming Development Programme in the Diffa Region
<b>PRODEFI</b>	Value Chain Development Programme
<b>PROFIT</b>	Programme for Rural Outreach of Financial Innovations & Technologies
<b>PRO-LENCA</b>	Project for Competitiveness and Sustainable Development Project in the South-Western Border Region (Honduras)
<b>PTL</b>	project technical lead
<b>REA</b>	rapid evidence assessment
<b>REMA</b>	Rwanda Environmental Management Authority
<b>RUFIP</b>	Rural Finance Intermediation Programme
<b>SAIL</b>	Sustainable Agriculture Investments and Livelihoods
<b>SCCF</b>	Special Climate Change Fund
<b>SECAP</b>	Social, Environmental and Climate Assessment Procedures of IFAD
<b>SDG</b>	Sustainable Development Goal
<b>SNNPR</b>	Southern Nations and Nationalities People's Region
<b>SNRLP</b>	Sustainable Natural Resources and Livelihoods Programme
<b>SSTC/KM</b>	South-South and Triangular Cooperation/knowledge management
<b>TE</b>	thematic evaluation
<b>ToC</b>	theory of change
<b>UCA</b>	University of Central Asia
<b>UNDP</b>	United Nations Development Programme
<b>UNEP</b>	United Nations Environment Programme
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>UTaNRMP</b>	Upper Tana Catchment Natural Resources Management Project
<b>WCA</b>	West and Central Africa Division of IFAD
<b>WFP</b>	World Food Programme
<b>WUA</b>	water users' association
<b>WWF</b>	World Wildlife Fund
<b>2RP</b>	Rural Resilience Programme
<b>3S Initiative</b>	Sustainability, Stability and Security in Africa



# Foreword

The increasing frequency and magnitude of extreme weather events and changes in the weather patterns have a serious adverse impact on the agricultural sector across the globe. Smallholder farmers, who inhabit some of the most vulnerable landscapes and rely on climate-sensitive natural resources to make a living, are particularly affected by climate change. Yet, knowledge of agricultural solutions that specifically address the vulnerability of smallholder farmers to climate change remain limited. Likewise, financial mechanisms for supporting adaptation measures to benefit smallholders are fragmented and insufficient. Countries have only seven years to achieve the targets related to climate change adaptation (CCA) set out under the 2030 Agenda for Sustainable Development, which is only one project cycle away.

Responding to the CCA challenge, IFAD formally recognized it as a corporate priority in the Eighth Replenishment of IFAD's Resources (IFAD8) (2010–2012); mobilized over US\$500 million to finance CCA interventions; mainstreamed climate considerations in all its new operations and country strategies; and committed to ensuring that 40 per cent of its programme of loans and grants is climate-focused under IFAD12 (2022-2024).

This context provides a timely case for this comprehensive evaluation, to assess the extent to which IFAD's efforts have improved smallholder farmers' resilience to climate change, and identify lessons to improve IFAD's present and future interventions to strengthen smallholder climate resilience.

This evaluation finds that IFAD is well positioned to address the accelerating risks to smallholders resulting from climate change, given its long track record of working with marginalized communities in the rural agricultural sector that face adverse climatic and environmental conditions. After it declared CCA as a corporate priority, IFAD developed guidance and tools to mainstream environment and climate change considerations, established a dedicated unit to support and guide CCA mainstreaming, and recruited technical staff to support these efforts in client countries.

Some challenges remain. IFAD needs to boost its technical capacities to mainstream CCA interventions, with a focus on strengthening resilience outcomes and track progress. A corporate methodology to track changes in smallholder farmers' climate resilience is not yet in place. The future of IFAD's ability to successfully strengthen smallholder climate resilience at scale depends on identifying promising interventions early on, prioritizing resources towards advocating for and scaling up successful interventions, engaging in policy discussion based on its experience on the ground, and strengthening strategic partnerships at country, regional and global levels.

The evaluation recognized that CCA responses can be sustainable in the long term, provided that they strengthen climate, economic and ecosystem resilience at the same time. IFAD is yet to offer a methodology to assess ecosystem resilience to CCA responses. To address this gap, the evaluation advanced an approach for a comprehensive ecosystem-wide analysis of the sustainability of CCA responses.

I hope this report takes IFAD closer to achieving its strategic goals, to effectively support its members and clients, and to contribute to the attainment of the 2030 Agenda for Sustainable Development.



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# Executive summary

## Context and rationale

1. In 2019, the Executive Board approved a proposal for a thematic evaluation of IFAD's contribution to smallholder farmers' adaptation to climate change. IFAD's mandate to invest in the rural poor to enhance food production and food security and to eradicate poverty in rural areas is inextricably linked to supporting smallholder farmers' capacity to adapt to climate change.
2. Smallholder agriculture accounts for 75 per cent of global farmland and provides more than 80 per cent of the food consumed in the developing world. Rising temperatures and changing patterns of precipitation, coupled with the increasing frequency and magnitude of extreme weather events (such as floods, droughts and cyclones) and changes in the seasonality of weather patterns, are expected to increase the vulnerability of smallholder farmers to a changing climate. Recently, the United Nations Intergovernmental Panel on Climate Change (IPCC) warned that climate change is occurring at a faster pace than previously projected and that life on earth faces catastrophic consequences unless drastic and immediate action is taken.<sup>1</sup>
3. Assessments that specifically address the vulnerability of smallholder farmers to climate change remain limited, although extensive information is available on the projected impacts of climate change on agriculture and on the adaptation measures needed to minimize those impacts. Moreover, financial mechanisms for supporting adaptation measures to benefit smallholders are also often fragmented and inadequate.
4. In this context, during the past 30 years, IFAD projects have assisted poor rural smallholders living in marginal and/or unfavourable agroecological conditions to enable them to sustainably manage natural resources and increase agricultural productivity even under adverse climatic conditions. The Fund formally recognized climate change adaptation (CCA) as a corporate priority in the Eighth Replenishment of IFAD's Resources (IFAD8) (2010–2012). Since then, it has mobilized over US\$500 million to finance CCA interventions. Under the forthcoming IFAD12 (2022–2024), IFAD has committed to ensuring that 40 per cent of its programme of loans and grants (PoLG) is climate-focused.
5. IFAD's long engagement with the climate change agenda, efforts to mainstream CCA in its operations and expanded climate investments provide a compelling and timely case for a comprehensive evaluation that takes stock of progress and provides lessons to improve ongoing and future IFAD interventions to strengthen smallholder climate resilience in a sustainable manner. IFAD and other actors have nine years to achieve the CCA-related targets set out under the 2030 Agenda for Sustainable Development, which is only a project cycle and a half away. There is therefore an urgent need for this evaluation to provide the evidence that IFAD needs to make any necessary course corrections.
6. The objectives of this evaluation were to critically review and assess IFAD's performance in the following key areas: (i) strengthening smallholder farmers' capacity to manage climate change risks; (ii) mainstreaming CCA into IFAD programmes and projects to strengthen smallholders' climate adaptation capacity in an environmentally sustainable manner; and (iii) providing support for scaling up climate-responsive approaches at all levels.
7. The overall approach, and the key findings and recommendations emerging from this evaluation are summarized below.

<sup>1</sup> IPCC, Sixth Assessment Report Climate Change 2021 – *The Physical Science Basis* (IPCC, 2021).

## Approach and methodology

8. The evaluation focused on the extent to which IFAD efforts have promoted climate-resilient livelihoods for smallholders and improved their food security. Three overarching questions framed the data collection, evidence synthesis, analysis and reporting:
  - i. What difference have IFAD interventions made in the ability of smallholders and their communities to adapt to climate change, particularly in the case of those most vulnerable to climate change, such as women, youth and indigenous peoples? What has worked and why? What opportunities have been missed?
  - ii. To what extent has IFAD been able to leverage its operations to strengthen smallholder farmers' CCA capacity at the local, subnational and national levels through partnerships, and by scaling up successful interventions and development results, promoting enabling policies, strengthening institutional capacities and improving the financial architecture for adaptation? What has worked and why? What opportunities have been missed?
  - iii. To what extent is IFAD equipped to address the existing and projected adaptation challenges facing smallholder farmers and to meet its commitments under IFAD11 and beyond?
9. **Scope.** The scope of the evaluation was comprehensive. It covered all geographic regions and countries in which IFAD operates; all related IFAD interventions, projects and country strategies (country strategic opportunities programmes [COSOPs] and country strategy notes [CSNs]); and IFAD's business model related to CCA (including relevant corporate replenishment commitments, resource mobilization and corporate strategies, guidance and tools). The evaluation covered the period since CCA was declared a corporate priority by IFAD in 2010 (2010-2019).
10. **Evaluation criteria.** The evaluation applied key criteria, including relevance, effectiveness and impact. Analysis also included issues related to coherence and sustainability. A theory of change and evaluation matrix were used to inform the development of country case studies, desk reviews, evaluation tools and an interview protocol.
11. **Consultations.** Initial discussions with the Evaluation Committee and preparations for the evaluation commenced in April 2020. They were followed by discussions with Management as part of the management self-assessment workshop (June 2020). The core learning partnership group (CLP) was established to strengthen IFAD-wide ownership of the evaluation and to strengthen its relevance to the organization; indeed, the CLP comprises IFAD technical experts and managers in climate and environment. Two consultations were held with the CLP. The first, in April 2021, was to discuss emerging messages after the data collection and analysis and, the second, in June 2021, to discuss the draft evaluation report.
12. **Evaluation process.** A design workshop was held with the evaluation team and key IFAD stakeholders to finalize the theory of change and evaluation design in June 2020. A desk review of all relevant documents and a portfolio analysis were conducted to assist in the selection and framing of the case studies. The data collection and analyses were completed between July 2020 and April 2021. The report was drafted and quality assured through a series of internal and external interactions between May and August 2021.
13. Due to significant COVID-19 travel restrictions, data were collected through extensive desk-based document and portfolio reviews and remote engagement with IFAD staff, key informants and stakeholders and from secondary sources. Where country-level pandemic controls permitted, national consultants conducted site visits and beneficiary interviews, with remote participation by the international evaluation team.
14. **Data collection, analysis and reporting.** Primary data were collected from 20 country case studies (conducted in 20 countries) covering 35 projects (representing 14 per cent of IFAD's climate portfolio), identified via stratified purposive sampling; a study on IFAD's readiness to deliver on CCA commitments; studies on three learning themes (scaling up, knowledge management and human-ecosystem nexus interactions); analysis of geospatial data from geographical information systems (GIS) in nine of the case study countries; and two online surveys. Interviews were held with over 700 stakeholders and beneficiaries, and 227 survey responses were received from IFAD and project staff.



15. Secondary evidence was collected from past IOE evaluations; a rapid evidence assessment of relevant peer-reviewed and grey literature, which involved scanning 1,338 articles and analysing 91 documents; and GIS data (available for five of the 20 case studies).
16. Methods and sources were triangulated to arrive at evidence. The sources of data included document reviews, primary data collected by the evaluation team and secondary data. This evidence base provided the answers to all questions in the evaluation matrix, which in turn provided the basis for drafting the evaluation report.
17. **Quality assurance.** Feedback on the draft report was sought and obtained from: (i) a two-member external independent advisory panel; (ii) an IOE-wide peer review; (iii) IFAD Management, to identify any factual or interpretive errors; and (iv) the CLP, to identify any omission of key evidence that could materially change the evaluation findings and any factual and interpretive errors.
21. **IFAD has assessed climate risks in all its country strategies and operations and integrated climate response in every intervention with a climate risk rating of “moderate” or “high”.** In addition, COSOPs and operations approved after 2015 were relevant to countries’ nationally determined contributions under the December 2015 Paris Agreement. All interventions have targeted areas where the poor were concentrated. The recently revised operational guidelines on targeting<sup>2</sup> have emphasized the importance of including climate vulnerability as a consideration. Recent projects are beginning to integrate this critical aspect into their targeting.
22. **IFAD’s mainstreaming efforts lack a clear conceptual framework and operational guidance on how to strengthen smallholders’ climate resilience together with environmental and socio-economic resilience.** Corporate guidance for objectively assessing climate resilience and tracking resilience outcomes is not yet in place. This has limited the ability to analyse critical pathways to achieve climate resilience under country strategies. It has also limited IFAD’s ability to make resilience an evaluable concept in all project designs and develop quality assurance processes and implementation oversight functions (such as project supervision missions). In the absence of corporate guidance, there is a risk that ad hoc conceptual frameworks will proliferate, making it difficult to compare performance across projects and aggregate results. There is also a lack of clear guidance for identifying those CCA responses that go beyond do-no-harm and serve to restore degraded ecosystems while ensuring their nutritional and economic security.

## Main findings

18. The evaluation focused on the extent to which IFAD-supported initiatives have helped smallholders adapt to the impacts of climate change. The key findings in relation to the three overarching questions being considered are summarized below.
19. **Question 1:** What difference have IFAD interventions made in the ability of smallholders and their communities to adapt to climate change, particularly in the case of those most vulnerable to climate change, such as women, youth and indigenous peoples? What has worked and why? What opportunities have been missed?
20. **IFAD’s experience in working with marginalized communities in the rural agricultural sector, often facing adverse climatic and environmental conditions, has positioned it well to address the accelerating risks from climate change and to place CCA as a strategic institutional priority.** Over the past decade, the Fund has achieved important progress in supporting smallholder CCA. It has made climate response a corporate priority, mobilized climate finances and focused an increasing share of its PoLG on climate response. It has also set up a dedicated unit with technical capacities to mainstream climate responses across all interventions and developed relevant guidance and tools to support implementation.
23. **Insufficient capacity constitutes a major bottleneck to improving CCA performance.** IFAD’s analysis highlights significant gaps in the technical capacity to mainstream and monitor CCA responses at headquarters and project levels; this is likely to continue until 2024 and beyond. Nevertheless, efforts are under way to address these skills gaps. The Targeted Capacity Investment Implementation Plan and the People, Processes and Technology Plan are in the early stages of implementation. CCA capacity will need to expand further when the climate focus of the PoLG increases from 25 per cent under IFAD11 to 40 per cent under the IFAD12. There is currently no evidence to show that an assessment of the anticipated increase in CCA capacity is being planned.

<sup>2</sup> International Fund for Agricultural Development, *IFAD Revised Operational Guidelines on Targeting*, (EB 2019/127/R.6/R.1.).

24. **Question 2:** To what extent has IFAD been able to leverage its operations to strengthen smallholder farmers' CCA capacity at the local, subnational and national levels through partnerships and by scaling up successful interventions and development results, promoting enabling policies, strengthening institutional capacities and improving the financial architecture for adaptation? What has worked and why? What opportunities have been missed?
25. **IFAD is trying to step up corporate support to strengthen non-lending activities, such as fostering knowledge management or partnerships for scaling up results. The future of IFAD's ability to successfully strengthen smallholder climate resilience at scale depends on additional funding to promote non-lending activities.** Resources remain a challenge and the performance of non-lending activities constitutes a recurring weakness identified by several independent evaluations. Given the close interlinkages between climate change and ecosystems, long-term climate resilience cannot be achieved by focusing only at the farm or community levels. Moreover, in the absence of resources, systematic pursuit of scaling up and non-lending activities and provision of the necessary guidance and human resources for their implementation remain weak. Programme arrangements such as the Rural Resilience Programme may provide the flexibility to dedicate a proportion of programme resources to strengthening non-lending activities. However, this mechanism is yet to be implemented and will mainly be available for interventions in Africa and selected low-income countries.
26. **Question 3:** To what extent is IFAD equipped to address the existing and projected adaptation challenges facing smallholder farmers and to meet its commitments under IFAD11 and beyond?
27. **As it learns from experience, IFAD's approach to CCA is evolving and progressing in the right direction.** Over the past decade, IFAD has developed and updated its climate strategy and continues to improve the institutional environment for CCA responses. For example, it has established a dedicated unit with appropriate technical capacities to integrate CCA into its interventions and continues to revise policies, strategies and guidelines (grants policy, operational guidelines for targeting, knowledge management strategy and guidance on country strategies and operations). In addition, IFAD has developed mainstreaming guidance (Social, Environmental and Climate Assessment Procedures of IFAD, 2015) and updated it twice (2017 and 2020). It introduced new tools to guide CCA, and designed new tools such as the Adaptation Framework, with a database of adaptation options. These actions have helped bring into sharp focus the need to move beyond risk management and to ensure that the benefits of appropriate climate responses for smallholders are materialized, helping IFAD progress in the right direction to address the bottlenecks hindering performance.
28. **Targeting approaches continue to improve.** In addressing gender inequality and promoting women's empowerment in climate responses, the majority of earlier designs were more focused on establishing targets and quotas to increase women's participation in benefits. Recent designs are increasingly addressing the root causes of gender inequality, such as gender norms and beliefs, income and asset ownership and access to credit. One in three projects approved in 2019 was designed to be gender transformative, exceeding the 25 per cent target under IFAD11. IFAD's climate responses were focused on geographic areas and communities where the poor were concentrated. Recent changes to its targeting guidelines demonstrate IFAD's recognition of the need also to reach the most marginalized and climate-vulnerable smallholder farmers and newer projects are recognizing the role of climate vulnerability in targeting. Climate change contributes to the tension among marginalized smallholders, particularly in different production systems (such as sedentary crop-livestock farming and nomadic pastoralism), as farmers compete over land use and scarce water resources. Country operations are increasingly improving their approaches to address this issue, for instance in the Sahel region. IFAD's guidance has yet to pay sufficient attention to providing systematic support to improve the design and implementation of operations addressing this issue through participatory community-driven approaches.
29. **IFAD has demonstrated capacities and vision at its disposal to improve the economic, climate and environmental resilience of smallholders through a strong suite of appropriate interventions.** This evaluation found that climate responses in six of the 20 case studies were doing no net harm to the environment. These successful interventions were landscape-scale, integrated interventions providing natural solutions to underlying climate threats, and they involved strong engagement with beneficiaries and stakeholders during design and implementation. These offer important lessons to improve IFAD's CCA response, such as those in the six case studies that were getting closer to doing no harm and in the remaining nine case studies with interventions that recognized the importance of ecosystems but were some way distant from doing no harm to them.

30. **At the same time, this evaluation found that there were also significant gaps that need to be addressed for IFAD to deliver on its CCA commitments under IFAD12.** Actions needed to address these gaps included:

- i. Putting in place mechanisms to ensure systematic organizational learning from operational experience to reproduce the success achieved by the climate responses in doing no harm to ecosystems in the five case studies, and ensure that interventions that are closer to doing no harm – as well as those that are distant from this goal – learn lessons to build environmentally sustainable climate resilience of smallholders. A monitoring system to identify successes and capture knowledge to replicate these “islands of success” more broadly is a critical element to achieve this;
  - ii. Shifting to results-oriented mainstreaming of CCA, with adequate support and guidance from headquarters;
  - iii. Investing adequate time and resources to strengthen the design quality of CCA responses and to facilitate government buy-in;
  - iv. Designing and achieving do-no-harm and “win-win” CCA responses, to the extent feasible;
  - v. Having systematic approaches to leverage project results in order to generate impact at landscape scales and above through effective non lending activities;
  - vi. Having a robust results framework and monitoring system to track IFAD’s progress in strengthening climate resilience and identify best practices;
  - vii. Addressing the skills gaps in appropriate and adequate CCA technical capacities within IFAD and project management units; and
  - viii. Ensuring a shared vision and commitment of management and staff to deliver much-needed CCA action.
31. Ongoing decentralization efforts are necessary to bring IFAD capacities into closer proximity with clients, beneficiaries and partners to enhance its operational impacts, including those linked to CCA response. At the same time, transitioning to the new arrangements during 2021-2023 is likely to have consequences for addressing the above bottlenecks and, thereby, to deliver IFAD11 and IFAD12 CCA commitments. The risks involved need to be identified and managed.

## Recommendations

32. As noted earlier, the IPCC has warned that life on earth faces catastrophic consequences unless drastic and immediate action is taken to address climate change. Therefore, IFAD needs to address the bottlenecks identified in the conclusions section of the main report (paragraphs 302–308) urgently. To this end, a set of actionable recommendations is presented below, which recognizes the interlinkages among them. They also reflect the fact that mainstreamed CCA responses are not only affected by the challenges to achieving CCA resilience outcomes but are intertwined with the obstacles to overall operational performance.
33. **Recommendation 1:** Update the IFAD Strategy and Action Plan on Environment and Climate Change 2019–2025 to comprehensively address these bottlenecks to CCA performance, which include the following:
34. As part of the updated strategy, present a resource and results framework identifying the estimated financial and human resources needed for each output under the action areas.
- i. Drawing from the recent operational experience of IFAD and other development actors, establish and disseminate a corporate conceptual framework for climate resilience to guide designs, develop results frameworks and monitor project-level results. Ensure adequate capacities within project management units to understand and track the resilience results. To the extent feasible, such a framework should be consistent with the practices of other international actors to facilitate joint work and coherence among country-wide efforts to track CCA resilience outcomes.
  - ii. Update the CCA-related corporate key performance indicators to capture actual changes in relation to climate resilience, in line with this conceptual framework. Taking stock of the Fund’s experience in implementing and tracking CCA responses, IFAD should periodically refine the corporate-level indicators to measure outcome-level changes in climate resilience.

- iii. Allocate adequate financial and human resources so that the use of relevant geospatial information (derived from increasingly available satellite imagery or spatial databases) can be integrated into IFAD's results-based monitoring and evaluation framework, in order to systematically track resilience outcomes and to validate these observations with site visits.
  - iv. Getting the CCA design right requires in-depth knowledge of climate change challenges and practices at the project and national levels. To ensure the availability of such expertise in IFAD's quality assurance processes based in Rome, and in line with the practices of other international financial institutions, establish an external peer review panel. For each intervention, the panel should consist of context-specific experts with knowledge of local conditions, with a view to enhancing and ensuring the relevance of the CCA response. Panel reviews should be seamlessly integrated into the existing quality assurance process and should take place at the same time that input is being sought from all other reviewers. IFAD should ensure that the necessary time is allocated for this external review. The panels are expected to reduce the need for and the frequency of substantial modifications to designs during midterm reviews, thereby enhancing the effectiveness and efficiency of CCA responses.
35. **Recommendation 2:** Expand CCA guidance to include restorative solutions in order to fulfil IFAD's commitment to go beyond doing no harm and to restore the environment. Where feasible, this will include win-win solutions – CCA responses that achieve economic, climate and environmental resilience.
- i. The guidance should draw from successful IFAD examples (including those identified in the case studies). To ensure the relevance and effectiveness of such guidance, representatives from project delivery teams responsible for successful projects should participate in drafting the guidance.
  - ii. In addition, when necessary, IFAD should take concrete steps to promote government buy-in of win-win solutions. To this end, IFAD should build a knowledge base of viable restorative CCA solutions, based on its CCA experience, and ensure that it allocates sufficient capacities, financial resources and time to advocate at all levels, from local to national.
36. **Recommendation 3:** IFAD should undertake an analysis of the staff capacity and skill sets needed to design, implement and monitor the delivery of climate finance of 40 per cent of the PoLG under IFAD12. This analysis could build on the recent human resources study and focus on human resources needs for CCA responses. The needs assessment should cover project staff as well as IFAD staff. The study should fully assess the interim risks that the ongoing decentralization process poses both to delivering the IFAD11 and IFAD12 CCA commitments and to managing these risks, and should then determine the capacities and skills required at all levels of a decentralized IFAD. Based on the findings of this study, IFAD should move to address the capacity gaps identified.
37. **Recommendation 4:** IFAD should systematically prioritize scaling up and other non-lending activities with dedicated resources. The future of IFAD's ability to successfully strengthen smallholder climate resilience at scale depends on additional funding to promote these activities at the country level and, when feasible, at regional and global levels. To this end, IFAD should:
- i. Learn from its successful experiences and facilitate government ownership and partnerships;
  - ii. Dedicate sufficient resources, capacities and time to pursuing these activities;
  - iii. Include these activities in project designs, with goals and targets, and delineate a strategy to pursue these targets; related activities should continue throughout project implementation and not just to the end of the project cycle;
  - iv. Ensure adequate support and guidance to facilitate non-lending activities, as agreed under Decentralization 2.0; and
  - v. Establish incentives and accountability mechanisms to achieve (or make progress towards) results through these activities.



38. **Recommendation 5:** Develop and implement a framework and strategy for partnerships needed to achieve the results identified in COSOPs and related operations. The framework should: (i) identify the specific partnerships needed to scale up, expand outreach, manage knowledge and strengthen CCA technical capacities of IFAD and project management units; (ii) propose approaches to establish these partnerships; (iii) present expected outputs and outcomes of the partnerships; and (iv) estimate costs involved (if any).
39. **Recommendation 6:** IFAD should ensure sustained organizational learning from operational experience to improve current and future CCA performance.
- i. Learning from success requires identifying successful CCA responses; putting in place mechanisms for holding discussions to understand factors that have contributed to success; identifying, based on such discussions, design opportunities where this experience will be relevant and ongoing operations that could benefit from this experience; and, finally, using the discussions to take steps to improve relevant designs and strengthen ongoing interventions.
  - ii. At a minimum, discussions should include relevant project delivery teams, supervision mission members and relevant staff in the Strategy and Knowledge Department and the Programme Management Department. As needed, other partners and external subject experts could be included.
  - iii. Goals and targets should be established at the corporate and unit levels, and accountability for achieving learning results should be specified. To this end, IFAD should review progress periodically and update its approaches. Learning outcomes should be included as part of the Results Management Framework and reported annually.
  - iv. At the corporate level, a learning framework should be linked to the Strategy and Action Plan on Environment and Climate Change 2019-2025 (under action area 2).



# IFAD Management's response

1. Management welcomes the thematic evaluation (TE) prepared by the Independent Office of Evaluation of IFAD (IOE) on IFAD's support for smallholder farmers' adaptation to climate change. Management appreciates the interaction with IOE during the evaluation process and the efforts made to augment the review through in-house consultations. These constructive exchanges have been a critical part of the mutual learning process.
2. IFAD is widely recognized as an "early mover" on climate adaptation in the small-scale agriculture and rural sphere, notably through the Adaptation for Smallholder Agriculture Programme (ASAP) launched in 2012. Learning has always been a central tenet of IFAD's work in this area, drawing on the implementation of the ASAP1 portfolio alongside IFAD's broader portfolio in which climate adaptation has been increasingly mainstreamed. Significant lessons have also been drawn from ASAP2, a strategic programme enhancing IFAD's technical and innovation capacity on climate adaptation. The 2021 Annual Report on Results and Impact of IFAD Operations (ARRI) confirms the important returns this consistent focus on learning has yielded in its finding that: "*Only two criteria, ENRM [environment and natural resources management] and adaptation to climate change, show statistically significant improvements over the long term (for projects completed between 2007 and 2016)*". Furthermore, performance on climate change adaptation for projects completed in 2017–2019 was the best since 2007–2009, with 83 per cent of projects reporting moderately satisfactory or better ratings.
3. Management views IOE's TE of IFAD's support for smallholder farmers' adaptation to climate change as a useful learning product that offers relevant insights to support continued improvement of IFAD's performance on climate adaptation. Nevertheless, Management has some concerns regarding a number of the evaluation's conclusions and recommendations, as already highlighted in earlier comments provided to IOE on the draft evaluation report:
  - i. The conclusion that "a significant share of IFAD projects reviewed as part of this evaluation were falling short on the "do no harm" standard and posed net harm to the environment" is misstated. Especially considering that the evaluation later qualifies this strong statement as follows: "Challenges remain in ensuring no harm is done to the environment. Climate responses in 9 of the 20 case studies were found to be a distance from doing no harm and in six cases studies they were close to doing no harm to the system but fell short of this goal". Posing "net harm" and facing "challenges in ensuring that no harm is done" are very different things. IOE itself recognizes that the assessment used in reaching this conclusion is highly complex and has important limitations, which warrants a more careful and nuanced framing of the conclusion. It is important to note that the sample on which this conclusion was based is selective and not random, and therefore not representative of the population.
  - ii. The picture portrayed in the TE as regards the inclusion of climate vulnerability in project targeting is not representative of IFAD's portfolio. While the TE singles out only a few projects that included climate vulnerability in their targeting, Management would like to underscore that the majority – if not all – of IFAD projects include a climate vulnerability assessment in the Social, Environmental and Climate Assessment Procedures (SECAP) leading up to the selection of project areas. Projects may not always select the most climate-vulnerable areas because of other considerations such as poverty levels, market access, government priorities, and country programme approach, among others. Being climate responsive is integral to IFAD's work: it is one of the many prioritization factors reflecting IFAD's mandate to eradicate poverty and hunger by investing in poor rural people.

- iii. The TE indicates that *“given the downturn in many donor countries due to the COVID pandemic, IFAD is likely to face challenging circumstances in meeting its resource mobilization targets by 2025”*. It is unclear how this conclusion is reached, considering that in the first half of 2021, IFAD surpassed its goal of mobilizing US\$200 million in supplementary climate finance during IFAD11: to date, US\$352 million has been mobilized during 2019–2021. Although COVID-19 and other global shocks may pose challenges, IFAD is currently on track to achieve its climate-related resource mobilization target.
- iv. The 2019 cut-off for activities considered by the TE necessarily means that notable efforts in support of IFAD11’s ambitious mainstreaming agenda are not considered by the review, such as the updated SECAP; the new guidance on monitoring IFAD’s core outcome indicators (including survey methodologies); reporting guidance for the ASAP portfolio following the ASAP1 midterm review; and a number of new or refined climate assessment and planning tools, including the Adaptation Framework, Climate Adaptation in Rural Development and related capacity-building activities supported by the ASAP2 technical assistance facility. Importantly, an interdivisional working group on resilience was formed in 2021 to further align approaches for measuring resilience across IFAD, and a forthcoming how-to-do note detailing how to design and implement resilience scorecards in IFAD projects is already in pilot stage. These developments, while falling outside the scope of the review, should be noted in light of the statement that IFAD *“continues to evolve its business model to provide CCA response in terms of prioritizing CCA, mobilizing climate finances, providing dedicated institutional support, programming arrangements (design and implementation support), technical and managerial capacities, as well as safeguards and tools to mainstream CCA”*.
4. Management welcomes the six recommendations outlined in the TE. Detailed responses to the recommendations are provided below.
5. **Recommendation 1. Update IFAD Strategy and Action Plan on Environment and Climate Change 2019–2025 to comprehensively address bottlenecks to CCA performance.**
6. **Partially agreed.** Management believes that IFAD’s Strategy and Action Plan on Environment and Climate Change 2019-2025 and associated Results Management Framework – as approved by the Executive Board in 2018 and 2019 respectively – already clearly define a corporate hierarchy of results on climate change, and prioritize key actions to support performance. IFAD provides regular updates on progress within the existing framework through corporate reporting channels, including the annual Report on IFAD’s Development Effectiveness (RIDE) and Climate Action Report (CAR). In support of IOE’s recommendation, Management will undertake a midline review of the strategy’s implementation and propose any relevant adjustments and updates, in particular as IFAD articulates its strategy and road map for alignment with the Paris Agreement.
7. Management agrees with recommendation 1(a) on the need to refine the corporate conceptual framework for climate resilience: as highlighted above, an interdivisional working group on resilience has been formed to develop a streamlined framework for resilience measurement at IFAD, including but not limited to climate resilience. This framework will build on the many relevant elements of resilience measurement already applied in-house.
8. Management also agrees with recommendation 1(b) on ensuring that corporate climate and environment indicators are fit for purpose and remains committed to ensuring quality results reporting in this regard. Management would like to highlight ongoing efforts to enhance the measurement of existing adaptation indicators, e.g. through new training and guidance for ASAP indicators, as well as IFAD core indicators and core outcome indicators dedicated to climate change. Management would also like to note that IFAD’s environment and climate indicators are well aligned with those monitored by other International Financial Institutions investing in climate action in agriculture, including the global climate funds.
9. Management agrees with recommendation 1(c) on the need to dedicate adequate financial and human resources to integrate the use of relevant spatial information (derived from increasingly available satellite imagery or spatial databases) to track resilience outcomes more systematically and to ground-truth these observations. It would like to draw attention to the work of IFAD’s community of practice on geographic information systems (GIS), the World Food Programme (WFP)-IFAD climate analysis partnership and the fact that the enhanced Adaptation for Smallholder Agriculture Programme (ASAP+) pillar of the Rural Resilience Programme (2RP) also plans to engage in a GIS pilot programme, further exploring the potential of such monitoring in ASAP+ operations.



10. However, Management disagrees with recommendation 1(d) on establishing an external peer review panel to be integrated into the existing quality assurance process. Management believes that it is more sustainable to invest in strengthening internal capacities – including for the peer review process – rather than recruiting external support, which may lead to further layers of clearance and delay in project approvals.
11. **Recommendation 2. Expand CCA guidance to include restorative solutions.**
12. **Agreed.** Management agrees on the importance of expanding climate change adaptation guidance to include restorative solutions. In particular, Management agrees with recommendation 2(a) on the need to draw lessons from the successful examples, and recommendation 2(b) on taking concrete steps to promote government buy-in of win-win solutions when necessary. However, Management would note that in practice, win-win solutions are frequently not possible in the vulnerable and climate-stressed contexts in which IFAD operates, due to the complexity of balancing social, economic and environmental factors on the ground.
13. Management would like to highlight that key guidance materials and tools are now ready and available for roll-out in new designs. The updated SECAP makes a decisive move towards identifying risks and promoting restoration, notably through its standards on biodiversity conservation, resource efficiency and pollution prevention, and climate change. The Adaptation Framework is now available to use in project design as a planning tool that facilitates the selection of the best possible adaptation options based on multi-criteria assessments. Furthermore, a strategy and action plan on biodiversity will be presented to the Executive Board in December 2021 and will further promote the pursuit of nature-based solutions at IFAD.
14. Looking at the ongoing portfolio, Management would also like to note that the independent midterm review of ASAP<sup>1</sup> identifies several ASAP projects which already promote restoration, namely: cropland restoration in Sudan, mangrove restoration in The Gambia and Djibouti, land restoration in Mali, pasture restoration in Niger and restoration of watersheds in Ethiopia, among others. Ethiopia, Mali and Niger were also included in the list of projects selected for TE case studies. Finally, evidence from a biodiversity stocktake of 66 projects concluding in 2020-2021 shows that 74 per cent of these included a biodiversity component or biodiversity-related activities. Proactive, nature-based solutions already underpin IFAD's climate change adaptation interventions, and the biodiversity strategy to be presented to the Executive Board in December 2021 will help make such interventions more visible.
15. **Recommendation 3. IFAD should undertake an analysis of staff capacity and skill sets needed to design, implement and monitor the ability to deliver climate finance in 40 per cent of the programme of loans and grants under the Twelfth Replenishment of IFAD's Resources.**
16. **Agreed.** Management agrees with this recommendation, as a growing climate finance portfolio will indeed require increased dedicated staff capacity. Proposals for climate and environment-related staffing are already under discussion in light of the findings of the McKinsey study, together with plans for Decentralization 2.0 and IFAD's ambitious climate commitments.
17. **Recommendation 4. IFAD should systematically prioritize with dedicated resources, scaling up and other non-lending activities.**
18. **Agreed.** Management agrees with recommendation 4 and its five sub-recommendations. Management acknowledges the importance of non-lending activities (NLAs) such as scaling up, knowledge management and policy dialogue, and the need to systematically prioritize them. Management would note that while this recommendation is applicable beyond the theme of climate change adaptation, it has been possible for IFAD to consistently emphasize NLAs in the domain of climate change adaptation – e.g. thanks to supplementary resources mobilized through the first and second phases of the ASAP programme. Ongoing resource mobilization for the 2RP further prioritizes NLA-type activities.

1 ITAD, 2020. Mid-term review of IFAD's Adaptation for Smallholder Agriculture Programme. [www.ifad.org/documents/38714170/39155702/itad\\_asap\\_midreport.pdf/b198d59a-6758-5953-c1a1-fb19e05b2e0d](http://www.ifad.org/documents/38714170/39155702/itad_asap_midreport.pdf/b198d59a-6758-5953-c1a1-fb19e05b2e0d)

19. **Recommendation 5. Develop and implement a framework and strategy for partnerships necessary to achieve results identified in country strategic opportunities programme (COSOPs) and related operations.**
20. **Partially agreed.** Management agrees with the importance of having a framework and strategy for partnerships, and notes that these are already in place through the IFAD Partnership Framework (EB 2019/127/R.4) and the IFAD Strategy and Action Plan on Environment and Climate Change 2019-2025 (EB 2018/125/R.12). Indeed, IFAD has forged several successful partnerships in the area of climate change: on the one hand to increase resources mobilized, for example, from bilateral donors and the global climate funds; and on the other to strengthen technical cooperation, such as through the Nationally Determined Contributions Partnership, the United Nations Environment Management Group and the multilateral development bank working groups on social and environmental safeguards and climate finance tracking. Strengthening partnerships in the climate domain will be one of the areas of focus of the strategy and roadmap for alignment with the Paris Agreement that Management is developing.
21. **Recommendation 6. IFAD should ensure sustained organizational learning from operational experience to improve current and future CCA performance.**
22. **Partially agreed.** Management agrees on the importance of learning from operational experience to improve current and future CCA performance. In particular, Management agrees with recommendation 6(a) on identifying successful CCA responses; putting in place mechanisms to discuss and ascertain the factors that contributed to success; and based on this discussion, identifying design opportunities. Management also agrees that discussions should include relevant project delivery teams, supervision mission members and relevant staff in Strategy and Knowledge Department, Programme Management Department and other partners and external experts when needed, as per recommendation 6(b).
23. With regard to recommendations 6(c) and 6(d) on a learning framework, Management believes that various existing instruments are already in place and cater appropriately to IOE's proposals, namely: the IFAD Strategy and Action Plan on Environment and Climate Change 2019-2025 (EB 2018/125/R.12); its associated Results Measurement Framework (EB 2019/126/R.3); and reporting mechanisms such as the RIDE and CAR. Rather than introducing new instruments, Management will consider adjustments to outputs and targets following the findings of the midline review of the IFAD strategy mentioned in paragraph 6.

# Senior independent advisors' report

Robert D. van den Berg, Professor, King's College London, University of London

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## Summary

1. This is a highly relevant evaluation for IFAD's role in tackling the increasingly urgent climate crisis, especially in supporting smallholder farmers in partner countries. The evaluation shows the changes that IFAD has adopted and provides a fresh perspective on how these can be further improved and strengthened, for which credible and valid evaluative evidence has been assembled and discussed.
2. We are especially appreciative of the interactive way in which this evaluation has taken shape and of the way in which the findings have been discussed with Management and stakeholders. The meticulous way in which the draft report and the evidence have been discussed with those who need to use its findings and recommendations adds to the validity of the work done. As independent advisors, we have interacted with the Independent Office of Evaluation of IFAD (IOE) on methodological issues and on ensuring that best international practice was followed in the evaluation of poverty, rural development and its linkages to climate change.
3. We very much recommend this evaluation report to its readers and hope IFAD and partner countries will use its valuable lessons.

## Quality of the evaluation

4. As independent advisers, we were involved in looking at the draft report of the evaluation. This means that we did not have any input regarding the design and implementation of the evaluation. While an independent perspective could be useful in the design phase, we were pleased to see that a "core learning partnership" had been formed with relevant professional experts in IFAD, who were involved in all phases of the evaluation. Our assessment of the quality of the evaluation is based on our interaction with IOE on the draft report. We feel that the evidence gathered by this evaluation is credible, valid and relevant for the work of IFAD.

## Context of the evaluation

5. Our comments on the draft report are focused on two areas of major concern for IFAD: the climate crisis and rural poverty. On both issues, we feel the report has a lot to contribute to further thinking at IFAD, which would go beyond the confines of this evaluation. We believe the evaluation offers a solid foundation for future work and recommend its findings and recommendations for future action.

## The climate crisis and its impact on smallholder farmers

6. As is well known, the climate crisis will have its biggest impact on the poor and disadvantaged, and especially so in the least developed countries. It is therefore a key area of concern for IFAD. This report provides timely evidence and recommendations for future action. While the report is focused on resilience and adaptation to climate change, and its findings will help IFAD ensure better support to smallholder farmers, it should be noted that, in addition, farmers will need to be supported when extraordinary climate events take place, such as longer-term hot spells, more destructive hurricanes and similar weather phenomena, as well as flooding or extreme droughts. There is only so much that farmers can adapt to, and the time will come when more needs to be done than increasing the capacity of farmers to adapt to gradual climate changes. We hope the discussion of the report will include this forward-looking perspective.
7. While the focus on local adaptation in the report is important and useful, and IFAD is applauded for it, in our view there should also be interaction and exchange on national, regional and global adaptation issues and plans, in both directions: scaling-up solutions that work but also being informed about national and regional adaptation plans that, for example, would uproot farmers or transform agricultural practices. There should be mechanisms to learn throughout the portfolio, but also to learn from national- or ecosystem-level adaptation efforts. The evaluation demonstrates that IFAD is up to this task.

## Poverty issues

8. In most countries, the incidence of poverty is higher in rural areas. There are various reasons for this, including low education, fewer possibilities to address risks, low mobility, low productivity and institutional challenges. The evaluation is right in assessing one of the most important elements that increase poverty in rural areas: the effects of climate change.
9. One of the most important findings of the evaluation is determining that most climate change adaptation (CCA) projects do not target the most vulnerable population. It is important that new projects are able to target properly, using the best targeting tools available. These tools should include income-based indicators, but also multidimensional tools and indicators. IFAD should use multidimensional poverty measurements in the future.
10. The risk of climate change increases for poor families because they live in high-risk places. Lack of resources is not the only reason for this; it is also caused by bad institutional arrangements between poor families and authorities. Due to elections and corruption, politicians offer that families remain in risky settlements. This evaluation does not take this element into account, but we believe it is important for it to be addressed in further analysis, especially when the evaluation mentions that "Dialogue and learning to strengthen the enabling policy and regulatory environments at sub-national, national and international levels (e.g. the United Nations Framework Convention on Climate Change) should also be a key programme effect."
11. It would also be important to assess, in the future, the different strategies adopted by families to reduce risk and improve well-being, including moving to other sectors in the economy. Poverty reduction in rural areas is also achieved through other income sources; smallholders should be flexible enough to make such a move.

## Methodology

12. This report presents a very solid approach to evaluation. Nevertheless, even solid approaches have their limitations, and the climate crisis has posed challenges in this regard, which will need to be taken up by IFAD and IOE. The report contains a very useful discussion of this in its main text. The further development of thinking about resilience and how it should be defined and measured, and on transformational change, adaptive capacities and so on, should receive further impetus through this evaluation. It is good to see that IFAD and IOE are working on these issues and are connecting to international initiatives in this regard. This has implications beyond climate issues: as noted in paragraph 24, climate resilience is intricately linked to overall development resilience, especially of the rural poor.

## Conclusions

13. The report will provide a valuable resource for IFAD to deepen and enhance its approach to CCA and resilience. The climate crisis will hit the poorest hardest; this puts an emphasis on how IFAD looks at and measures poverty and includes this in its strategy to support adaptation and resilience regarding climate change in smallholder farming. The many findings and lessons draw together information from a range of sources and deserve to be widely read.

14. Even if IFAD does well on CCA, climate change remains a huge global problem. We can overcome the effects of climate change, but the root problem is there and it is growing. IFAD and the other United Nations agencies, taking into account the United Nations reform, should seriously work with countries to mitigate the problem. Smallholders' adaptation to climate change will greatly benefit if the world adopts a new and concrete strategy for climate change.





# I. Background

1. This section presents the rationale for the evaluation, the conceptual framework and definitions related to climate change adaptation (CCA), the theory of change (ToC), the evaluation methodology and the constraints faced.

## A. Introduction

2. In December 2019, at the 128<sup>th</sup> session, the Executive Board approved the proposal for a thematic evaluation (TE) of IFAD's contribution to smallholder farmers' adaptation to climate change.<sup>1</sup> IFAD's mandate to invest in poor rural people to enhance food production and food security and to eradicate poverty in rural areas is inextricably linked to supporting smallholder farmers' adaptation to climate change.<sup>2</sup>
3. **Climate change directly affects the smallholder agriculture**<sup>3</sup> that constitutes 75 per cent of the world's farms,<sup>4</sup> 60 per cent of the global agricultural workforce<sup>5</sup> and is the source of over 80 per cent of the food consumed in the developing world.<sup>6</sup> Rising temperatures and changing patterns of precipitation, coupled with an increasing frequency and magnitude of extreme weather events (such as floods, droughts and cyclones) and changes in the seasonality of weather patterns, are expected to increase the vulnerabilities of smallholder farmers to a changing climate. A recent report from the United Nations Intergovernmental Panel on Climate Change (IPCC) warned that climate change is accelerating at a faster pace than previously projected and that life on earth is poised for catastrophic consequences unless drastic and immediate action is immediately taken.<sup>7</sup> Its 2018 report<sup>8</sup> also drew

attention to the impacts of climate change on ecosystems, the rapidly narrowing opportunities to act and the world's limited experience of effective adaptation at transformative scales. A global temperature increase of 2° C will exacerbate hunger due to climate change,<sup>9</sup> seriously stress marine and terrestrial ecosystems, result in almost two billion people having to live in water-scarce environments<sup>10</sup> and magnify the inequalities between women and men.<sup>11</sup>

4. In recognition of the urgency of the situation, the goals set out in the United Nations 2030 Agenda for Sustainable Development include CCA and environmentally sustainable development.<sup>12</sup> The formulation of these Sustainable Development Goals (SDGs) came in the wake of important international agreements on climate-related issues, including the United Nations Framework Convention on Climate Change (UNFCCC, 1992), the Kyoto Protocol (1997), the Paris Agreement 2015 and the agreement to establish the Conference of the Parties (COP).<sup>13</sup>

1 IFAD, 2019, p. 31.  
2 IFAD, 2016.  
3 IFAD, 2009.  
4 Lowder et al., 2016.  
5 Fyfe, 2002.  
6 UNEP and IFAD, 2013.  
7 IPCC, 2021.  
8 IPCC, 2018.

9 World Food Programme, Climate Action Portal, accessed on 23rd February 2021: <https://www.wfp.org/climate-action>  
10 UN Water Portal, accessed on 23rd February 2021: <https://www.unwater.org/water-facts/scarcity/>  
11 UNFCCC Portal, accessed on 23rd February 2021: <https://unfccc.int/gender>  
12 Sustainable Development Goals 2,12,13,14.  
13 See <https://www.eesi.org/policy/international> for a time line of major United Nations climate negotiations.

5. Assessments that specifically address the vulnerability of smallholder farmers to climate change remain limited, even when extensive information is available on the projected impacts on agriculture and on adaptation measures needed to minimize those impacts.<sup>14</sup> Over half of the world's undernourished people are rural smallholder food producers.<sup>15</sup> Smallholder agriculture is disproportionately threatened by unpredictable weather patterns, shifting seasons, frequent natural disasters and other climate risks.<sup>16</sup> The financial mechanisms for supporting adaptation measures to benefit smallholders are also often fragmented and inadequate.<sup>17</sup>
6. **In this context, during the past 30 years, IFAD projects have assisted poor rural smallholders living in marginal and unfavourable agroecological conditions to sustainably manage natural resources and increase agricultural productivity, even under adverse climatic conditions.** In 2004, IFAD became an accredited implementation partner to the Global Environment Facility (GEF) with financing approved for CCA, which marks the point when CCA became an explicit objective of IFAD. IFAD also became an accredited entity of the Adaptation Fund (AF) in 2010 and the Green Climate Fund (GCF) in 2018. It also recognized CCA as an explicit priority with its Eighth Replenishment 2010-2012 (IFAD8).<sup>18</sup> In 2010, a climate change strategy was adopted and the flagship Adaptation for Smallholder Agricultural Programme (ASAP I) launched in 2012 to support smallholder investment in climate resilience.<sup>19</sup> The Social, Environmental and Climate Assessment Procedures (SECAP), mandatory since 2015, was an important mechanism to help mainstream climate change. Strengthening environmental sustainability and climate resilience constituted one of the three strategic objectives in the 2016-2025 Strategic Framework. In 2018, the IFAD Strategy and Action Plan on Environment and Climate Change 2019-2025 fused climate and environment strategies and committed to reduce the exposure and vulnerability to climate change faced by 24 million rural smallholder farmers by 2025.<sup>20</sup> The IFAD11 midterm review estimated that 34 per cent of IFAD's total investments in 2019 (equivalent to US\$568 million) was directed towards climate finance.<sup>21</sup> The key milestones are further elaborated in chapter 2 (table 2).
7. **IFAD's long engagement with climate change adaptation, efforts to mainstream CCA in its operations, and expanded climate investments provide a compelling and timely case for a comprehensive evaluation to take stock and learn lessons to improve ongoing and future IFAD interventions to strengthen smallholder climate resilience in a sustainable manner.** Contributions to CCA have been included in the Independent Office of Evaluation's project-level evaluations, in project completion reports (PCRs) since 2015, in select impact assessments of CCA projects, and in the midterm review of ASAP I. Yet, no independent or self-evaluation is available on how well IFAD interventions, policies, and strategies have acted together to strengthen the climate resilience of smallholders, or more explicitly, on IFAD's overall development effectiveness in this area, hence the rationale for this thematic evaluation.
8. **The objectives of the evaluation** were to critically review and assess the performance of IFAD across a number of areas, including a) support for smallholders' efforts to manage climate change risks; b) mainstreaming CCA into IFAD programmes and projects to strengthen smallholders' climate adaptation capacity in an environmentally sustainable manner; and c) scaling up successful climate-responsive approaches.
9. **To better contextualize IFAD's performance in this area, its business model towards CCA was compared with other international financial institutions (IFIs) and selected United Nations agencies,** as described later in this chapter.

<sup>14</sup> Donatti et al., 2019.

<sup>15</sup> IFAD, 2011; Lloyd et al., 2018.

<sup>16</sup> UN General Assembly, 2018.

<sup>17</sup> UNEP, 2018.

<sup>18</sup> Annex II provides a chronology of key climate change milestones for IFAD.

<sup>19</sup> The budget was US\$298 million (contributions coming from United Kingdom, Canada and Belgium). The programme used grants to incentivize farmers to adapt climate-resilient practices.

<sup>20</sup> IFAD, 2018.

<sup>21</sup> IFAD adheres to the Multilateral Development Bank's Methodologies for Climate Finance Tracking (p.1) to determine climate finance.

## B. Definitions and concepts

10. According to UNFCCC, the term “**climate change**” refers to “a change of climate that is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and that is in addition to natural climate variability observed over comparable time periods”.<sup>22</sup> The concept of “**climate risk**” relates to the potential adverse consequences of a climate-related hazard on people’s lives, livelihoods, health and well-being; ecosystems and species; economic, social and cultural assets; services (including ecosystem services); and infrastructure. Climate risks affect human systems as well as natural systems and are often represented as the probability of the occurrence of hazardous events or trends, multiplied by the impacts of these events or trends should they occur. Risk results from the interaction of vulnerability, exposure and hazards (figure 1).

11. The IPCC defines climate “**adaptation**” as the process of adjustment to actual or expected effects of climate change in order “to moderate harm or exploit beneficial opportunities”.<sup>23</sup> The term resilience “**resilience**” is defined by the IPCC as “the capacity of social, economic and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity and structure while also maintaining the capacity for adaptation, learning and transformation”.<sup>24</sup>

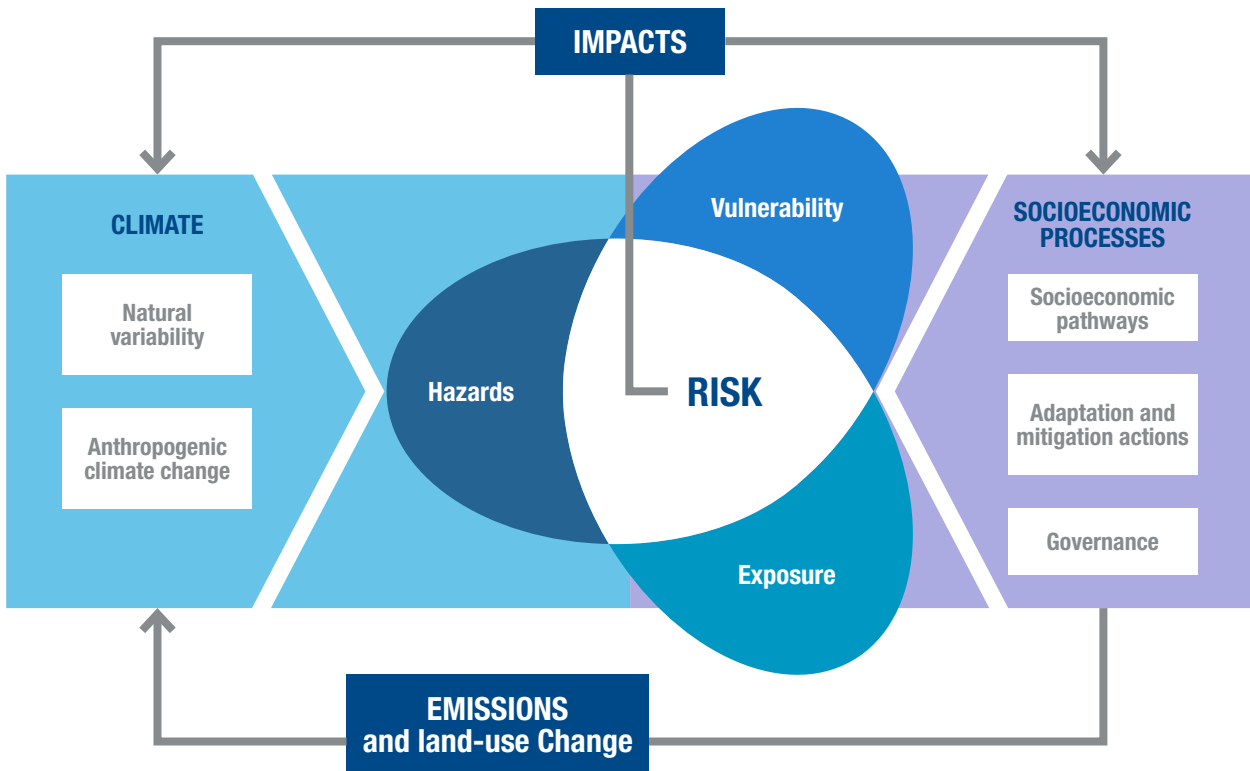
<sup>22</sup> UNFCCC, 1992, p.3.

<sup>23</sup> IPCC, 2018b, p. 542.

<sup>24</sup> IPCC, 2018b, p. 557.

FIGURE 1

Interdependencies between climate drivers, risks, impacts and responses



Source: IPCC (2014).



12. While closely interdependent, CCA measures and environmental sustainability measures are not synonymous and may involve trade-offs. Within the framework of sustainable development ('development that meets the needs of the present without compromising the ability of future generations to meet their own needs'),<sup>25</sup> the IPCC (2018b) defines (environmental) sustainability as a dynamic process that guarantees the persistence of natural and human systems in an equitable manner. In other words, it is about pursuing goals for the human system (such as equity and food security) while preserving (or restoring degraded) natural systems. This sustainability consideration is not automatically embedded in climate adaptation approaches. As in any development intervention, efforts to address the sustainability of the natural system need to be brought in as central elements in designing climate adaptation response. These similarities and differences have long posed challenges for development interventions and efforts to identify the most appropriate climate adaptation interventions for promoting and interpreting resulting outcomes.
13. It is thus necessary to situate the adaptive responses of smallholders and their capacities in the context of localized climate risks in order to assess the adequacy and appropriateness of responses to the risks identified. If the magnitude of climate risks outstrips the existing response capacity, then smallholders will need external assistance to recognize localized risks, identify existing smallholder responses and knowledge, and determine the appropriateness and adequacy of the enhanced adaptation response and its impact on the ecosystem and on the relevant socio-economic systems. With the rate at which climate change is accelerating, periodic reassessments of risks in areas prone to climate threats are needed to ensure the adequacy and magnitude of the intended intervention or response. The ability of the organization to recognize and adaptively respond to changing climate risks is a critical aspect of this evaluation.
14. The inhabitants of all locales facing climate risk require adaptive strategies, and this need is particularly relevant for smallholders and the rural poor, for whom disruptions affecting their food security and livelihoods carry a far greater risk. This implies that CCA must be scaled to reach all poor smallholders facing climate risks. Where the impacts of climate change and adaptation responses are at the local scale, it is essential that successful actions are then replicated or scaled up to other locations with similar conditions to ensure widespread, systematic adjustments to climate change. Larger-scale adaptive responses, such as at landscape or watershed scales, might already be at a sufficient scale.
15. **Additional definitions:** IFAD12 focuses on achieving 'transformative change'. Given the urgency of the need to engage with the climate crisis, climate response needs to be not only effective but transformative. At the corporate level, IFAD has not yet defined transformative change.<sup>26</sup> By reviewing the literature on the subject, this evaluation presents some key attributes of transformational change.<sup>27</sup> These include, for example, changes in the mindset and behaviour of smallholders and duty-bearers in recognizing the importance of investing in CCA. Transformative change catalyses system-level changes to reach beyond project boundaries, generating multilevel (local, subnational, national and global), cross-sector (agriculture, environment, health, gender, finance) links and influencing decision-making. Building transformational change also requires sound root-cause analysis of development and sustainability challenges and taking into account the intended and unintended consequences of human system actions on ecosystems.

<sup>25</sup> IPCC, 2018b. The definition of (environmental) sustainability in the IPCC Glossary borrows from the 1987 UN World Commission on Environment and Development report: 'Our Common Future'.

<sup>26</sup> Some IFAD reports refer to transformative change and attempt to provide definition specific to sectors. For example, see the Rural Development Report 2016.

<sup>27</sup> Blue Marble Evaluation (<https://bluemarbleeval.org/>), Better Evaluation (<https://www.betterevaluation.org>), Centre for Evaluation Innovation (<https://www.evaluationinnovation.org>), American Evaluation Association's Systems in Evaluation (<http://comm.eval.org/systemsinevaluation/home>) to name a few.

16. **Scaling up.** IFAD's Operational Framework for Scaling up Results defined scaling up as expanding, adapting and supporting successful policies, programmes and knowledge so that they can leverage resources and partners to deliver greater impacts to a larger number of rural beneficiaries in a sustainable way. Scaling up, in addition to replicating or expanding approaches or results to improve outreach, can also mean moving a project forward into a more developed, complex phase, possibly involving new components, configurations and stakeholders. It could also involve mainstreaming a certain approach into policy.<sup>28</sup>
17. **Human system - ecosystem nexus.** Environmental sustainability requires not only that global warming is arrested, but also that other critical challenges confronting the planet, such as loss of biodiversity and compromised quality of land, air, and water do not reach critical thresholds such that the planet cannot sustain life. Climate change affects smallholder agriculture and ecosystems. The status of the ecosystems in which smallholdings are located affects farm production, its sustainability and the options available for improving system resilience. At the same time, smallholder actions affect these ecosystems both positively and negatively and through their ecosystem interactions, smallholder agriculture also moderates the rate of climate change. This intended and unintended interaction between the human system and ecosystem represents the so-called 'nexus' and determines the environmental sustainability of CCA responses.
18. **Win-win solution** is used in this evaluation to refer to the CCA responses that seek to collectively achieve climate, economic and environmental resilience. In addition to strengthening economic and climate resilience, these responses recognize any negative impact of agricultural practices on ecosystems and aim to restore degraded environments to ensure environmental sustainability. In other words, deep adaptation goes beyond the do-no-harm approach and attempts to reverse the damage to the surrounding ecosystem.
19. **Farmers.** IFAD operations defines farmers as people engaged in agricultural activities and/or agricultural-related businesses. These activities or businesses relate to crop production, livestock, capture fisheries and agroforestry. In this evaluation, pastoralists and agro-pastoralists are assumed to be a subset of farmers.

## Measuring climate resilience

20. **To date, IFAD does not have a corporate definition or measurement framework to assess climate resilience.**<sup>29</sup> Given its absence, this evaluation draws on the necessary elements of a working definition and framework that is consistent with the current development literature, the practices of other IFIs and the most recent attempts by IFAD country offices and regions to define and measure resilience.
21. **IFAD recognized that the concept of climate resilience may be applied to an entire system or its components and to all hazardous events or a subset of events.**<sup>30</sup> Resilience applied to particular components or a particular subset of hazardous events is referred to as 'specified resilience' and must be qualified by the response to the specific questions 'resilience to what?' and 'resilience of whom?' The IPCC definition corresponds to general resilience, which is relevant to all systems (social, economic and ecological/environmental) and considers all hazardous events. IFAD<sup>31</sup> recognized the need to work with 'specific' resilience that is applicable to strengthening the well-being and food security of smallholder farmers and their communities. For instance, the concept note of ASAP (2011) adopted the IPCC definition as a starting point, and defined specific resilience to climate shocks and stresses of smallholders and their communities at farm and landscape levels. Shocks were understood to be extreme events such as floods, cyclones, droughts, and stressors covered prolonged low-intensity effects such as rising temperatures and their consequences.<sup>32</sup>

<sup>29</sup> As discussed subsequently, in September 2015, IFAD produced a 'How To Do Note' on 'Measuring climate resilience' that presented different approaches to measuring resilience without prescribing any specific approach. The Corporate Results Management Framework of IFAD11 provides four core indicators for aggregating climate resilience results (see paragraph 141, footnote 110 of this report). These indicators, such as the number of groups supported, and number of hectares brought under CCA technologies, provide critical output level indicators that contribute to smallholder resilience but do not measure the actual outcome level changes to climate resilience, such as reduced variations in income over time, or the extent to which degraded ecosystems were restored, to name a few.

<sup>30</sup> Walker *et al.*, 2004; Folke *et al.*, 2010; Elmqvist 2014; Carpenter *et al.*, 2001.

<sup>31</sup> IFAD, 2015d.

<sup>32</sup> IFAD, 2011a.

<sup>28</sup> IFAD, 2015c.

22. **Consistent with the literature on resilience, IFAD treats climate resilience as a measure of the capacity to adapt to climate change effects.** As subsequent chapters will discuss, the corporate framework to conceptualize and measure climate resilience is yet to be put in place. While IFAD-wide guidance that is consistent with international practices is currently absent, multiple efforts are under way at the regional level to develop such a framework and use it to track improvements to CCA in projects. The Resilience Scorecard in the Latin America and the Caribbean (LAC) region is one such example.<sup>33</sup>

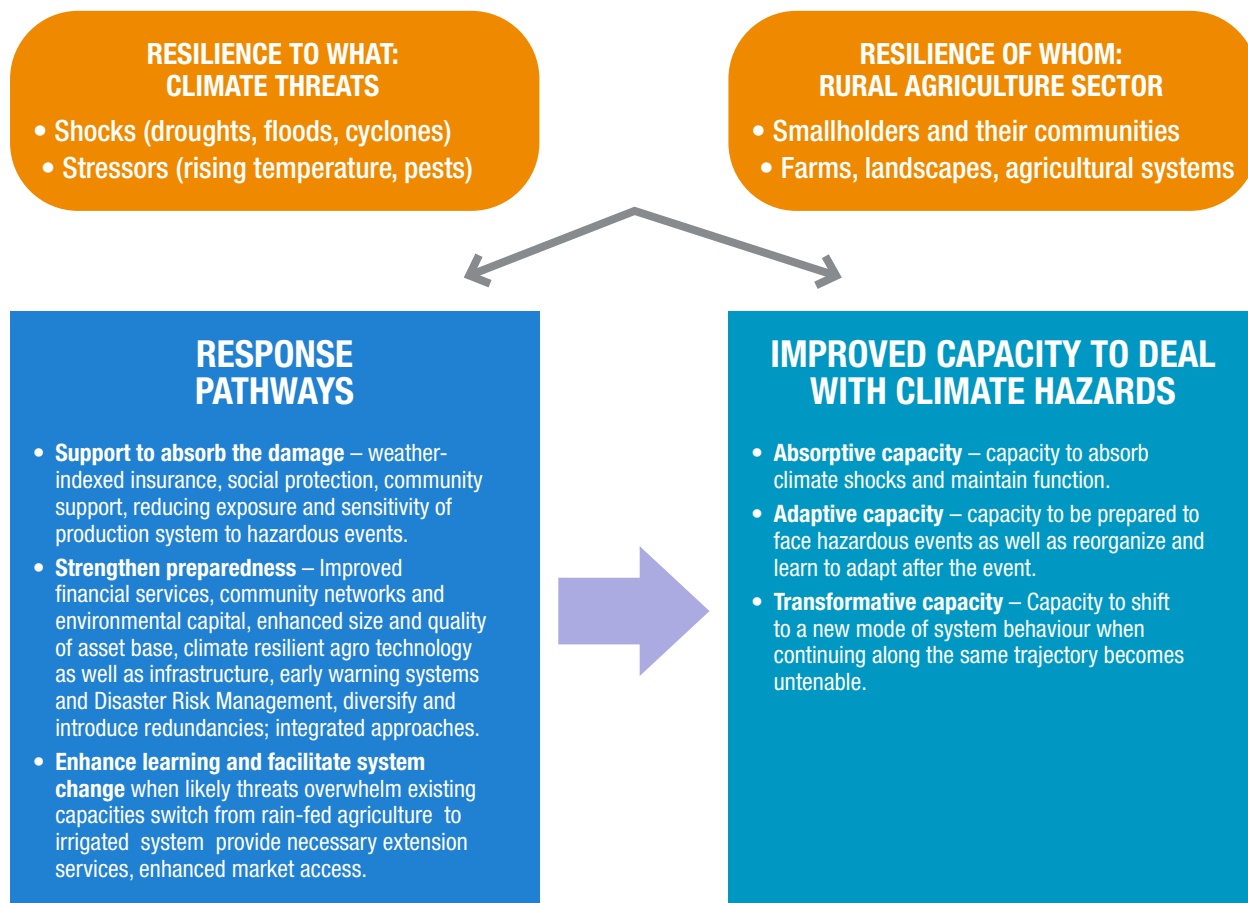
23. **Climate resilience is widely referenced in the literature and practices of other IFIs such as the World Bank, in terms of three types of capacity: absorptive capacity, adaptive capacity and transformative capacity.** Absorptive capacity is the capacity to absorb shocks and maintain function; adaptive capacity describes being prepared for the next event or recovering from one by reorganizing an agricultural production system and learning in order to adapt; and transformative capacity is the ability to shift into a new mode of system behaviour when continuing along the same trajectory becomes untenable.<sup>34</sup> This understanding and definition is also reflected in more recent climate responses from IFAD (for instance, the World Bank and IFAD joint project in Ethiopia, the Lowlands Livelihood Resilience Project (2019-2026)). Figure 2 summarizes this conceptual resilience framework for the rural agricultural sector.

33 IFAD produced a 'How To Do note: Measuring Climate Resilience' in 2015 which provided alternative methods to measure climate resilience, without offering a preferred approach. LAC piloted efforts to operationalize one of these approaches and developed Resilience Scorecards to measure resilience through proxy indicators: <https://intranet.ifad.org/documents/20143/1443189/Understanding+and+monitoring+Resilience+Lac+11+April+2018.pptx/e4e85961-3d2b-11f9-c101-6d5d873c1379> This approach was also tested by the Asia and the Pacific Division with the Environment, Climate, Gender and Social Inclusion Division's support.

34 Boltz *et al.*, 2019; Folke *et al.*, 2010; Helfgott, 2018.

FIGURE 2

**A conceptual framework for climate resilience in the rural agricultural sector**



24. **The conceptual framework is consistent with the idea that climate resilience is intricately linked to overall development resilience.** The pathways above show the importance of other types of resilience in shaping climate resilience. For instance, climate change-related absorptive and adaptive capacities are, in turn, linked to the initial asset base (economic resilience), environmental capital (environmental resilience) and community support (social capital).

## C. Theory of change

25. Strengthening smallholder farmers' adaptation to climate change is a priority for IFAD. To develop an operational theory of change (ToC) for IFAD's CCA response, the evaluation collected evidence from IOE project performance evaluations of 144 relevant projects that were completed between 2004<sup>35</sup> and 2018. Based on this evidence, a schematic system-level nested theory of change was developed by the evaluation team and validated by key stakeholders during the design finalization workshop and by key informants throughout the evaluation. The key elements of the high-level ToC are presented in figure 3 and the more detailed theory of change content, including key assumptions and risks, is presented in annex 2.<sup>36</sup>

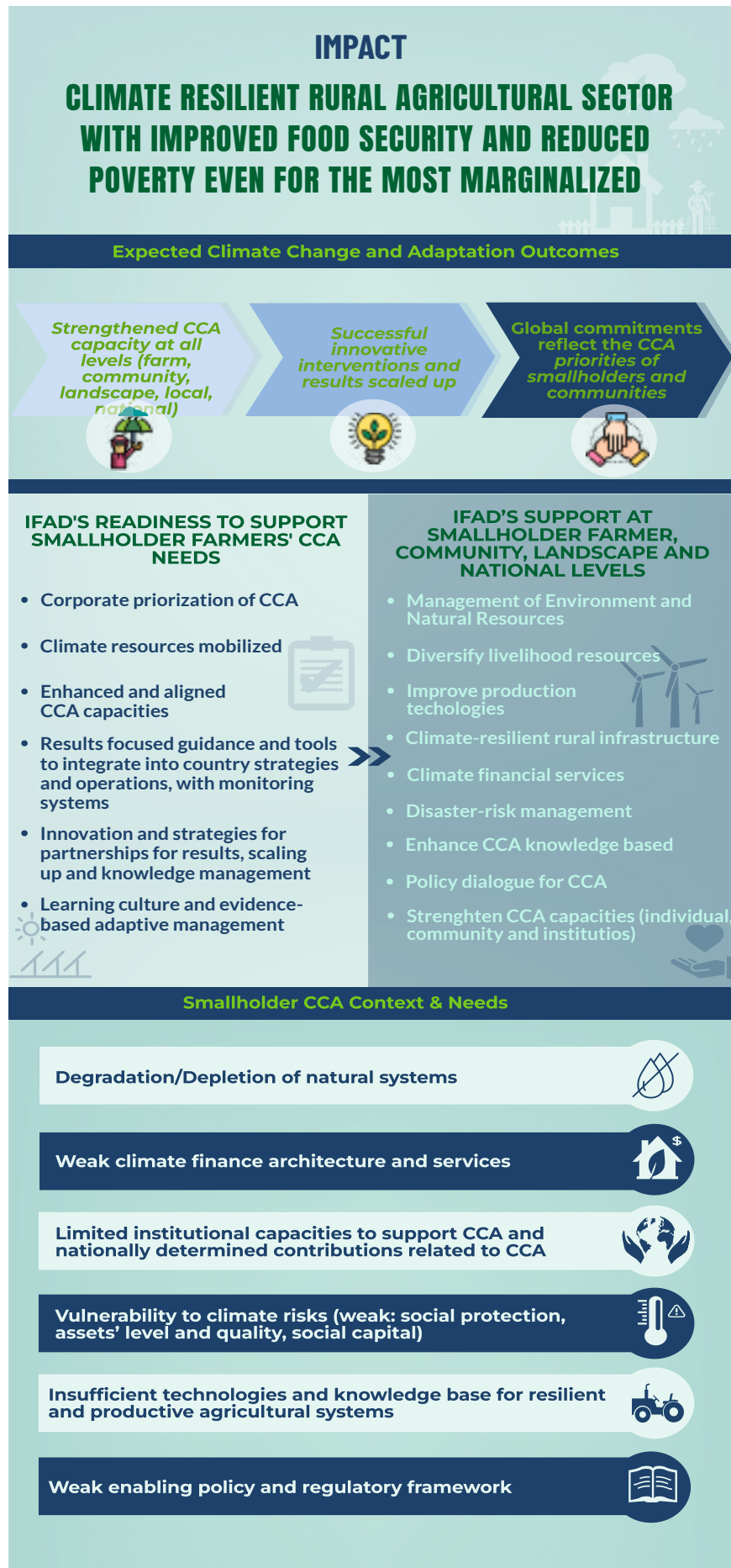
<sup>35</sup> 2004 marks the first year when IFAD became an implementation agency for GEF and started incorporating climate adaptation into its operations.

<sup>36</sup> IFAD's strategy and action plan on environment and climate change (2019-2025) presents a theory of change for the organization. However, it pertains to both environment and climate change generally and is not specific to climate adaptation. ASAP does not provide a corporate-level ToC for climate adaptation but the ToC of this approach paper draws upon the results framework and the concept note of ASAP.



FIGURE 3

High-level theory of change



26. The ToC in annex II identifies and defines the necessary preconditions and steps to achieve socially and environmentally sustainable CCA of smallholder agricultural communities. The ToC sets out an 'outcomes pathway' by which the process of change and its causal linkages are related chronologically, as well as by their increasing spatial impact. In this TE, five 'pillars' or domains were identified. The first pillar is IFAD's corporate resources and instruments, which ensure that the organization is fit for purpose. These include: having an appropriate priority and strategy to mainstream and target CCA; providing the relevant technical and financial capabilities and tools to manage development programmes in-country and to build national capacities; developing the partnerships to foster collaboration with governments and agencies; and putting appropriate monitoring and evaluation systems in place to ensure effective project implementation and learning emerges from the investment. Collectively, these steps provide the basis for providing relevant support to smallholders and ensuring the design and implementation of projects will meet external scrutiny and the required levels of quality.
27. The second pillar relates to defining and identifying the adaptation needs of smallholders and their communities, including the most vulnerable and food-insecure. IFAD can ensure that activities will be effective across key areas. These include addressing climate risks, ensuring projects are environmentally sustainable and socially inclusive of the most vulnerable smallholders, incorporating local knowledge into the design and ensuring actions are context-appropriate. Projects are expected to deliver efficiency in terms of time inputs and resources, seek opportunities to scale up and promote innovative solutions to contribute to the wider knowledge base through learning.
28. Feeding into the third pillar, sound design and implementation by IFAD should lead to positive programme and project effects for smallholders through strengthened adaptation responses and climate resilience, with positive consequences for livelihoods and income sources (farm and non-farm activities). Smallholders and their communities will become more resilient, reflected in improved and diversified smallholder earnings, enhanced food security, and strengthened supporting institutions and a positive enabling policy environment. Livelihoods for poor rural populations, including the landless, youth and others, will be addressed through developing off-farm and on farm-related enterprises in smallholder communities. A positive enabling environment is achieved through transforming policies and regulations to support adaptation and sustainability.
29. It is also important that IFAD-funded interventions are targeted to improve or at least maintain the condition of local ecosystems, by ensuring natural-human interventions are explicitly addressed, that sustainable land and water management practices are promoted, that land degradation, deforestation and biodiversity losses are minimized and opportunities for carbon sequestration are maximized to limit carbon emissions. IFAD programmes should also support governments and national institutions to build capacity. This will ensure the integration of CCA approaches into future rural development activities and advocate ongoing support to smallholders and the rural poor. Dialogue and learning to strengthen the enabling policy and regulatory environments at subnational, national and international levels (e.g. UNFCCC) should also be a key programme effect.
30. As reflected in the fourth pillar, successful IFAD programme and project outcomes need to be considered for different time frames, both immediate and for the longer term. For example, in terms of achieving enhanced resilience to climate risks, it will be important to expand the knowledge base, with learning and advocacy platforms at both national and international levels to facilitate CCA for smallholders, including the most vulnerable. There will also be a priority action to develop synergies with international agencies, NGOs and others to disseminate best practices and to co-design integrated support services to build adaptive capacity. This will require a suitable climate-informed knowledge platform, with IFAD and partners as users and contributors at global and country levels, to scale successful adaptation. If the complexity of smallholder-landscape-ecosystem interactions or the specific vulnerabilities of women and disadvantaged groups are not sufficiently understood and addressed, then IFAD's adaptation efforts may adversely affect the environment and sustained resilience will be at risk.

31. Finally, as represented in the fifth pillar, the longer-term impact from IFAD's smallholder climate interventions would lead to sustainable agricultural development. Here, three priority areas are relevant, including: (i) long-term poverty reduction and social equality (improving well-being, livelihoods, food security and empowerment); (ii) sustainable ecosystems management (human-natural interventions being explicitly recognized and ecosystem functions and services protected); and (iii) tangible contributions to society, knowledge and policy accrue. This would include, for example, informing debates on sustainable and healthy diets, improved health and education of smallholders and vulnerable communities, increased national coping capacity and global attention to climate justice, and greater fiscal justice at national and transnational levels.
- ## D. Methodology
32. **Key evaluation issues.** This evaluation focused on the extent to which IFAD-supported initiatives have helped smallholders adapt to the impacts of climate change by promoting climate-resilient livelihoods and improving their food security. The overarching questions were identified from an initial round of consultations, then validated during the design workshop with IFAD Management representatives. Three overarching questions were identified:
- i. What difference have IFAD interventions made in the ability of smallholders and their communities to adapt to climate change, particularly in the case of those most vulnerable to climate change, such as women, youth and indigenous peoples? What has worked and why? Have opportunities been missed?
  - ii. To what extent has IFAD been able to leverage its operations to strengthen smallholder farmers' CCA capacity at the local, subnational and national levels through partnerships and by scaling up successful interventions and development results, promoting enabling policies, strengthening institutional capacities and improving the financial architecture for adaptation? What has worked and why? What opportunities have been missed?
  - iii. To what extent is IFAD equipped to address the existing and projected adaptation challenges facing smallholder farmers and to meet its commitments under IFAD11 and beyond?
33. **Scope.** The scope of the evaluation was comprehensive. It covered all geographic regions and countries in which IFAD operates; all related IFAD interventions in projects as well as country strategies (country strategic opportunities programmes [COSOPs] and country strategy notes [CSNs]); and IFAD's business model related to CCA, including relevant corporate replenishment commitments, resource mobilization, as well as corporate strategies, guidance and tools. The evaluation covered the period since CCA was confirmed as a corporate priority by IFAD in 2010 (2010-2019).
34. **Evaluation criteria.** The evaluation adopted key criteria, including relevance, effectiveness and impact. The analysis also included issues related to coherence and sustainability. In conjunction with a theory of change, an evaluation matrix was used to inform the development of country case studies, desk reviews, evaluation tools and an interview protocol.
35. **Consultations.** Initial discussions with the Evaluation Committee (EC) and preparations for the evaluation commenced in April 2020, followed by discussions with management through the management self-assessment workshop (June 2020). Two consultations were held with the core learning partnership group (CLP): the first in April 2021 to discuss emerging messages after the data collection and analysis, and the second in June 2021 to discuss the draft evaluation report. The CLP comprises of IFAD technical experts in climate and environment and managers, and was established to strengthen IFAD-wide ownership of the evaluation and to strengthen its relevance to the organization.
36. **Evaluation process.** A design workshop was held with the team and key IFAD stakeholders to finalize the theory of change and evaluation design (June 2020). A desk review of all relevant documents and portfolio analysis was conducted to assist the case study selection and framing. The data collection and analyses were completed between July 2020-April 2021. The report was drafted and quality assured through a series of internal iterations between May-August 2021.
37. **Data collection and analysis.** The evaluation employed multiple lines of evidence to ensure that all interests were represented. Primary data was collected through reviews of key programme and policy documents, an extensive and systematic portfolio review of 256 projects, 20 detailed case studies (involving 20 countries), 2 online surveys, and interviews and group discussions with representatives at headquarters. The evaluation also collected secondary data through a rapid evidence assessment exercise, collecting available geospatial data, and three learning theme studies.

## Primary data

38. **Document review.** The evaluation team conducted an extensive review of relevant documents including: i) IFAD's Strategic Frameworks, replenishment reports and other strategy documents related to CCA since 2010; ii) the four versions of the SECAP beginning with 2009; iii) COSOPs and CSNs approved since 2010; iv) documentation of IFAD's ongoing efforts and thinking to improve climate responses, such as the Rural Resilience Programme (2RP); iv) relevant self-evaluations conducted by IFAD management, including the seven impact assessments of climate responses conducted as of 2019 (Bangladesh, Chad, Ethiopia, Malawi, Mexico, Rwanda and Tajikistan) and v) related knowledge products, such as research and evaluative studies on smallholder adaptation and agriculture conducted by other development partners.
39. **Portfolio review.** Documents for 256 projects identified as addressing climate risk and approved from 2010 to 2019. Chapter II elaborates how projects addressing climate threats were identified and provides an overview of the portfolio analysis.
40. **Case studies.** Altogether, 20 case studies were conducted involving 35 projects (annex I, table 1) constituting 14 per cent of the IFAD portfolio of climate responses. These involved key informant interviews as well as the collection of monitored data. Interviews were held with government officials, other actors such as the World Bank, the European Union (EU), and the Food and Agriculture Organization of the United Nations (FAO), research organizations, NGOs, private sector organizations, farmers' organizations and other beneficiaries and key civil society organizations active in CCA. Smallholders and other target groups were interviewed during field visits by national consultants and by evaluation team members.
41. **Impact of COVID-19.** Due to the COVID-19 outbreak and ensuing travel restrictions, the case studies were all undertaken remotely with field visits by national consultants, wherever possible (13 of 20 countries). The pandemic also necessitated extensive desk-based document and portfolio reviews and remote engagement with IFAD staff, key informants and stakeholders, and with secondary sources. When country pandemic controls permitted, national consultants conducted site visits and beneficiary interviews, with the international evaluation team participating virtually. In addition, an in-country expert panel was constituted to verify important project claims, whenever feasible. The technical experts were chosen from academia or watchdog NGOs.
42. **Sampling strategy for case studies.** Country-level case studies were selected using a purposive sampling strategy to ensure representation across a number of criteria including: type and severity of climate risk, agricultural ecologies, typology of climate adaptive activities, type of agricultural system, income status, development context, fragility status, availability of geospatial data and maturity level. IFAD was committed to mainstreaming CCA at project and COSOP levels, so countries were chosen as the unit of analysis. Hence, the sampling strategy included not only project-level characteristics but also relevant country characteristics. Based on project design documents, each project was scored for the number of characteristics (types of climate activities, types of climate risks, and agroecological conditions, to name a few) that it represented, and then ranked. Inputs from IFAD management during the management self-assessment workshop and supplementary communications were used to refine the characteristics used to rank projects. Ranking became the mechanism used to select case studies. It should be noted that, consistent with the case study approach, purposive sampling aims not to simply create a microcosm of the project universe, but to capture the key elements that should be analysed. Highlights of some of the key characteristics of the cases studied are presented in table 1 below.



TABLE 1

## Select descriptive statistics of portfolio of CCA case studies

Description	Statistics
Total number of projects in case studies	35 (14% of the universe of CCA projects)
Total case studies (case study countries)	20
Share of ASAP-funded projects	50%
Share of projects with supplementary CCA finances	69%
Share of ongoing projects	71%
Share of projects approved after SECAP was introduced (2015)	43%
Share of projects in countries with a fragile situation	25%
Share of projects in lower-income/lower middle income countries	72%

Source: IOE elaboration of case studies.

43. **Institutional readiness study.** Interviews at IFAD headquarters were undertaken to feed into the formative part of the evaluation analysing IFAD's readiness to deliver on its future commitments. Semi-structured interviews and group discussions were held with IFAD senior managers, country directors, regional programme teams, and technical specialists based in IFAD headquarters as well as IFAD hubs and country offices, and selected Executive Board representatives. The institutional readiness analysis also benefited from the case studies, which explicitly assessed institutional readiness to deliver at the regional and country level.

44. **Online surveys** were used to collect views and experience from IFAD and project country staff regarding IFAD's CCA response (see annex VIII). The surveys were conducted between February and March 2021, and the results used to triangulate evidence from the case studies and document review. The surveys drew responses from 136 project staff and 102 IFAD staff, totalling 238 respondents.

**Primary data collection involved interviews with 742 beneficiaries and stakeholders and responses from 238 IFAD and project staff.**

#### Secondary data

45. **Geospatial data.** Given the challenges with collecting primary data, the evaluation team also considered the availability of geospatial data, in particular geographical information system (GIS) data to inform case studies. Due to the dramatic increase in the availability, accessibility and quality of satellite imagery, earth observation and geospatial technologies have allowed the study of Earth surface phenomena and features in much greater detail than ever before. Such instruments are increasingly being used for monitoring and tracking key aspects of climate resilience interventions. The study analysed the geospatial information available to determine whether it could be used for monitoring results, achieving project milestones, and for geographical targeting in IFAD operations. Five of the 20 case studies benefited from supplementary GIS data.

46. **Evidence from IOE evaluations.** The evaluation team also reviewed evaluations undertaken by IOE, including evaluation synthesis reports on Environment and Natural Resource Management (2016),<sup>37</sup> IFAD's Support to Infrastructure (2020),<sup>38</sup> and corporate-level evaluations such as IFAD's Support to Innovations in Smallholder Agriculture (2020).<sup>39</sup> Case studies also benefited from ongoing or recent country strategy and programme evaluations and from evidence emerging in recent project performance evaluations (PPEs).
47. **Rapid evidence assessment (REA).**<sup>40</sup> A REA was undertaken to supplement the primary evidence collected from IFAD projects and programmes with key lessons and recommendations from relevant scientific peer-reviewed and grey literature on building smallholders' adaptive capacity to climate variability and change. In total, 1,338 documents were scanned and 91 selected from which to cull relevant evidence. This provided a transparent, rigorous and repeatable synthesis from non-IFAD sources in the areas of knowledge management (KM), scaling up and human system-ecosystem nexus. It was the first such exercise undertaken by IOE in its evaluations.
48. **Learning theme studies.** The TE aimed to promote learning from this evaluation. IFAD12 emphasizes the importance of achieving transformative change. Among many factors contributing to such transformation, this evaluation identified three themes critical for successful programming for CCA: i) Effective KM – strengthening the knowledge base based on experience and using evidence to improve solutions; ii) scaling up – designing and implementing with an aim to scale up results and projects or designing projects at scale provides another key pathway to transformational change; and iii) ecosystem-human system nexus – sustainability is key to transformation, and the long-term sustainability of climate response is ensured when ecosystems are restored, or at the least remain unharmed. IFAD recognizes the importance
- of this nexus in the Strategy and Action Plan on Environment and Climate Change 2019-25.
49. **Data analysis and reporting.** Methods and sources were triangulated to arrive at evidence. The sources of data included document review, primary data collected by the evaluation team and secondary data. This evidence base provided the answers to all questions in the evaluation matrix, which in turn provided the basis for drafting the evaluation report.
50. **Quality assurance.** Feedback on the draft report was sought and obtained from: i) a two-member external independent advisory panel; ii) IOE-wide peer review; iii) IFAD management, to identify any factual or interpretive errors; and iv) the CLP, to identify any omission of key evidence that could materially change the evaluation findings as well as factual and interpretive errors.
51. **Comparing with other IFIs.** The evaluation compared IFAD's support structure for responding to CCA with other IFIs and United Nations actors. Only the organizations that had recently conducted corporate-level, independent climate response-related evaluations were selected. The evaluation findings provided an external frame of reference with regard to identifying the critical success factors in responding to CCA. Based on this, comparisons with these organizations were made: World Bank, FAO, AF, GEF and Inter-American Development Bank (IDB). The analysis was based on findings from related independent evaluations conducted by these organizations, combined with a group discussion with evaluation offices. Table 5 was prepared based on this information and validated by management units.

37 Evaluation Synthesis Report on Environment and Natural Resource Management, 2016: [https://ioe.ifad.org/en/w/environment-and-natural-resource-management-evaluation-synthesis?p\\_l\\_back\\_url=%2Fen%2Fevaluation-synthesis%3Fmode%3Dsearch%26q%3DEnvironment](https://ioe.ifad.org/en/w/environment-and-natural-resource-management-evaluation-synthesis?p_l_back_url=%2Fen%2Fevaluation-synthesis%3Fmode%3Dsearch%26q%3DEnvironment)

38 [https://www.ifad.org/en/web/ioe/w/corporate-level-evaluation-on-ifad-s-engagement-in-pro-poor-value-chain-development-1?p\\_l\\_back\\_url=%2Fen%2Fweb%2Fioe%2Fcorporate-level-evaluations](https://www.ifad.org/en/web/ioe/w/corporate-level-evaluation-on-ifad-s-engagement-in-pro-poor-value-chain-development-1?p_l_back_url=%2Fen%2Fweb%2Fioe%2Fcorporate-level-evaluations)

39 [https://www.ifad.org/en/web/ioe/w/corporate-level-evaluation-on-ifad-s-support-to-innovations-for-inclusive-and-sustainable-smallholder-agriculture-1?p\\_l\\_back\\_url=%2Fen%2Fweb%2Fioe%2Fcorporate-level-evaluations](https://www.ifad.org/en/web/ioe/w/corporate-level-evaluation-on-ifad-s-support-to-innovations-for-inclusive-and-sustainable-smallholder-agriculture-1?p_l_back_url=%2Fen%2Fweb%2Fioe%2Fcorporate-level-evaluations)

40 Compared to a regular literature review, a REA provides a much broader and deeper analysis of both peer-reviewed and grey literature and adopts a highly structured sampling protocol to limit any sample biases. It is a recognized technique for gathering evidence in a robust, transparent and tractable way.

## 52. Evaluation process and key milestones

- The TE was initiated in October 2019 and discussed with the Evaluation Committee in its April 2020 session.
- Design workshop, June 2020.
- Management self-assessment workshop, June 2020.
- Desk reviews, interviews with IFAD managers in headquarters, and case study development, July 2020 - April 2021.
- Rapid evidence assessment, March 2021.
- Three learning theme studies, December 2020 - April 2021.
- Data analysis, February - June 2021. Weekly virtual meetings of the evaluation team to discuss relevant issues, identify key messages emerging from case study data.
- Reporting and quality assurance, May - August 2021.
  - ▶ Key messages workshop with Core Learning Partnership group (CLP), April 2021.
  - ▶ CLP discussion on draft evaluation report, July 2021.
  - ▶ IOE peer review of draft report, June 2021.
  - ▶ Management review of draft report, July 2021.
  - ▶ Evaluation advisory panel review of draft report, July 2021.

## E. Constraints

53. The evaluation was planned and started before the COVID-19 outbreak but largely conducted afterwards; thus, field visits by the evaluation team were not possible. This made it more difficult to gain a comprehensive view of the national context, climate risks and the adequacy and appropriateness of the project interventions and responses relative to local context and climate risks, and to identify unintended and unexpected effects. The use of national consultants helped address some of these gaps. To supplement this evidence, geospatial data was collected, where feasible, and analysed. While these proved to be of limited value in assessing results, they proved useful in other issues, for instance, assessing the efficacy of geographic targeting or the relevance of IFAD infrastructure to local needs.

## II. Mainstreaming climate change adaptation in IFAD and its evolution

54. This section provides an overview of the IFAD CCA portfolio and reviews the IFAD Adaptation Business Model, providing the context and perspective to inform framing the study and its analysis. An overview of the key findings of evaluations of similar entities concludes the section.
56. As discussed in chapter 1, this evaluation focuses on the climate response during 2010-2019. Of the 294 projects approved by the Executive Board during this period, 256<sup>41</sup> or 87 per cent identified climate risks and provided CCA support as part of their projects. Figure 4 presents the distribution of project age within the CCA portfolio of IFAD operations.

### A. Overview of IFAD's portfolio of CCA operations

55. **IFAD smallholder projects have strong CCA focus.** The evaluation considered all IFAD interventions contributing to smallholder adaptation to climate change. To identify interventions with climate response, two criteria were considered: (i) projects facing climate risk(s); and (ii) where project activities plausibly contributed to smallholders adapting to the climate risks they faced. The climate risks identified by the projects were determined from the project design reports (PDRs) and relevant COSOPs. When information was not available, the PDRs of recent projects in the geographical area were reviewed. To determine the possible contribution of project activities to address climate risks, the evaluation compiled all CCA activities listed in the PDRs of all 41 ASAP projects and identified the relevant categories of activities (see annex IX for details) addressing specific climate threats. The project activities and climate risks were compared with this list to determine if the project activity could plausibly contribute to addressing the climate risk. This approach emerged from the recognition that IFAD has a long history of working in areas with adverse and variable climate conditions, well before CCA became an organizational priority in 2010. IOE's analysis of project design reports shows that, even when the intention to address the climate risks is not explicitly stated, many IFAD interventions in areas facing climate risks conduct activities similar to those CCA projects facing climate risks in similar conditions and meet multilateral development banks' criteria. Hence, they likely contribute to CCA.

41 Review of project design reports.



FIGURE 4

Age of projects in CCA portfolio



Source: IOE elaboration.

57. **Engaging with climate risks.** Of the projects stating risk ratings, 95 per cent addressed moderate or high climate risk situations. However, it should be noted that only three quarters of the climate projects (187 of 256) actually provided any ratings of climate risks. This is because formal guidelines to assess risk ratings only became effective under SECAP in January 2015<sup>42</sup>. The risk level ratings

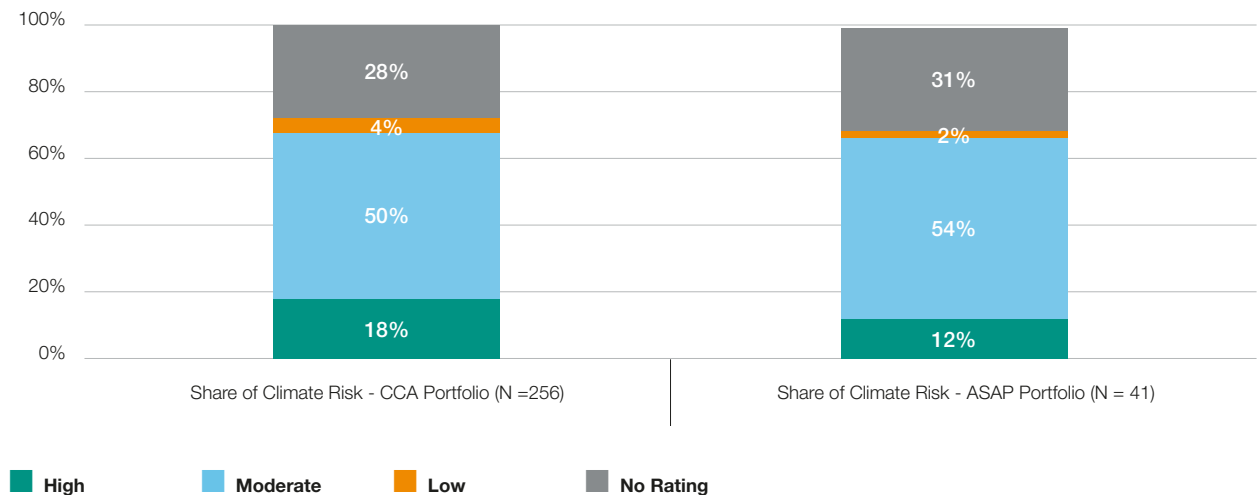
were provided by the project delivery teams based on SECAP guidance<sup>43</sup>. Figure 5 presents a summary of climate risk rating across projects.

<sup>42</sup> The SECAP guidelines were updated in 2017 and later in 2020. Forty-four projects approved prior to 2015 retroactively included the climate risks.

<sup>43</sup> It should be noted that an independent assessment function of climate risks was initiated only when the Operational Policy and Results Division of IFAD (OPR) was created in mid-2018. It uses standardized international climate risk sources to ensure accurate classification. While this is certainly a step in the right direction, given the local and context specific nature of climate risks, it is not clear to what extent quality assurance at headquarters could ensure an accurate classification without full knowledge of the local context.

FIGURE 5

Distribution of climate risks in operations



Source: IOE elaboration from project design reports.

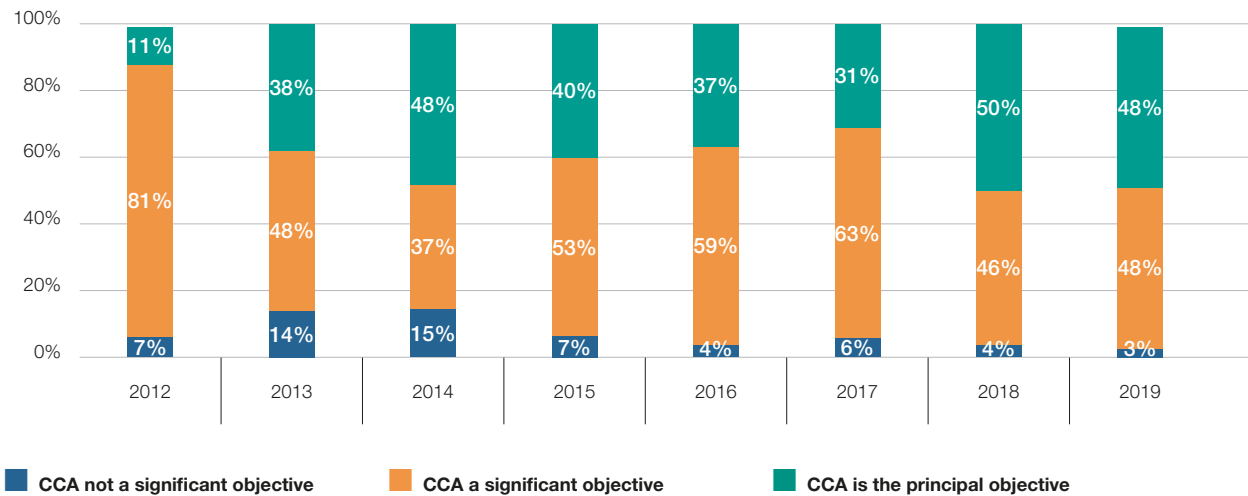
58. Mainstreaming CCA in IFAD involves assessing a wide range of climate threats occurring in diverse agroecological zones which use a range of agricultural production systems.<sup>44</sup>
59. **Evolving prioritization of climate change.** The importance of CCA actions to projects was assessed by the evaluation team using the Organization for Economic Cooperation and Development Development Assistance Committee (OECD DAC) Rio markers, which focus on whether the project objectives were the principal (main) project objective, significant (one of the main) or not

significant.<sup>45</sup> Figure 6 presents the distribution of the intensity of project engagement with climate risks, as described above. There is a clear shift from significant to principal importance after 2013, following the introduction of ASAP in 2012. After fluctuating, projects approved in 2018 and 2019 show that nearly half of those with climate responses appear to have CCA as a principal objective, underlining the importance of corporate guidance.

44 Examples of climate threats include increasing temperature, varying rainfall, increasing frequency and intensity of weather extremes, glacier melt, and changing onset of seasons. IFAD works in a range of agroecological zones (mountain slopes, valleys, steppe, coastal zones) and with a range of agricultural production systems, such as rainfed agriculture, irrigation-based agriculture, cropping systems, livestock and pastoralism.

45 [https://www.oecd.org/dac/environment-development/Revised%20climate%20marker%20handbook\\_FINAL.pdf](https://www.oecd.org/dac/environment-development/Revised%20climate%20marker%20handbook_FINAL.pdf)

FIGURE 6  
Prioritization of CCA in IFAD operations (OECD DAC RIO markers)



Source: IOE elaboration from project design reports.

60. Climate response in different country contexts. Almost three quarters of climate projects (72 per cent) are located in low- or lower-middle-income countries, with the remaining share invested in upper-middle-income countries (figure 7).<sup>46</sup> Similarly, based on IFAD's listing of countries with situations of fragility, 25 per cent of the portfolio

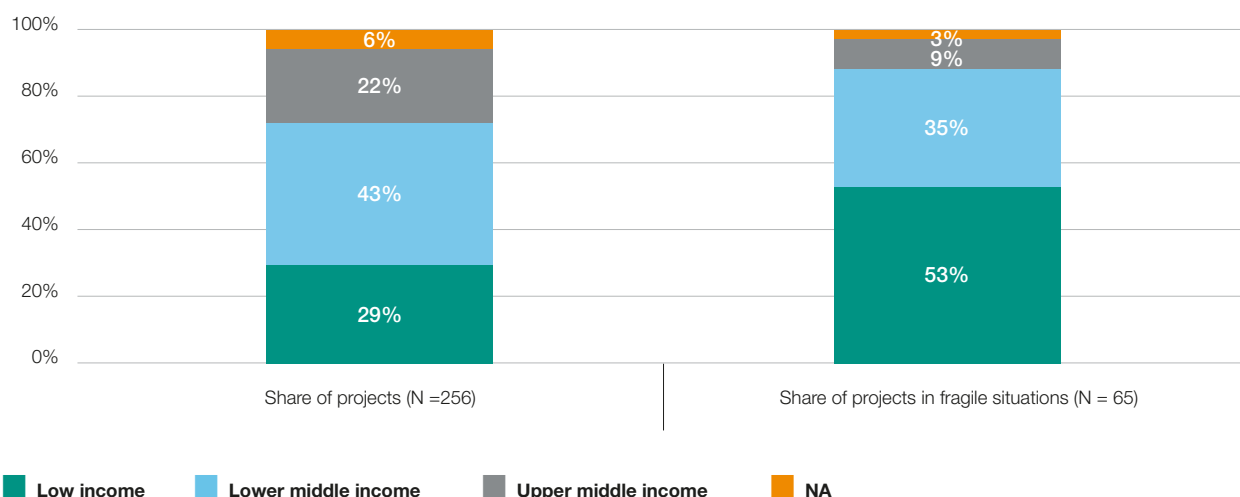
is located in countries with fragility situations at approval,<sup>47</sup> and 88 per cent of these projects are located in low- or lower-middle-income countries (figure 7).

46 Income status was determined from the World Bank income classification.

47 Design reports identified whether projects were located in countries with fragility situations. This determination of situation of fragility was made by IFAD in line with the World Bank system of classification.

FIGURE 7

**Income status and fragility situations in portfolio countries**



**Source:** IOE elaboration from project design reports, World Bank income classification, and IFAD listing of countries with situations of fragility.

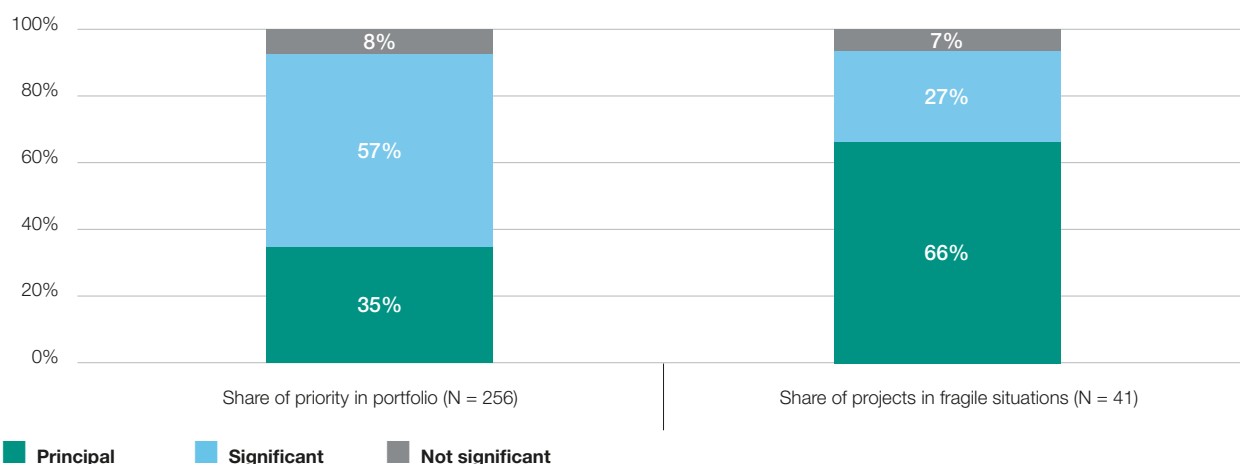
61. **ASAP projects are twice as likely to have CCA as a primary objective.** ASAP was the largest smallholder adaptation programme in the world,<sup>48</sup> with 41

projects. The country case studies considered 35 projects in 20 countries, including 17 ASAP projects. Figure 5 shows that when climate risk ratings are available, ASAP and non-ASAP projects are located in moderate or high climate risk situations. Two thirds of ASAP-supported projects have CCA as their primary objective, nearly double the share of projects in the general portfolio (figure 8).

<sup>48</sup> IFAD – ASAP website: <https://www.ifad.org/en/asap>, accessed on 13/05/2021

FIGURE 8

**Prioritizing CCA: ASAP-supported projects and overall portfolio**



**Source:** IOE elaboration from project design reports based on OECD DAC Rio markers guide.

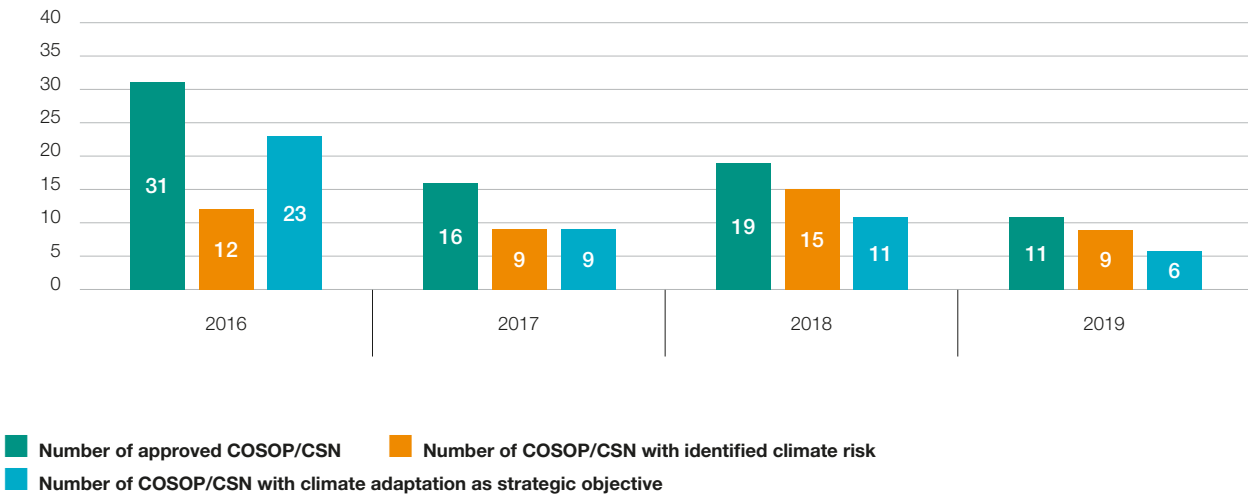
## Country strategies

62. This study reviewed COSOPs and CSNs which were approved during the period 2010-2019 of the country strategies that identified climate risks and prioritized CCA as an objective or as an area of interest.<sup>49</sup>

49 IFAD – ASAP website: <https://www.ifad.org/en/asap>, accessed on 13/05/2021

63. **Almost half the country strategies approved since SECAP reported climate threats.** Of the 93 reviewed, 46 COSOPs/CSNs identified climate threats and rated climate risks, while 58 identified CCA as a priority. It should be noted that 27 of the 58 (47 per cent) COSOPs/CSNs that identified CCA as a priority did not rate the climate risk. Almost all COSOPs/CSNs with a climate risk rating were in medium or high climate risk situations. As seen from figure 9, since 2016 there has been a steady increase in the share of programmes and notes identifying climate risks.

FIGURE 9  
COSOPs/CSNs – climate risk level and prioritizing CCA response



Source: IOE elaboration based on IFAD database for COSOPs/CSNs.

## Target groups in climate response

64. **The majority of CCA responses explicitly target women and gender issues.** Among the projects and COSOPs/CSNs identifying climate risk (figure 10),<sup>50</sup> women were the primary targeted group (81 per cent) followed by youth (66 per

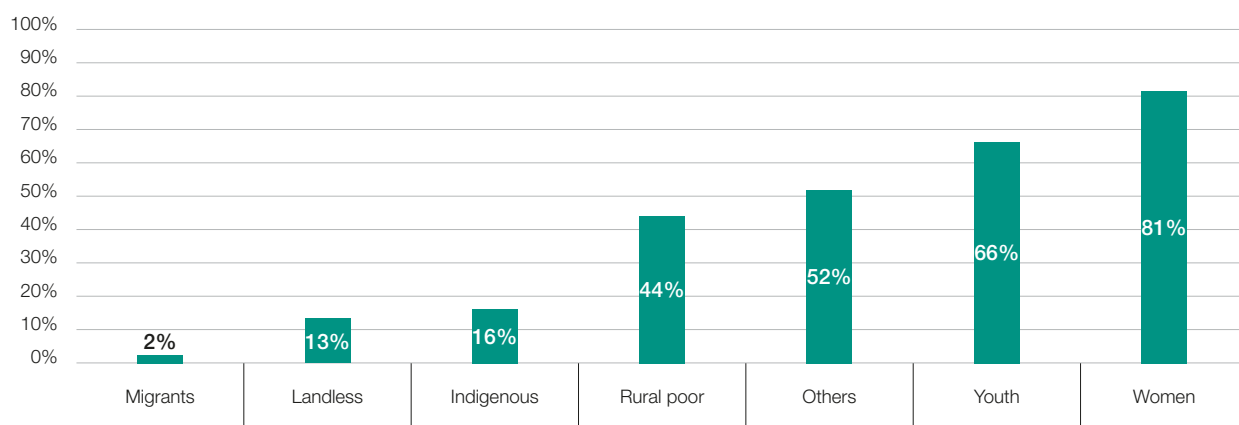
cent). CCA response usually involves more than one target group. As will be discussed later, this also means that one in five CCA responses did not target women and gender issues at all, while IFAD10 committed to mainstreaming gender issues in all its development activities.

50 Target groups were identified from the 256 project and 58 COSOPs/CSNs reports that identified climate risk. Results were validated by comparison to supervision mission reports, midterm reviews, project completion reports, COSOP reviews and any independent evaluations available. It was noted that each project or country strategy usually has more than one target group.



FIGURE 10

Representation of target groups in IFAD's CCA response



Source: IOE elaboration based on project design reports.

## B. Development of the IFAD climate response business model

65. **Key milestones in the evolution of IFAD's business model for CCA.** IFAD's approach to prioritizing climate response is to mainstream it into "prevailing business concepts, strategies and processes so that they can become the norm and improve the effectiveness of development investments. Along these lines, climate mainstreaming for IFAD means integrating climate-related risks and opportunities into IFAD investment programmes by establishing the necessary institutional mindset, expertise, tools and processes."<sup>51</sup> Table 2 below provides an overview of the key milestones of IFAD's CCA response.

51 IFAD, 2016b, p. 4.

TABLE 2

## Milestones of IFAD's engagement in the CCA response

Year	Event	Reference document
2004	As an accredited implementing organization of GEF, IFAD gets financial approval for its first project to explicitly address CCA.	
2009-2010	IFAD8 declares combating climate change an operational priority.	Report on the consultation on eighth replenishment of IFAD resources.
2010	IFAD approves the first climate change strategy.	IFAD Climate Change Strategy 2010.
2010	Environment and Climate Division (ECD) formed.	
2011	IFAD Strategic Framework (2011-15) recognizes resilience to climate change as an objective. IFAD9 commits to address CCA.	IFAD Strategic Framework 2011-15. IFAD9 Resource Replenishment Consultations Report.
2011	IFAD prepares the concept note for Adaptation of Smallholder Agriculture Programme (ASAP).	ASAP concept note.
2012	Newly approved IFAD9 has three commitments on CCA.	IFAD9 commitments.
2012	ASAP-I approved.	
2015	Newly approved IFAD10 has four commitments related to CCA, including a commitment to mainstream CCA in 100 per cent of project designs. In addition to IFAD9 indicators, two new CCA- related indicators introduced in IFAD10.	IFAD10 commitment document.
2015	Social, Environmental and Climate Assessment Procedures (SECAP) replaces IFAD's Environmental and Social Assessment Procedures (ESAP). Recognition of climate change in the safeguards document. Serves as the primary tool to mainstream CCA in IFAD operations.	SECAP document 2015.
2016	IFAD's 2016-25 strategic framework recognizes CCA as one of the three strategic objectives.	IFAD 2016-25 strategic framework.
2016	ASAP II designed as a technical assistance and knowledge management window for adaptation. IFAD10 calls for COSOPs to analyse nationally determined contributions (NDCs) and respond to country CCA needs.	ASAP II concept note.
2017	Updated SECAP document released to account for the mainstreaming commitments of IFAD10.	IFAD 2017 SECAP document.
2018	Newly approved IFAD11 commits that "project budgets will be categorized to respond to the Rio markers and, in addition to ensuring that 100 per cent of projects' mainstream climate concerns, Management will ensure that at least 25 per cent of IFAD's programme of loans and grants is specifically climate-focused".	IFAD11 commitment document.
2018	New IFAD strategy and action plan for environment and climate change 2019-25 released, integrating CCA and mitigation strategies with its environment strategy for the first time. Among other things, it reiterates the need for COSOPs to respond to related country needs and NDCs.	IFAD Strategy and Action Plan on Environment and Climate Change 2019-2025.
2018	Environment, Climate, Gender and Social Inclusion Division (ECG) formed to mainstream these areas in IFAD Operations.	
2019	IFAD began tracking climate finance using multilateral development banks' methodology (to fulfill its commitments under IFAD11 to allocate 25 per cent of programme of loans and grants to climate response).	IFAD11 commitment document.
2020	SECAP updated and provides standards for assessing CCA interventions; Rural Resilience Programme formulated to bring all IFAD climate response under one umbrella.	SECAP 2020 document; guidance on scoring adaptation options.
2020	IFAD12 consultations under way which envisages switching from a project-based approach to a programming approach, which covers climate response as well.	IFAD12 consultations.

Source: IOE elaboration.

66. Operationally, IFAD launched its first major initiative to promote CCA action through ASAP (2012). This programme offered a supplementary funding window to finance additional qualitative and climate resilience dimensions in IFAD projects. In addition, the SECAP was introduced in 2015 to integrate social, environmental and climate change assessments into IFAD investment designs and has been a key instrument for mainstreaming CCA in IFAD operations.

### Corporate-level priorities and strategies

67. **Corporate priorities continue to intensify commitments to CCA** (see table 3 for details). IFAD declared CCA a corporate priority with IFAD8 and approval of a climate strategy in 2010. IFAD10 and IFAD11 continued this impetus and set the direction to mainstream CCA in 100 per cent of projects and country strategies (COSOPs). They also included CCA-related indicators in their respective Results Management Frameworks. IFAD11 committed to focus 25 per cent of the PoLG on climate response activities.<sup>52</sup> This focus on climate in the programme of loans and grants (PoLG) was increased to 40 per cent in IFAD12.<sup>53</sup>

<sup>52</sup> IFAD 2015, IFAD, 2018b.

<sup>53</sup> IFAD, 2021.

TABLE 3

#### Corporate CCA priorities

IFAD8 2010-2012	IFAD9 2013-2015	IFAD10 2016-2018	IFAD11 2019-2021	IFAD12 2022-2024
Stresses the importance of addressing CCA.	Stresses the importance of addressing CCA.	Results Management Framework integrates CCA-related indicators.	Results Management Framework CCA-related indicators refined.	Results Management Framework CCA adds an indicator. Biodiversity strategy by 2021. Develop specific agro-biodiversity initiatives to improve management and restoration of water or land ecosystems by 2022.
CCA is one of the operational priorities.	CCA continues to be an operational priority.	Climate risks will be mainstreamed in 100% of IFAD's operations.	Mainstreaming commitment continues.	Mainstreaming commitment continues.
Required a corporate climate strategy.	Dedicated funding window for adaptation established (ASAP Trust Fund).	All new country strategies include analysis of countries' NDCs under the Paris Agreement.	Invest 25% of PoLG (2019-2021) in climate-focused activities.	Invest 40% of PoLG in climate response activities.

**Source:** IOE elaboration from IFAD replenishment reports (IFAD8 through IFAD12).

68. IFAD's Strategic Frameworks 2011-2015 and 2016-25 also prioritized CCA. The 2011-2015 Framework recognized climate change as a critical factor in addressing food security and made climate response one of the nine thematic areas of focus.<sup>54</sup> The next framework (2016-2025) made CCA as one of the three strategic priorities of the Fund.<sup>55</sup>
69. **Corporate climate strategy is also evolving in tandem with the intensifying commitments to CCA.** The first climate strategy was approved in 2010. It called for all operations and resource mobilization decisions, as well as knowledge, innovation and advocacy approaches to be climate-smart. It recognized the need to strengthen organizational structure and capacity as well as to leverage partnerships for enhanced advocacy and results. To facilitate climate-smart operations, the strategy encouraged all new COSOPs and programme documents to systematically reflect climate and environmental risks and opportunities. It targeted improvements in the guidelines for formulating COSOPs to include climate change issues and strengthened environment and social assessment tools. It emphasized the importance of forming partnerships with local communities and using local knowledge in designing projects. It prioritized enhancing KM along with global and national advocacy for climate responses. To finance climate-smart operations, it sought supplementary funding through strategic partnerships with GEF, AF, UNFCCC, the BioCarbon Fund among others. It also created an Environment and Climate Division (ECD), to ensure increased focus in the climate-related technical capacity in the organization in the form of climate and environment experts, including regional environment and climate specialists.<sup>56</sup>
70. IFAD's Strategy and Action Plan on Environment and Climate Change (2019-2025) integrates IFAD's core strategies to address the environmental and climate challenges facing smallholder farmers. The new strategy aims to address the rapidly expanding scope of climate response within IFAD to meet the replenishment commitments and enhanced climate objectives. It develops and extends the approach of its first strategy in focusing on resource mobilization, KM, strengthening environment and climate interventions, enhancing organizational capacity, refining specific operational guidance and tools (SECAP) and leveraging partnerships for policy engagement and more effective interventions.<sup>57</sup> Both strategies emphasized the need to integrate climate considerations from the very early stages of design.

### Climate resources – complementary and supplementary funds

71. **IFAD continues to expand its partnerships and mobilized over US\$500 million for climate finance during 2010-2019.** As described under IFAD's climate strategies (2010, 2019), expanding the resource base for climate responses has been an appropriate focus since it became an organizational priority. IFAD has several dedicated complementary and supplementary funds for CCA. Supplementary funds are normally provided on a grant basis<sup>58</sup> to boost the incentives for integrating climate response into broader smallholder development programmes and policies in partner organizations and governments. These funds are received from external donors (such as international organizations and funds, bilateral partners, foundations and the private sector), and the conditions for managing the funds are bilaterally agreed between IFAD and the financing partner. Supplementary funds are allocated outside IFAD's performance-based allocation system (PBAS) and grant allocation systems. These funds leverage the financing from IFAD's core resources through loans and debt sustainability framework (DSF) grants. The sources of these funds are briefly discussed below.

<sup>54</sup> IFAD, 2010.

<sup>55</sup> IFAD, 2016.

<sup>56</sup> IFAD, 2010b.

<sup>57</sup> IFAD, 2018.

<sup>58</sup> Green Climate Fund provides a mix of loans and grants.



72. **Adaptation for Smallholder Agriculture Programme.** This multi-year programme was launched in 2012 with support from 12 donors with the objective to mainstream CCA in IFAD. A trust fund was established to provide grants linked to IFAD loans to promote CCA in small-scale agricultural sector.
73. **Adaptation for Smallholder Agriculture Programme II.** In 2016, IFAD started a technical assistance window known as ASAP II. The focus of ASAP II was on tool development, capacity-building and technical assistance to mainstream climate change concerns into overall IFAD operations. Unlike IFAD grants, ASAP II grants can be used for those activities which are usually financed through IFAD's administrative budget.
74. **Adaptation for Smallholder Agriculture Programme Plus.** For IFAD12, IFAD has established an ASAP+ window as a development to ASAP. In ASAP+, 5-10 per cent of the funds can be set aside within the programme to support work on project designs, participatory consultations, backstop project monitoring and implementation supervision, research and innovation, and the construction of technical tools to enhance delivery of results,<sup>59</sup> just as in ASAP II.
75. **Adaptation Fund.** IFAD was first accredited to the AF in 2010 as a Multilateral Implementing Entity and re-accredited in 2016 and 2020. The AF has supported five IFAD projects, totalling US\$35.5 million as of December 2020.<sup>60</sup> AF support is directed to countries that are party to the Kyoto Protocol and in need of resources to meet urgent adaptation needs related to rural agricultural development and disaster risk reduction.
76. **The Global Environment Facility, Least Developed Countries Fund (LDCF) and Special Climate Change Fund (SCCF).** The first IFAD CCA project was approved in 2004 and its climate adaptation-related activity was funded by GEF. Since then, 62 GEF projects were approved, totalling US\$256.5 million for a range of activities such as sustainable land and water management, watershed and ecosystem management and rangeland management. The funding for adaptation mainly comes through the Least Developed Countries Fund (LDCF) and Special Climate Change Fund (SCCF).<sup>61</sup>
77. **Green Climate Fund.** IFAD became an Accredited Entity to GCF in 2016 and signed the Accreditation Master Agreement in September 2018 which opened the door for IFAD to submit funding proposals. IFAD is accredited to apply for both loans and grants for medium-sized projects up to US\$250 million (inclusive of cofinancing) with a category B or C environmental risk rating.<sup>62</sup>
78. The supplementary funds mobilized during 2010-2019 for climate response from these sources amount to US\$518 million.

### Financial instruments

79. IFAD uses loans, debt sustainability grants and IFAD grants to finance its operations. The resources for these financial instruments are drawn from the core resources of IFAD, facilitated through replenishments from Member States.<sup>63</sup>
80. **Loans.** IFAD provides loans on highly concessional, blend and ordinary terms. Each of these terms carries varying terms of maturity, grace periods, concessionality and amortization schedule.

<sup>61</sup> Flexcube System, accessed on 12th March 2021.

<sup>62</sup> Categories of ratings for environmental risks (A, B or C) correspond to those established on ESAP and SECAP 2015. With the introduction of SECAP 2017 and updates in SECAP 2020, the Fund shifts from a three-tier risk rating (A, B or C) to a four-tier rating (high, substantial, moderate, or low).

<sup>63</sup> Another instrument called Reimbursable Technical Assistance (RTA) was approved by the Executive Board in 2012. However, this product is yet to gain traction. As of 2020, there are two ongoing RTAs in Saudi Arabia and Mauritius.

<sup>59</sup> Rural Resilience Programme: <https://webapps.ifad.org/members/eb/131R/docs/EB-2020-131-R-INF-4.pdf>

<sup>60</sup> Ibid. The five projects were in Georgia, Iraq, Lebanon, Republic of Moldova and Sierra Leone.

81. **IFAD grants.** IFAD has a grants programme financed through its core resources (replenishment). Under the current grants policy, approved in 2015, up to 6.5 per cent of the PoLG can be made available for grants to be used for non-lending activities such as partnerships, KM and policy dialogue. IFAD grants cannot be approved and used for activities that IFAD would normally undertake with its own administrative budget.<sup>64</sup> The grants policy was revised and became effective in January 2022. There are noteworthy changes to the existing policy which are discussed in section C.
82. **Debt Sustainability Framework grants.** IFAD introduced the policy on the DSF in 2007. The DSF allowed IFAD to lend to debt distressed countries on a grant basis. Based on a classification proposed by the International Monetary Fund and World Bank, countries are classified as green, yellow or red. Green countries are lent funds on a loan basis, yellow countries are lent money on a 50 per cent highly concessional loan and 50 per cent grant basis while countries classified as red are lent money on a full grant basis.
- Dedicated institutional setup and management arrangements for mainstreaming climate response**
83. **IFAD established a dedicated unit to mainstream CCA response in its country strategies and operations and piloted programming arrangements.** ECD was formed in 2010, following the decision that CCA should become an operational priority under IFAD8 and the first climate change strategy was approved in 2010. ASAP was established in 2012 as a dedicated financing window to mainstream climate response across IFAD operations. ECD became the nodal division to implement IFAD's adaptation agenda and to manage climate supplementary funds such as ASAP and GEF (see the previous section for details). ECD housed the expertise related to environment and climate change, while the Policy and Technical Advisory Division housed other thematic expertise such as rural finance, gender, youth, livestock, water management, fisheries, value chains, institutions etc.
84. In 2018, ECD was converted into the Environment, Climate, Gender and Social Inclusion Division (ECG), assigned the responsibility of mainstreaming all four priority themes of IFAD – climate change, gender, youth and nutrition. It also continued to be responsible for managing the ASAP financing window. All other technical expertise was grouped into another newly formed division, the Sustainable Production, Markets and Institutions Division (PMI).
85. IFAD's mainstreaming approach envisages ECG's involvement in design and supervision missions. The IFAD project design guidelines require setting up a project delivery team which is responsible for the design and supervision of each operation. The project delivery team is headed by a project technical lead (PTL) from ECG or PMI, with ECG providing technical leadership in cases such as when Environment and Social Risk is rated as A (high risk), in projects with high climate risk or in blended IFAD/Climate Fund projects. The PTL is an integral part of the project delivery team designing and supporting a project. While the ECG is accountable for the project design and carries primary responsibility, the PTL contributes to the design, developing the project concept note, PDR and the President's Report. During implementation, PTLs ensure the backstopping of ongoing projects through participation in supervision missions.<sup>65</sup> The monitoring framework, including for the climate response component, is set up in the Project Implementation Manual, and implemented by the project management unit. Core indicators related to CCA, along with other project results are uploaded in the corporate online database, the Operational Results Management System.
86. Together with the Global Engagement, Partnerships, and Resource Mobilization Division (GPR), ECG is responsible for mobilizing climate resources for IFAD. Since 2019, it is also responsible for producing the annual climate action report that reports on IFAD's progress towards climate mainstreaming and the results it achieved on the ground.

64 IFAD, 2015b.

65 IFAD, 2020.

## Human resources – capacities and capabilities

87. **Recent studies find that IFAD’s capacities and capabilities fall short of being able to deliver on existing and future CCA commitments.** In the context of ongoing reforms in terms of people, process and technology, IFAD commissioned a three-phase study of human resources. The study, conducted by an external agency (McKinsey & Company, 2019-2020), assessed IFAD’s current workforce composition, capacity (staff headcount) and capabilities (skills), as well as its future requirements. Relevant findings are summarized

in table 4 below. The study was not intended to identify gaps in specific priority areas (such as climate change) and deals with broad categories (such as programme management and technical specialists). It should be recognized that while changes to PoLG under different replenishments may be very limited, the composition of delivery is dramatically shifting towards climate response – the focus on climate was 25 per cent of PoLG under IFAD11 and increased to 40 per cent under IFAD12. As such, the overall gaps and needs may not fully reflect the specific needs in this area.

TABLE 4  
Skill mapping overview, differences between skill groups<sup>66</sup>

Category of staff	Average proficiency level in 2019	Average needed proficiency in 2020	Average needed proficiency in 2030	Gap foreseen in 2020	Gap foreseen in 2030
Cross-cutting theme of environment and climate change	2.51	3.65	3.65	1.14	1.14
Technical specialists	2.23	3.00	3.46	0.76	1.23
Programme management for agricultural development	2.69	3.06	3.38	0.37	0.69
Economists and results specialists	2.89	3.33	3.61	0.44	0.72
Communication and knowledge management	3.26	3.34	3.66	0.07	0.39

Source: McKinsey Human Resource Study (2019).

<sup>66</sup> Rated on a scale of 1 to 5 with 1 being the lowest capacity and 5 the highest.

88. Taking a closer look at the capacities available for mainstreaming CCA, this evaluation reviewed the data from the Human Resource Division on the sanctioned number of fixed-term positions in ECG. In ECG, staff are categorized by clusters, one of which is the environment and climate change cluster (ECC). ECC has seen its positions increase from 17 in 2016 to 22 in 2020. The McKinsey study finds that the Fund needs 33 more full-time equivalent staff in programme management, technical specialists to meet the current demand, and predicts that the gap will widen in 2024.

## Guidance and tools

89. **IFAD put in place guidance and tools to mainstream CCA and adaptively updated them in line with evolving corporate priorities and lessons from experience.** IFAD recognized that the environment was particularly important for rural poor people as they were largely dependent on the natural resource base for their livelihood and hence more vulnerable to natural resource degradation and environmental pollution. IFAD adopted **Environmental and Social Assessment Procedures**<sup>67</sup> in 2009 to ensure that its operations avoid adverse impacts on people and the environment.

<sup>67</sup> ESAP was issued in December 2008 as a President’s Bulletin (PB/08/23) and reviewed by the Executive Board in April 2009.

90. ESAP Procedures were updated and expanded in 2015 to realize IFAD's new commitment to achieve 100 per cent climate mainstreaming for all new projects by 2018 and to better align with safeguarding requirements across multilateral financial institutions such as GEF. **SECAP** became effective since January 2015.<sup>68</sup> These procedures provided the information necessary to formalize IFAD's approach to assessing the nature and degree of (social, environmental and climate) risks, potential impacts, and opportunities relevant to IFAD interventions. In addition, SECAP calls for specifying the risk mitigation measures to be taken and tracked throughout the life cycle of the intervention. It provided supporting material to guide IFAD missions in systematically introducing necessary mitigation measures into all operations as well as in developing COSOPs and use this assessment in the quality enhancement and decision-making processes. SECAP made it mandatory for all projects under IFAD10 onward to undertake climate risk screening and was seen as the primary instrument to mainstream climate considerations in all IFAD's interventions - COSOPs, CSNs, programmes and projects.<sup>69</sup>
91. **SECAP was updated in 2017 to clarify mandatory elements, improve the alignment of the procedures with those of other IFIs, and to better reflect IFAD's complementary policies<sup>70</sup> and climate mainstreaming agenda.<sup>71</sup>** Notable changes included improved tools and methods to assess and document risks, clarifying and expanding mandatory requirements, and strengthening monitoring systems, including the Grants and Investment Projects System and the Operational Results Management System to reflect project cycle entry points and compliance monitoring and reporting.<sup>72</sup> In terms of environmental and social risks, it made it mandatory for all category B projects to have a SECAP review note, including a matrix for an environmental and social management plan at design. It also required all category A projects to have an environmental and social impact assessment at their design stage. For projects with a moderate climate risk classification, it required a basic climate risk analysis at design, and required an in-depth climate risk analysis for projects with high climate risk classification.<sup>73</sup>
92. In addition to SECAP, IFAD has produced several guidance notes on specific issues. A partial list of 'how to' notes related to climate resilience is presented in annex III.
- C. Ongoing evolution of IFAD's climate response business model**
93. **Programming arrangements, policies, guidance and tools are rapidly evolving and briefly summarized here.** At its core, **IFAD12** reflects a stronger commitment to climate response by increasing the climate focus of PoLG from 25 per cent under IFAD11 to 40 per cent.<sup>74</sup> IFAD's revised Operational Guidelines on Targeting emphasized social inclusion and the integration of mainstreaming themes. Targeting strategies were intended to provide an entry point to effectively mainstream its thematic priorities, thereby improving the quality of mainstreaming and the measurement of results against the prioritized themes.<sup>75</sup>
94. The Fund has committed to mobilize US\$500 million in supplementary **climate and environment finance** by 2025 with at least US\$200 million in IFAD11<sup>76</sup> envisaging further collaboration with the GCF. In addition, to attract more climate resources, IFAD12 envisages new programmes, such as the Private Sector Financing Programme and the Rural Resilience Programme, which is discussed below.
95. IFAD again **updated SECAP** in 2020 to better address the Fund's evolving business model, to improve its relevance to identifying and integrating transformational climate responses, to better align with international best practices, and to cover new and emerging social and environmental issues relevant to IFAD operations. In addition to guiding risk management, the updated SECAP provided guidance to maximize the benefits of interventions through scoping, assessing and selecting the climate themes to be integrated in IFAD's interventions. The updated SECAP includes other new features, such as a climate change standard, changes to social and environmental risk, and an automated integrated management system to track compliance and results more effectively.<sup>77</sup>

68 Approved by the Executive Board in December 2014.

69 IFAD, 2014.

70 Including, but not limited to, policies on targeting (2016), gender equality and women's empowerment (2012), and indigenous peoples (2009).

71 IFAD10 (IFAD, 2015), IFAD Strategic Framework (2016-2025) (IFAD, 2016).

72 The Grants and Investment Projects System to better reflect project cycle entry points and ORMS to improve compliance monitoring and reporting.

73 IFAD, 2017.

74 IFAD12 climate adaptation targets include: 1.9 million hectares of land brought under climate-resilient management; 11,500 groups supported to sustainably manage natural resources and climate related risks; develop specific initiatives for enhanced IFAD engagement in the Sahel and Horn of Africa regions.

75 IFAD, 2021.

76 IFAD, 2019b.

77 IFAD, 2020b.



96. In 2020 IFAD developed an **Adaptation Framework** to help projects identify feasible adaptation options for climate risks identified through the SECAP process.<sup>78</sup> It is accompanied by an adaptation options database populated with 120 adaptation options synthesized from good practices and lessons learned from adaptation actions from past IFAD climate response, including ASAP. The selected options can be assessed using tailored multi-criteria analysis.<sup>79</sup>
97. The Rural Resilience Programme is a new **programming arrangement** (IFAD, 2020e). This umbrella programme brings together IFAD's existing and new key climate and environmental initiatives under a common coordinating framework.<sup>80</sup> It comprises three pillars of activity: the enhanced ASAP+ that builds on the lessons from ASAP1 and ASAP2, the initiative for Sustainability, Stability and Security in Africa (3S Initiative), and the GCF umbrella programme for the Great Green Wall Initiative of Sahel. The three pillars state the aim to go beyond the principle of do-no-harm and to actively restore degraded ecosystems at the same time as providing climate adaptation and mitigation responses. They face different primary challenges,<sup>81</sup> have different geographic focus, and involve different sources of funding.<sup>82</sup> The day-to-day management will be undertaken by an interdivisional coordination unit composed of experts across a number of IFAD divisions and an advisory committee will oversee its strategic direction. The programme trust fund is already approved and it will dedicate resources to providing technical assistance to projects to strengthen their design and pursue non-lending activities.
98. This all takes place within the context of improvements to the complementary policies and strategies of IFAD, such as Decentralization 2.0 (2021-2023), the Knowledge Management Strategy (2019), the revised Operational Guidelines for Targeting (2019), the revised Project Restructuring policy (2018) and the revised Grants Policy (2022).

#### D. Review of experience of other organizations

99. In identifying the practices of other relevant actors to compare with IFAD's CCA response, the report first sought out those with evaluative evidence. To identify such evidence, this study reviewed all recent evaluations conducted by major IFIs, climate funds and United Nations agencies on their CCA responses. This study identified the following actors with recent evaluations: the AF, GEF, GCF, IDB, the World Bank and FAO. Based on a review of evaluation documents and further focus group discussions with the managers of these evaluations, this review process identified markers in the areas of institutional and technical capacity, sustainability and exit strategies, mainstreaming CCA in operations, alignment with safeguards and policies and related monitoring and evaluation. The following paragraphs compare the experience of key IFIs and FAO. In addition, the evaluation conducted a document review and used further interviews to identify more comprehensive markers of the CCA business model: such as having a climate strategy/policy in place, dedicated units set up to guide CCA mainstreaming, guidance, tools and safeguards made available, identified climate resources, and operational communities of practice to promote knowledge-exchange. These details are provided in table 5. **It can be concluded that in all these aspects, IFAD compares well with other IFIs considered in this study.**

<sup>78</sup> <https://www.ifad.org/en/web/knowledge/-/publication/adaptation-framework-tool>

<sup>79</sup> In addition, a few tools were recently developed through ASAP II. For instance, the Climate Adaptation in Rural Development (CARD) resilience tool, first launched in March 2019 and currently applied in the North Africa region is continuing to evolve. This helps predict the crop yields of established varieties under different climate risk scenarios. This has been used in six projects and four country strategies as of October 2019 (IFAD, 2019b). Another tool jointly developed with FAO is the Ex-Ante Carbon-balance Tool, a land-based accounting system measuring carbon stocks and greenhouse gas (emissions per measure of land. This aims to help projects to estimate their potential mitigation farmers' organizations.

<sup>80</sup> The programme will address the commitments of the three Rio conventions – the UN Framework Convention on Climate Change (UNFCCC), the Convention on Biological Diversity (CBD) and Convention to Combat Desertification while contributing to 15 of the 17 SDGs.

<sup>81</sup> ASAP+ faces climate threats, 3S faces food insecurity and migration and the Great Green Wall Project faces environmental degradation and water shortages as primary challenges.

<sup>82</sup> 3S and the Great Green Wall initiative of the Sahel will focus on Africa, and will be focused on the 13 contiguous countries from West Africa to Horn of Africa, while ASAP+ has no geographical focus.

100. **Institutional and technical capacity.** Which capacity, and where and when it is needed are important questions related to technical capacities. Adequate climate expertise is certainly required. However, it has to be available when it is needed most - during critical times such as all phases of design, including the very early phase, and during implementation. It should also be available at the right level - for instance, capacities are needed at the project level during implementation and within the units designing projects during project design. IDB, in its evaluation titled "Climate Change at the IDB: Building Resilience and Reducing Emissions", highlighted the importance of technical capacity on climate change and recommended that the institution invest heavily in increasing its capacity by creating a dedicated 'group' with a cross-cutting mandate across departments.<sup>83</sup> Similarly, FAO's evaluation found gaps in capacity in its country offices to engage with governments on CCA and recommended that FAO build staff capacity at the country level in this critical area of expertise.<sup>84</sup>

101. **Sustainability and exit strategies.** The AF evaluation found that sustainability strategies were not sufficiently considered in the project design phase. The same evaluation found that project teams sought to address this issue during implementation, as the majority of projects had developed exit strategies.<sup>85</sup> Similarly, GEF's evaluation of the SCCF found that a higher-level impact in the form of scaling up was constrained, mainly due to the difficulty of securing sufficient resources or mainstreaming the work within national budgets.<sup>86</sup>

102. **Mainstreaming climate change into operations.** The evaluation of the AF observed that project designs often do not closely analyse the adaptation logic.<sup>87</sup> FAO evaluations noted that climate-smart agriculture has served as a high-level concept in FAO for its interventions in CCA and mitigation. However, the same is not sufficiently reflected in operations in the field, through its projects. FAO's operations were also found to have insufficiently mainstreamed gender concerns, with substantial gaps in gender mainstreaming, particularly at the country level.<sup>88</sup> A World Bank evaluation recommended developing reference guidelines for incorporating climate risk management into project and programme design, appraisal, and implementation.<sup>89</sup>

103. **Alignment with internal guidelines, policies and national policies and coherence.** The projects developed by the AF were not uniform in their application of the Fund's Environment and Social Policy. GEF found its projects to be strongly country-driven and well aligned with national environmental and sustainable development policies. The evaluation, however, found that the relevance of GEF's support to other, non-adaptation GEF focal areas—and to GEF's global environmental benefits—was limited.<sup>90</sup> GCF's evaluation of adaptation interventions found that project-level interactions between GCF proposals and the projects of other climate funds, multilateral partners and the private sector were not yet systematically identified nor actively pursued. However, the evaluation also noted that there was increasing coordination in recent years.<sup>91</sup>

83 IDB – OVE, 2014.

84 FAO, 2015; FAO, 2021.

85 Tango International, 2018.

86 GEF IEO, 2018.

87 Tango International, 2018.

88 FAO, 2015; FAO, 2021.

89 IEG, 2013.

90 Tango International 2018; GEF IEO, 2018.

91 Binet et al., 2021.

<sup>104</sup>. **Monitoring and evaluation (M&E).** All evaluations (the AF, IDB, GEF, GCF, FAO, the World Bank) have highlighted the need to strengthen M&E systems. The IDB evaluation recommends structuring an M&E system that “deepens IDB’s ability and incentive to track its activities and results related to climate change mitigation and adaptation.”<sup>92</sup> GEF’s evaluation found the data available on M&E systems to be inaccurate. In the World Bank, the evaluation recommended that to track progress, it should mobilize resources and collaborate with

national and international partners to create and test practical, sensitive, and specific indicators that capture various dimensions of vulnerability, resilience, and adaptive capacity. Similarly, the GCF evaluation noted that the institution does not have a specific approach regarding adaptation or achieving and measuring impact in its adaptation portfolio. As such, the impact of adaptation interventions cannot be monitored with the current set of indicators.<sup>93</sup>

<sup>92</sup> IDB – OVE, 2014, p. xii.

<sup>93</sup> GEF IEO, 2018; IEG, 2013; Binet *et al.*, 2021.

TABLE 5

## Comparison of CCA policy, strategy, guidance and institutional set up

Criteria	IFAD	World Bank	Asian Development Bank (ADB)	IDB	FAO	GCF	Adaptation Fund	GEF
Is there a corporate climate response policy/strategy in place?	<b>YES</b> IFAD Strategy and Action Plan for Environment and Climate Change (2019 - 2025)	<b>YES</b> Climate Change Action Plan 2021 - 2025	<b>YES</b> Climate Change Operational Framework 2017-2030; Operational Priority 3 - Tackling Climate Change, Building Climate and Disaster Resilience and Enhancing Environmental Sustainability	<b>YES</b> Climate Change Action Plan 2021 - 2025 and Climate Change Sector Framework Document	<b>YES</b> FAO Strategy on Climate Change 2017 and an action plan with results framework	<b>YES</b> updated Strategic Plan for the Green Climate Fund 2020-2023	<b>YES</b> Medium-Term Strategy 2018 - 2022	<b>YES</b> Climate Change Focal Area Strategy (part of GEF-7 Programming Directions)
Does the organization have safeguards for interventions related to climate change adaptation and environment and natural resources management (ENRM)?	Social, Environmental, Climate and Climate Assessment Procedures (SECAP)	<b>YES</b> World Bank Environment and Social Policy	<b>YES</b> Environment Safeguards: A Good Practice Sourcebook (draft working document)	<b>YES</b> Environment and Safeguards and Compliance Policy, (new Environmental and Social Policy Framework will take effect in Sept 2021)	<b>YES</b> Environment and Social Management guidance (2015) and FAO's Framework for Environmental and Social Management	<b>YES</b> GCF Environment and Social Policy (amended March 2016)	<b>YES</b> Environment and Social Policy (amended March 2016)	<b>YES</b> Policy on Environmental and Social Safeguards
Does the organization have dedicated funds for climate investments?	<b>YES</b> Supplementary Funds	<b>YES</b> • Climate Investment Funds (which includes Clean Technology Fund and Strategic Climate Fund)	<b>YES</b> • Climate Change Fund • Urban Climate Change Resilience Trust Fund • Irish Trust Fund for Building Climate and Disaster Resilience	<b>YES</b> • Canadian Climate Fund for the Private Sector in the Americas • NCD Accelerator Fund • UK Sustainable Infrastructure Programme, • Accredited to a variety of financial intermediary funds (e.g. Green Climate Fund, Climate Investment Funds (CIF))	<b>YES</b> Multi-donor trust funds to support climate response-related projects and programmes	<b>YES</b> 100% of GCF funding is for climate response	<b>YES</b> • Single country project window • Regional project window • Innovation: large and small projects window • Enhanced direct access • Readiness programme • Learning grant • Project scale-up grant	<b>YES</b> GEF is mostly focused on mitigation efforts with the exception of the following two CCA windows: • Least Developed Countries Fund (LDCF) • Special Climate Change Fund (SCCF)

Criteria	IFAD	World Bank	Asian Development Bank (ADB)	IDB	FAO	GCF	Adaptation Fund	GEF
Does the Results and Resources Framework of corporate strategies/priorities include indicators related to strengthening climate resilience (or strengthening climate adaptive capacity)?	IFAD Strategic Framework 2016-2025; Resources Management Framework of IFAD11	<b>YES</b> Operational Guidance for Monitoring and Evaluation (M&E) in climate and disaster resilience-building operation	<b>YES</b> Results Framework Indicators (women's resilience to external shocks strengthened; number of people with strengthened climate and disaster resilience, etc.)	<b>YES</b> IDB Group Corporate Results Framework 2020-2023 (beneficiaries of enhanced disaster and climate change resilience; habitat that is sustainably managed using ecosystem-based approaches, installed power generation capacity from renewable sources)	<b>YES</b> FAO Strategy on Climate Change - Primary indicators: FAO's role (number of countries identifying institutional capacity needs or which develop capacity for CCA delivery; amount of finance targeted at CCA in food and agriculture that is mobilized with FAO support, etc.)	<b>YES</b> Mitigation and adaptation performance measurement frameworks	<b>YES</b> Strategic Results Framework (Increased adaptive capacity of communities to respond to the impacts of climate change; increased ecosystem resilience in response to climate change-induced stresses)	<b>YES</b> The above funds have their own results architecture for adaptation. GEF Results Framework is not focused on CCA (only one of the 11 indicators deal with resilience at the ecosystem level)
Is there a dedicated unit to support climate response/ENRM? Are there adequate capacities in place?	<b>YES</b>	<b>YES</b> Climate Change Group	<b>YES</b> Climate Change and Disaster Risk Management Division in Sustainable Development and Climate Change Department	<b>YES</b> Climate Change and Sustainable Development Division with 22 staff; Environmental and Social Solutions Unit and the Environmental and Social Risk Unit also have key functions on climate issues	<b>YES</b> Office of Climate Change, Biodiversity and Environment	<b>YES</b>	<b>YES</b>	<b>YES</b> Entire GEF is dedicated to ENRM and Climate Response. Specifically, there is a Climate Change unit in the GEFSEC, and a dedicated unit for LDCF/SCCF.
Is there dedicated guidance to identify climate resilience needs to analyse pathways to strengthen climate resilience in countries?	<b>NO</b>	<b>YES</b> Resilience rating system	<b>YES</b> ADB-World Bank are currently developing country climate risk profiles to inform country partnership strategies in countries	<b>YES</b> A Framework and Resilience Metrics in Financing Operations and Disaster and Climate Change Risk Assessment Methodology	<b>YES</b> Climate resilient practices; typology and guiding material for climate risk screening; Making climate-sensitive investments in agriculture-approaches, tools and selected experiences	<b>YES</b> Adaptation: accelerating action towards a climate-resilient future	<b>YES</b> Proposal development guidance specifies the use of country development plans; adaptation reasoning and risk screening	<b>NO</b> This was noted as a deficiency, including by GCF's Scientific and Technical Advisory Panel.



Criteria	IFAD	World Bank	Asian Development Bank (ADB)	IDB	FAO	GCF	Adaptation Fund	GEF
Is there a community of practice for climate response or knowledge platform for successful climate responses?	<b>YES</b>	<b>YES</b> World Bank climate change knowledge portal for development practitioners and policymakers	<b>NO</b>	<b>YES</b> Technical working groups and communities of practice for sustainable infrastructure, disaster and climate risk management, etc.	<b>YES</b> The Technical Network on Climate Change	<b>YES</b> iLearn Green Climate Fund	<b>YES</b> Community of Practice for Direct Access Entities	<b>YES/NO</b> The following platforms exist but are not dedicated to CCA or even climate: <ul style="list-style-type: none"> <li>• The International Waters Learning Exchange and Resource Network</li> <li>• Global Platform for Sustainable Cities</li> </ul>
Has the organization developed adequate processes, instruments and tools to promote climate change and adaptation strategies in its operations?	<b>YES</b> SECAP, How to do notes, Ex-Ante Carbon-balance Tool, Adaptation Framework	<b>YES</b> <ul style="list-style-type: none"> <li>• World Bank Urban Risk Assessment</li> <li>• Energy Sector Management Assistance Program</li> <li>• Hands-on Energy Adaptation Toolkit</li> <li>• World Bank's Resilient Cities Program</li> <li>• CityStrength</li> <li>• Confronting Climate Uncertainty in Water Resources Planning and Project Design: The Decision Tree Framework</li> </ul>	<b>YES</b> <ul style="list-style-type: none"> <li>• Climate Risk Management Framework: Climate risk screening and assessment of projects (screening through online tool AWARE for projects, sector-specific technical guidance on climate proofing infrastructure, capacity-building course for ADB staff)</li> </ul>	<b>YES</b> <ul style="list-style-type: none"> <li>• Regulatory framework quality indexes for private investment (Climatescope)</li> <li>• Promotion of good practices (e.g. Infrascope and Envision)</li> <li>• Climate Change Sector Framework document</li> </ul>	<b>YES</b> FAO Adapt Framework on Climate Change Adaptation) - 2011 - FAO's Modelling System for Agricultural Impacts of Climate Change (MOSAICC) Self-evaluation and Holistic Assessment of Climate Resilience of Farmers and Pastoralists (SHARP), global agroecological zoning, aqua-crop water productivity model, Agroecological zoning	<b>YES</b> GCF Programming Manual - an introduction to the Green Climate Fund project cycle and project development tools for full-size projects <ul style="list-style-type: none"> <li>• GCF readiness and preparatory support programme</li> </ul>	<b>YES</b> Operational Policies and Guidelines including how projects are assessed against adaptation reasoning Medium-term strategy 2018-2022	<b>YES</b> GEF projects are country-driven and developed at the request of country focal points (with the exception of small grants that are mostly civil society organization- driven and pure private sector projects). There are tracking tools in use at the project level. Also, there are the RAPTA guidelines developed by the GEF's Scientific and Technical Advisory Panel.

Criteria	IFAD	World Bank	Asian Development Bank (ADB)	IDB	FAO	GCF	Adaptation Fund	GEF
Has the organization developed internal guidance coherent with the national environmental and sustainable policies?	<b>YES</b> Procedures and guidance for country strategies (2019)	<b>YES</b> World Bank Reference Guide to Climate Change Framework Legislation	<b>YES</b> Environmental Assessment Guidelines	<b>YES</b> Implementation Guidelines for the Environment and Safeguards Compliance Policy NDC Invest (mechanism to support LAC countries to develop and implement NDCs)	<b>YES</b> Addressing agriculture, forestry and fisheries in national adaptation plans • Agriculture, Forestry and Fisheries in National Adaptation Plans (NAP-Ag Guidelines) • Forest and Landscape Restoration Mechanism Initiative	<b>YES</b> National adaptation plans	<b>YES</b> Guidance document for Implementing Entities on compliance with the Adaptation Fund	<b>YES</b> All GEF projects are country driven and developed at the request of country focal points (with the exception of small grants) with guidance on GEF priorities, strategies and procedures.

**Source:** IOE elaboration, based on interviews with agency evaluation units and units related to climate response, and review of evaluations.

### III. Relevance of IFAD response to climate change adaptation

<sup>105.</sup> This section presents the findings related to the relevance of IFAD's CCA response. An overall summary of the assessments of relevance in the 20 case studies is summarized in annex I table 1. The analysis presents IFAD's comparative advantage in providing CCA response. This is followed by assessments of the relevance of CCA response to i) national climate priorities, ii) the CCA-related demand and needs of target groups, and iii) IFAD's mandate, priorities and practices. The evidence base for this chapter comes from analyses of relevant IFAD corporate documents, the portfolio of 256 projects and 93 COSOPs/CSNs with CCA response, two online surveys conducted among IFAD staff and project staff, and the 20 case studies.

#### A. IFAD's comparative advantage in CCA and its prioritization

<sup>106.</sup> IFAD is the only IFI with the specific mandate to eradicate poverty and hunger by investing in poor rural people through financial and technical assistance to agriculture and rural development projects. To fulfil its mandate during the past four decades, IFAD acquired experience and expertise in working with the rural agricultural sector around the globe, mostly facing challenging agroecological conditions. This experience positions the Fund well to address the worsening threats from climate change and to place climate change and adaptation at the core of its strategy. It established a dedicated unit to provide technical support to design its climate response and provide implementation support. Moreover, during the past decade, it mobilized over US\$500 million in climate finances to support smallholder farmers adapt to climate change. Finally, in addition to its mandate and record of accomplishment in supporting CCA efforts within the rural agricultural sector, IFAD is seen as a neutral and trusted partner for governments, farmer organizations and the rural poor.

<sup>107.</sup> CCA is a significant or principal objective in 92 per cent of the portfolio of 256 projects incorporating climate response that were approved during 2010-2019. The proportion of projects declaring CCA as a principal objective showed a noticeable increase from 11 per cent in 2013 when ASAP was introduced, to 48 per cent in 2019.

#### B. Relevance of CCA operations to country CCA priorities (nationally determined contributions, National Adaptation Plans)

<sup>108.</sup> Overall, IFAD's interventions relating to CCA were well-aligned with the nationally determined contribution (NDC) commitments of host countries. IFAD has recognized the need to support Member States to address the effects of climate change. IFAD9 committed that all new operations and country strategies (COSOPs and CSNs) would be aligned with national CCA priorities, including the NDCs (as confirmed in the Paris Agreement 2015), and proactively identify climate risks. IFAD11 further committed to incorporate an analysis of the CCA-related NDC commitments in all country strategies. By doing so, IFAD aligned its interventions with the international priorities on climate change adaptation, such as those of the Paris Agreement.<sup>94</sup> Table 1 in annex IV shows that all COSOPs and operations in case studies contributed to the NDCs.

<sup>94</sup> IFAD, 2018b.

109. All interventions in the case studies were relevant to the NDCs, including some with very high relevance. Nepal's Adaptation for Smallholders in Hilly Areas Project (ASHA) sought to operationalize the national programmes of action (NAPAs) at the local level, thereby directly contributing to Nepal's NDCs. The project supported preparing and implementing Local Adaptation Plans for Action, which were local-level iterations of NAPAs based on the local analysis of risks, vulnerabilities and interventions required. Similarly, the Project to Improve the Resilience of Agricultural Systems in Chad (PARSAT) was designed as one of the building blocks of Chad's National Strategy Against Climate Change (2017). PARSAT regions where interventions took place, Batha, Guéra and Hadjes-Lamis, were identified by the NDC<sup>95</sup> as among the most climate-vulnerable regions of the country and it chose the two NDC priorities of land and water conservation and soil restoration as its focus. The Economic Inclusion Programme for Families and Rural Communities in the Territory of Plurinational State of Bolivia (ACCESOS) was highly relevant to the country's NDC focus on finding structural solutions to the climate crisis. Moreover, the ACCESOS programme was developed through a community-based approach and supported investments aimed at reducing vulnerabilities related to water scarcity.

### C. Relevance (maintaining relevance) of CCA interventions facing climate threats and changing contexts

110. The continued relevance of the selected CCA case studies was demonstrated in those cases where project areas were affected by actual climate threats during the implementation period. This allowed for real-time testing of both the relevance and the effectiveness of the selected climate-related solutions in these projects. The affected project countries include Bangladesh (which faced cyclones and floods), Cabo Verde and the Republic of Moldova (which faced drought), and Nicaragua and Honduras (which suffered heavy tropical storms and rain in late 2020). In general, these practical experiences have demonstrated a high relevance of the climate and resilience elements included in these projects to face climate risks.

111. An ASAP midterm review conducted by external consultants found that ASAP projects strengthened smallholders' capacities to deal with shocks and stressors and were sufficiently flexible to deal with changing climatic conditions with multiple changes.<sup>96</sup>

112. A note of caution should be expressed here regarding the longer-term relevance of the supported interventions. While the climate threats tested the immediate relevance of IFAD's operations, the longer-term relevance of the project interventions should be separately assessed, taking into account effects of interventions over time, such as ecosystem sustainability. This is discussed under the nexus between human and the ecosystems discussion elsewhere in this report.

113. **In cases that faced political instabilities or changing climate priorities during implementation, the projects accommodated significant modifications after a midterm review (MTR) to ensure the continued relevance of their CCA components.** These changing conditions affected case studies such as the Fostering Agricultural Productivity Project (PAPAM) in Mali and the ACCESOS project in the Plurinational State of Bolivia. At the start of PAPAM in 2011, the interventions covered areas with potential for their production systems to be developed elsewhere in the country. However, after the 2012 political turmoil and the armed conflicts in the northern regions of the country, the project area was restricted to the southern regions of Kayes and Sikasso and the eventual intervention area was limited to only the Sudanian and Sudanian-Guinean agro-climatic zones in the country. In the Plurinational State of Bolivia, the country signed the Paris Declaration and introduced NDCs in 2015 during ACCESOS implementation (2013-2019). The project also faced other challenges and the MTR recommended realignment of the project with the country's NDCs, which led to significant modifications to maintain relevance to country's CCA priorities.

<sup>95</sup> Republic of Chad, 2015.

<sup>96</sup> Leavy et al., 2020.

114. **Relevance of CCA designs to local contexts was uneven.** In over 25 per cent of case studies, interventions including climate response needed substantial revisions to the original design to ensure the relevance of CCA responses to local contexts, even when the external context had not changed since the design. In an online survey of IFAD operational staff, 61 per cent reported that significant modifications had to be made to the design to implement projects properly. If the alterations were not identified as implementation began, revisions were undertaken following a MTR. While such adjustments demonstrated a flexibility to effect changes, they also indicated a recurring issue of designs not getting the local or country context right. Invariably, these changes came at the high cost of delays in implementation and reduced time window to deliver results. Design weaknesses included: weak conceptualization of climate and resilience (for example, in the Project for Competitiveness and Sustainable Development Project in the South-western Border Region (PROLENCA) in Honduras); the weak integration of climate activities with other project components (for example, the ACCESOS programme in the Plurinational State of Bolivia which faced not only the changing priorities of the country but also design issues); and existing social conflict or tensions which were not originally recognized by the project design (for example, in the Value Chain Development Programme (PRODEFI-II) in Burundi).

115. In the PRODEFI-II project in Burundi, the MTR found that the benefits of reduced water and soil erosion were mostly enjoyed by the better-off segments of the target group and any benefits to the poorest were at best, temporary. The project adjustments following the MTR addressed the targeting issue and adopted anti-erosive measures that protected downhill areas and stabilized and enriched the hillside. The MTR of the Livestock Marketing and Resilience Programme in Sudan (LMRP) identified the challenges faced by the project during implementation to address the social tensions and recommended a shift from developing community adaptation plans as originally envisaged by the project design, to developing climate resilience community village plans to ensure a bottom-up approach, integrating landscape planning and the climate resilience focus that were necessary to address the existing tensions between pastoral and agricultural systems.

116. **The long duration of COSOPs with common extensions limits their relevance to fast-changing IFAD priorities, approaches and country priorities.** COSOPs and operations were designed for a six-year period and were often extended. This means the evaluation period of 2010-2019 amounted to a cycle and a half while, as noted earlier, IFAD's business model had evolved rapidly during this period. Yet case studies showed that projects approved during the course of COSOPs were designed in full alignment with IFAD's evolving priorities and approaches even when COSOPs were not. In addition, as discussed, the existing operations were modified to ensure alignment after a MTR. The high relevance scores of the vast majority of the case studies showing nearly 90 per cent of case studies showing moderately satisfactory or better relevance (figure 11) is a testament to this flexibility of operations to adopt to changes.

## D. Relevance to climate-vulnerable target groups

117. In general, **project designs focused CCA interventions in geographical areas where the poorest and most vulnerable population groups were concentrated. However, the projects were less consistent in reaching and addressing the needs of the most marginalized and climate-vulnerable smallholder farmers.** Case studies showed that nearly a third of the climate responses made attempts to use climate vulnerability for targeting.<sup>97</sup> Of these, 50 per cent were in projects approved after the introduction of SECAP. Case studies also showed that projects used climate vulnerability for targeting but often climate vulnerabilities associated with different agroecological zones and production systems in selected geographic areas were not considered to refine targeting (see details in annex V table 5).

<sup>97</sup> Recent revisions to IFAD's targeting guidelines (IFAD, 2019d) include climate vulnerability as one of the criteria to target.



118. A good example of using climate vulnerability holistically in targeting among the 'older' projects was the ACCESOS in the Plurinational State of Bolivia (2013-2019). The overall ACCESOS identified 52 municipalities based on poverty maps. For the ASAP-funded climate component, the following two additional criteria were included to narrow the selection to 15-16 municipalities: i) **municipal level vulnerability to climate change**, integrating the variables of exposure, sensitivity and adaptive capacity, and using future climate scenarios suggested by the IPCC; and ii) a criterion on **territorial continuity** between the municipalities and a hydrographic basin, allowing for mitigating environmental problems associated with climate change. The selection involved a highly participatory design process with the close involvement of target groups (mainly indigenous peoples) within the selected municipalities and communities. In summary, the final targeting involved a combined use of poverty maps, vulnerability assessment tools and comprehensive field consultation observations by the IFAD design team.
119. Recent projects that included climate vulnerability in their targeting include Belize, Burundi, Cabo Verde, Chad, Honduras and Mali, with Belize providing a good example of the use and periodic update of climate vulnerability maps. In Burundi, it became clear during the implementation of PRODEFI-II that it had overlooked and marginalized a large number of households which were very climate and economically vulnerable on the hills; the project activities had been focused on the marshland areas. As a result, a more inclusive and integrated watershed management approach was adopted, targeting the entire community land base, including the hills and the marshlands.
120. **The information base for determining local climate risks and vulnerability requires a mix of local knowledge with external scientific data**,<sup>98</sup> as evidenced by the findings of the REA, a review of existing literature.<sup>99</sup> Among the case studies, some of the successful climate responses were found to involve community-based targeting. For instance, the ACCESOS in the Plurinational State of Bolivia, working with communities, jointly developed geo-referenced community 'talking maps' (*mapas parlantes*)<sup>100</sup> on the basis of a combination of scientific data, satellite maps and traditional knowledge to identify key climate risks and adaptation priorities within local areas. In other projects, comprehensive consultation processes with target groups during the design process added a high level of local knowledge into the design stage (for example, the projects in Bangladesh, Belize, Kyrgyzstan and Nepal). However, the majority of case studies lacked this bridging between scientific and local knowledge.

<sup>98</sup> Local knowledge relates to smallholders' experience from successful agricultural practices in dealing with past climate events, including indigenous practices. External/scientific knowledge relates to: 1) knowledge of (present and future) climate risks facing smallholders from climate modelling; 2) Solutions to these risks from past experiences elsewhere that may not be available at the local level.

<sup>99</sup> IOE, Building the adaptive capacity of smallholders to climate variability and change: key findings from REA 2021. Final Technical Report 06 April 2021, background document to this thematic evaluation.

<sup>100</sup> Talking maps, or *mapas parlantes* in Spanish, is a participatory mapping methodology which depicts layers of information documenting past, present and future scenarios that reflect the most important aspects of the local territory and the management of natural resources. See IFAD (2009): "Good practices in participatory mapping". [https://www.ifad.org/documents/38714170/39144386/PM\\_web.pdf/7c1eda69-8205-4c31-8912-3c25d6f90055](https://www.ifad.org/documents/38714170/39144386/PM_web.pdf/7c1eda69-8205-4c31-8912-3c25d6f90055)

## E. Relevance to social inclusiveness (women, youth, indigenous peoples)

121. The analysis of this section focuses on the extent of inclusion of women, youth, and indigenous peoples, as well as marginalized segments in community-based approaches in IFAD interventions. The inclusion analysis takes into consideration not only the outreach to these targets but also how well their needs were addressed by CCA activities.
122. **Overall, the evaluation found projects were continuing to improve their social targeting.** The challenges lay both in the design as well as the implementation of IFAD operations. Most designs did not have differentiated and integrated analyses of targets, particularly the marginalized ones (such as women, youth, indigenous peoples, pastoralists, landless people, migrants and other vulnerable groups) [see annex V, table 5 for details]. There were significant gaps in integrating relevant targeting capacities and strategies in project design and implementation. IFAD's Revised Operational Guidelines on Targeting (2019)<sup>101</sup> calls for future projects to have dedicated social inclusion/targeting expertise and clear targeting strategies in project implementation units.
123. **In addressing gender inequality and women's empowerment in climate responses, IFAD's performance is mixed.** The majority of project designs did consider how gender-related interventions were expected to shape women's and men's different vulnerabilities to climate change impacts and their capacities to adapt to them. The full portfolio of CCA responses (approved during 2010-2019) showed that three quarters of projects intended to include women smallholder farmers. Moreover, after IFAD placed greater focus on having gender transformative projects under IFAD10 (2016-2018), one in three climate projects approved in 2019 was designed to be gender transformative, a higher share than the IFAD11 target of 25 per cent.
124. At the same time, analysis of project design reports showed an inadequate focus on capacity-development processes through which women, men, producer groups, community leaders and other institutions could develop robust gender-responsive climate vulnerability and capacity assessments supporting CCA plans and adaptive management. One in five CCA interventions in the full portfolio and nearly a third of interventions in the case study portfolio did not adequately consider gender inequality issues and women's empowerment. They therefore fail to meet the IFAD10 commitment to include gender inequality issues in all development activities.
125. In the designs, there was strong emphasis on establishing targets and quotas for women's participation, either in project activities or in leadership roles in producer groups or community committees. Efforts were made to promote the participation of women in CCA activities, such as receiving relevant training or access to loan services. These are necessary steps, but they did not always translate into addressing the root causes of gender inequality, nor did they present the expected changes to their conditions resulting from women's participation. Consequently, many projects did not sufficiently engage with gender norms, roles and relations or how the CCA activities were expected to promote gender equality and women's empowerment. This would also require stronger efforts to engage with men (such as community leaders), as well as partner institutions with strategic gender positions (including service providers and institutions with responsibilities for land and labour allocation).
126. Recent IOE evaluations of projects share these findings. The 2020 Annual Report on Results and Impact of IFAD Operations (ARRI) concluded that beneficiary inclusion was being built into project designs, but the focus was more on ensuring participation through quotas (on the principle that equal opportunities will reduce economic inequalities) and less on more transformative approaches.<sup>102</sup> The 2018 IOE evaluation synthesis on What Works for Gender Equality and Women's Empowerment found that, as many project stakeholders may intuitively understand transformations in the ways that gender roles and behaviours are critical to the success of projects, it was difficult to conceptualize how 'gender-transformative' looks without sufficient guidance.<sup>103</sup>

101 IFAD, 2019d.

102 IOE, 2020c.

103 IOE, 2017.

127. **Exceptions to this pattern were noted in case studies.** In the Republic of Moldova, the supervision mission (2020) recognized the need to go beyond the share of women’s participation as a measure of women’s empowerment, and the project agreed to collect qualitative data from women on their perceptions regarding their social and economic empowerment, access to programme resources and opportunities on an equal basis as men, and the contribution the project made to these factors. In Burundi, the MTR of PRODEFI-II noted that those with little or less access to land, such as women and youth, were mostly left behind and, as a corrective measure, small livestock and short cycle animal raising activities were subsequently included to better target both women and youth.
128. **Targeting of youth is still at an early stage in IFAD’s projects and the evaluation found only weak or indirect targeting of youth in the country case studies.** Even though 62 per cent of the portfolio of projects with climate response had youth as target groups, there was little evidence that the content of activities addressed the specific needs of the youth. In the online survey of project staff, 37 per cent reported that their CCA project did not have a youth strategy and when it was in place, only 55 per cent addressed youth needs. Findings from ARRI 2020 (see IOE, 2020c) echoed this observation and noted that the livelihoods of young people were facing two main challenges: i) access to assets, goods and services; and ii) a lack of opportunities to acquire new skills. In December 2018, IFAD’s Executive Board approved a Rural Youth Action Plan that commits to mainstreaming youth in all COSOPs and in 50 per cent of future projects under IFAD 11.<sup>104</sup> This confirmed the need for a more tailored approach to youth targeting in IFAD projects to address these two challenges.
129. **Indigenous peoples were targeted well in the case studies from the LAC region.** Out of the portfolio of 256 projects with CCA response, 15 per cent targeted indigenous peoples. The LAC and APR regions accounted for 88 per cent of these projects, but none of the case studies in APR region included targeting indigenous communities. In the case studies in the LAC region, the projects in the Plurinational State of Bolivia and Honduras included a very high share of indigenous communities. The Adapting to Markets and Climate Change Project in Nicaragua (NICADAPTA) was less explicit about targeting indigenous peoples. However, experience from the project cases shows that when indigenous communities exist in countries, the decision to target them or not was closely linked to national policy and priority setting.
130. **Project designs did not always pay sufficient attention to assessing the potential competing interests of different types of stakeholders and production systems over the use of land and water resources to avoid exacerbating existing social tensions.** In most case studies in sub-Saharan Africa, project designs and implementation approaches lumped different target and user groups together and lacked sufficiently differentiated analyses and engagement strategies with these groups. Specific IFAD guidance on community-based approaches to address social conflicts and tensions in project designs would have helped.
131. For example, deep social tensions often exist between sedentary crop-livestock systems and (semi-) nomadic pastoralists in almost the entire Sahel region of Africa. The conflict is fuelled by competition over the use of land and water resources. Although project design documents in these cases refer to the existing social tensions over natural resources access, no clear guidance or transparent mechanism was provided on how to respect or secure such competing interests during implementation. This was observed in the Chad, Mali, Niger and Sudan case studies, where the projects aim to enhance water access and management for sedentary mixed crop and livestock systems in regions that technically would also be of interest to dry season access to water and fodder for (semi-)nomadic pastoralists.

## F. Relevance to the competing interests among the marginalized

<sup>104</sup> IOE, 2020c. The Rural Youth Action Plan defines a “youth-sensitive” project as one that (i) describes youth and its context-based challenges and opportunities in the project design analysis; (ii) informs a targeting strategy that explicitly targets youth with concrete objectives and activities to achieve impact in priority areas; and (iii) allocates resources to deliver activities targeting youth.

132. In the cases of Chad, Mali and Niger, the project design documents noted the existence of transhumant pastoralism in the intervention areas but did not put in place a transparent mechanism to address probable competing interests concerning access to water and land resources. In Sudan, the implementation of the LMRP project even ignored the experience under a previous project, the western Sudan Resources Management Programme which was funded by IFAD in Sudan. This programme promoted a more inclusive approach to natural resource governance, such as co-management of stock routes, contributed to more equitable access to natural resources, and improved natural resources management, as well as to reducing tensions between pastoralists and settled farmers. This oversight was corrected by the MTR (2018), which recommended instituting co-management mechanisms to ensure sustainable stock route management, share resources and minimize conflict between pastoralists and farmers.

133. It should be noted that the recent Lowlands Livelihoods Resilience Project (LLRP) of Ethiopia (approved in 2019) recognized and addressed the longstanding contest over rangelands and access to pasture and water as a source of conflict that added to the challenges of sustaining climate resilience and livelihoods.

## G. Relevance of financial instruments

134. As described in chapter 2, the grant-related financial instruments (supplementary and complementary funds, DSE, the grant instruments (such as ASAP, AF, GEF and GCF) used to integrate climate responses in loan services were considered in this analysis. The relevance of these instruments is considered from two perspectives: were the instruments deployed to address high climate risks? Were the instruments solely used to promote and mainstream CCA responses in IFAD operations?

135. **The relevance of the deployment of the financial instruments was high.** Nearly all projects (37 of 39) supported by these instruments had climate responses to either a moderate or a high-risk context (table 6). In addition, the relevance of the different sources of CCA supplementary funds to IFAD practices is summarized in table 7.

TABLE 6

Cross-tabulation of climate risks with climate finance instruments in the CCA portfolio

	Level of climate risk assessed				Risk identified without rating	Total projects
	1 High	2 Moderate	3 Low			
Grant financing	number of projects	number of projects	number of projects		number of projects	
AF		3				3
ASAP	4	24	1	12		41
GEF <sup>105</sup>		4	1	9		14
GCF	2			1		3
<b>Total</b>	<b>6</b>	<b>31</b>	<b>2</b>	<b>22</b>		<b>61</b>

Source: IOE elaboration.

<sup>105</sup> One project in Sudan was approved prior to 2010 and hence was not included here.

TABLE 7

## Comparison of key sources of supplementary funds for CCA

	GEF (LDCF, SCCF)	ASAP, ASAPII, ASAP+	GCF
Duration of partnership	IFAD6-present (2004-present)	IFAD9-present (2012-present)	IFAD11 2016 - present GCF Board approved IFAD as an Accredited entity in October 2016 and the AMA was signed in 2018
Contribution to IFAD's CCA response	First to fund CCA response in IFAD operations (2004). To promote climate response, supports stand-alone CCA projects as well as mainstreaming CCA into operations.  Total GEF projects 62 totalling US\$256.5 million).	Fully integrated into IFAD operations.	Inadequate evidence base to assess.
Extent of integration into IFAD operations	GEF-funded components are approved separately from the rest of the project and subject to GEF approval processes. (For instance, a third of GEF funded projects had a lag of more than one year between approval by IFAD and approval by GEF Council.	Fully integrated into IFAD operations.	Like the GEF, the GCF-funded components are approved separately from the rest of the project and subject to the GCF approval processes.
Fiduciary requirements	According to PMUs, reporting requirements were heavy and required dedicated capacities and considerable time investment.	Integrated into IFAD's monitoring and reporting.	Inadequate evidence base to assess but early reports suggest that the fiduciary requirements are more strenuous than the GEF.
Financing for design	Provides access to project preparation grants to all projects.	Resources could not be used for design in ASAP; ASAP II provided the flexibility to use funds for design; ASAP+ envisages technical assistance funds to support design.	Normally, project preparation grants are not standard. IFAD received one project preparation grant for an exceptionally complex project.

Source: IOE elaboration.

136. **The relevance of the use of the climate finance instruments was positive with few exceptions.** Grant instruments were instrumental in providing the flexibility for IFAD to undertake activities for mainstreaming CCA. They demonstrated additionality in terms of financing climate response activities for which governments hesitated to use loan funds.<sup>106</sup> For instance, an ASAP grant was used for a spatial vision of land use planning to be developed at the landscape level, supporting climate resilient agriculture; in LMRP and the Sustainable Natural Resources and Livelihoods Programme (SNRLP) in Sudan, ASAP and GEF financing supported participatory approaches to strengthen community resilience and natural resource management plans; in the Livestock and Market Development Programme (LMDP) I and II in Kyrgyzstan, the Sustainable Agriculture Investments and Livelihoods (SAIL) project in Egypt, and PARSAT in Chad, ASAP grants were used for developing early warning systems and climate information services

to target groups; in PRODEFI II in Burundi, ASAP resources enabled the project to take a landscape view of the project area and increased the inclusion of marginalized populations living in the hills; in the follow-on PAPANV-B project, this landscape approach was replicated through DSF grants; and in ASHA Nepal, ASAP and DSF grants enabled IFAD to directly operationalize the NAP for action.

<sup>106</sup> Strengthen individual and institutional capacities, knowledge management, policy dialogue for climate adaptation, conserve or rehabilitate environment and natural resources, increase availability of water and efficiency of water use, diversify sources of livelihoods, climate resilient rural infrastructure, disaster risk management, and provision of financial services.



137. **However, climate finance instruments also carry the risk of weak integration of climate activities and results into project**, particularly when CCA is not the primary objective, as these activities are tied to governance systems external to IFAD.<sup>107</sup> Case studies noted instances where financing instruments were retrofitted into an ongoing project, such as the PAPAM project in Mali and the Rural Socio-economic Opportunities Programme (POSER) in Cabo Verde. This is partly because of the lag between project approval by IFAD and the approval of climate component financing from one of the financial instruments. Five out of fourteen projects with GEF financing had a lag of more than one year between the approval of IFAD and approval of GEF financing.
138. **Other case studies demonstrated examples of projects where the climate finance funds contributed to components and activities which were largely standalone in nature**, lacking integration with rest of the project. In the Inclusive Rural Economy and Climate Resilience (IRECR) project in the Republic of Moldova, the CCA financing by GEF largely functioned in isolation from the rest of the components of the project with no integration with other activities. Attempts were made to be better integrated in the follow-on Rural Resilience Programme project with financing from the AF. Similarly, in ACCESOS Bolivia, the ASAP component was initially implemented in a standalone manner before being successfully integrated with rest of the ACCESOS programme.
139. **In some cases, such as the SAIL project in Egypt, part of GEF and ASAP funding was used for activities without clearly establishing their contribution to CCA.** For instance, vocational training to women funded by ASAP contributes to diversifying incomes, but it was not clear if and how the new vocations would help women mitigate their exposure to the specific climate threats they are facing of water scarcity and rising temperatures.
140. The case studies did not find clear articulation of these risks and risk management strategies presented in project design reports and project implementation manuals.

<sup>107</sup> ASAP is an exception as it is fully integrated in to IFAD mechanisms of approval.

## H. Relevance of IFAD's results and conceptual framework to measure climate resilience

141. IFAD11 included four more project indicators related to CCA in its Results Management Framework with indicators 2.3.11, 2.3.13, 2.3.14 and 2.3.16.<sup>108</sup> The impact assessments and the Report on IFAD's Development Effectiveness (2020) reported that IFAD is on track to achieving these targets. The case studies which had completed projects confirmed that in the majority of cases (84 per cent) the country-level CCA targets were met (see figure 12).
142. **These results constitute important steps towards strengthening smallholder adaptation to climate change but did not show to what extent their resilience was improved.** Analysis showed that all four corporate indicators mentioned above were at the output level and did not provide any measure of changes to smallholder resilience. Climate resilience takes time to build and IFAD11 came into effect just one project cycle after ASAP began to be implemented. It may be too soon to be able to identify fully fledged climate resilience outcomes, but intermediate steps towards outcomes should be identified and measured.

<sup>108</sup> IFAD, 2018b. These indicators are: 2.3.11. Number of groups supported to sustainably manage natural resources and climate-related risks. 2.3.13. Number of persons/households reporting adoption of environmentally sustainable and climate resilient technologies and practices. 2.3.14. Number of hectares of land brought under climate resilient management. 2.3.16. Number of persons whose ownership or user rights over natural resources have been registered in national cadasters and/or geographic information management systems.

143. **Corporate and project documents make frequent reference to the term ‘climate resilience’ without explicitly defining how to interpret and measure it at the project level.** Strategic Objective 3 of IFAD’s Strategic Framework 2016-2025 was to “Strengthen the environmental sustainability and climate resilience of poor rural people’s economic activities”. However, corporate guidance to conceptualize and measure resilience is yet to be implemented. Climate responses and resilience are highly dependent on context, and will be affected for example, by agroecological conditions (coastal zones, semi-arid regions, flood-prone areas), agricultural production systems (livestock, cropping) and other socio-economic and environmental factors. At present, differing approaches are being pursued at regional and country levels to quantify resilience outcomes. Identifying relevant indicators is a challenge without a shared understanding and a framework to measure resilience. Chapter 1 presented a framework for conceptualizing and measuring resilience that is widely accepted by other IFIs, UN agencies including FAO and the World Food Programme (WFP) and which is used by IFAD when collaborating with

Rome-based agencies and the World Bank.<sup>109</sup> Despite this experience, in many case studies, particularly those that had the earlier projects, there was little real consideration of resilience in terms of precisely indicating the robustness of the agricultural system (absorptive capacity), how the interventions would contribute to the preparedness for, or recovery from a climate shock or disturbance (adaptive capacity), and whether a shift or reorientation would then be beneficial (transformative capacity) [See table 8 for illustrative examples of IFAD’s actions that strengthen these resilience measures]. Nor was there a clear interpretation of resilience ‘of what’, ‘to what’ and ‘to whom’. Consequently, the designs of the projects assessed in this evaluation lacked an adequate lens for integrating climate resilience in their theories of change and their results frameworks.

109 FAO, IFAD and WFP (2015). RBA Collaboration for Strengthening Resilience, Niger Case Study, p.4: <https://documents.wfp.org/stellent/groups/public/documents/newsroom/wfp278361.pdf> Lowlands Livelihood Resilient Project Design Report, World Bank and IFAD, 2019.

TABLE 8  
Examples of climate responses addressing resilience

<b>ABSORPTIVE CAPACITY</b> (the capacity to moderate or buffer the impact of shocks in order to persist) [applies during crisis]	<b>ADAPTIVE CAPACITY</b> (the capacity to learn, adjust and adapt in response to a disruption) [applies before or after crisis]	<b>TRANSFORMATIVE CAPACITY</b> (the capacity to fundamentally alter the social, ecological and economic processes that make a system untenable) [applies after crisis]
Example 1: Strengthen community organizations to provide support during crisis [Niger, PPI- RUWANMU (2012-2018) & PASADEM (2011-2018)].	Example 1: Raising rural incomes through pro-poor value chain development (Republic of Moldova, IRECRP and RRP; Rwanda, RDDP; Sudan, LMRP).	Example 1: Transitioning from solely rainfed agriculture to include irrigated agriculture [Niger, all projects; Ethiopia, PASIDP II (2016-2024) and LLRP; Madagascar, AD2M].
Example 2: Improving size and quality of asset base [Niger, PASADEM & PRODAF-MTZ (2015-2024)].	Example 2: Raising road infrastructures to manage flood water (Bangladesh, CCRIP, 2013-2019).	Example 2: Investments in watershed management to address the nexus of rural poverty, environmental degradation and climate change (Honduras, PRO-LENCA).
Example 3: Weather-indexed or hazard insurance [Ethiopia, PASIDP II (2016- 2024); RUFIP II (2011- 2021)]; Niger, PRECIS.	Example 3: Early warning systems and climate risk management; Egypt, SAIL, (2014-2023); Ethiopia, PASIDP II (2016-2024), PCDP III (2013- 2019)].	Example 3: Transformation of resource governance from a state-managed centralized approach to a community-based local self-governance model (Kyrgyzstan, LMDP).
Example 4: Communities integrating DRR in their development activities to address climate change risks [Bolivia, ACCESOS-ASAP (2013- 2019)].	Example 4: Nutritional diversification; Madagascar AD2M; Niger PRODAF and PRECIS; Ethiopia PASIDP II.	Example 4: Maintenance/restoration of environment and ecosystem integrity (Ethiopia, LLRP).

An exemplar of all three resilience capacity attributes: LLRP in Ethiopia (2019-2026) was a joint project with the World Bank. Its design aimed to build climate resilience by strengthening: (i) absorptive capacity through strategic investments and improved basic social service delivery, to help communities and productive agricultural systems to absorb drought shocks and reduce asset losses; (ii) adaptive capacity, through helping beneficiaries to adopt climate-smart agriculture as well as better rangeland and natural resource management, and by investing in research systems that help identify adaptation solutions; and (iii) transformative capacity through small-scale irrigation, livelihood diversification, and enhancing market links. These provided a basis for socio-economic advancement and enabled beneficiaries to shift away from rainfed agricultural systems.

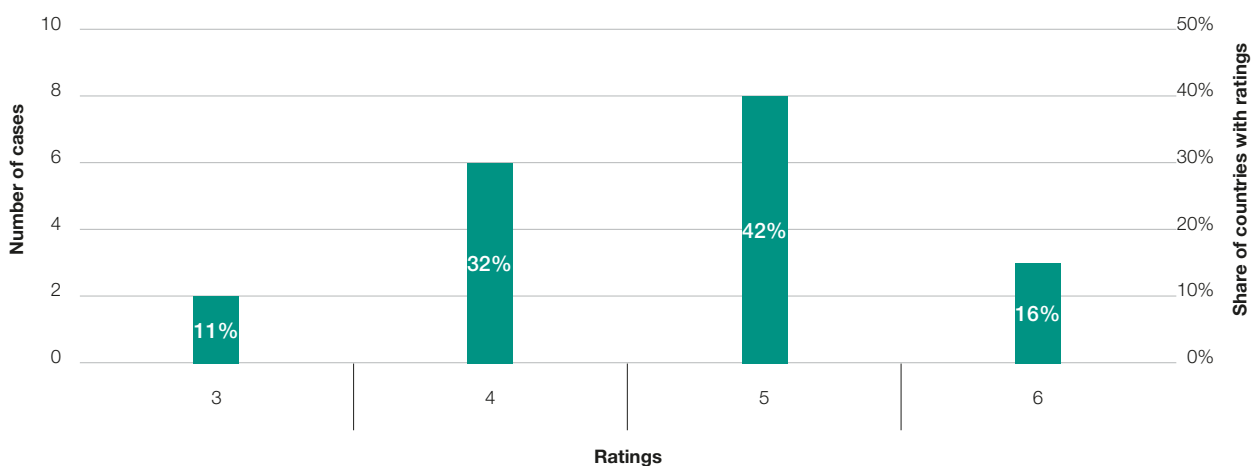
144. Conceptualizing and measuring CCA resilience is challenging because the nature of resilience and the approaches used by projects vary widely, depending on the contexts of smallholder vulnerability as well as the attributes and intensity of climate threat they face. For instance, recurrent droughts and other weather-related extreme events affect the capacity of rural households to accrue assets and sustain their livelihoods. Firstly, CCA is highly context-specific and interventions or responses are largely influenced by the 'type' of climate risk (for instance, floods or droughts), the agricultural production system (cropping or livestock), agroecological zones (windy and dry plains, or hill slopes prone to flooding), the extent of community networks available for support, the quality of the initial asset base of the smallholders, and the extent of access to resources (the degree of social marginalization). Secondly, the initial vulnerability undermines their ability to cope with the hardship of the "période de soudure," i.e., the lean hunger season, and to face drought shock the following year, resulting in increased vulnerability and a higher level of food and nutritional insecurity. Thirdly, the structural vulnerabilities would be further exacerbated if smallholders adopted negative coping strategies, such as unsustainable tree cutting on communal land for firewood or charcoal making, selling their livestock assets, reducing their food consumption, or borrowing money at excessive interest rates, thereby further undermining their

well-being and long-term resilience capacity. **These interrelated contextual factors which shape their specific climate resilience therefore require more complex analysis of project-level experiences to identify suitable performance indicators to reflect improvements in overall climate resilience.**

145. A few recent IFAD project designs began taking steps to measure climate resilience at the country and local level, such as the Lowlands Livelihood Resilience Project in Ethiopia (2019-2025).<sup>110</sup> That design laid out the resilience framework as outlined in chapter 1 and identified indicators to track resilience outcomes. In this context, it would be appropriate and timely for IFAD to introduce corporate guidance to ensure all IFAD CCA responses measure and track progress towards resilience outcomes, even if the full extent of outcomes may not materialize immediately upon completion of a project. Based on the discussion above, the evaluation team assessed the overall relevance of each country case study to the CCA priorities of programme country, target groups and IFAD which are presented below in figure 11.

<sup>110</sup> See discussion in chapter I for regional efforts underway to pilot conceptual framework and monitoring systems (resilience scorecard) that is based on a vulnerability assessment to arrive at resilience.

FIGURE 11  
Relevance of IFAD interventions in the 20 case studies



Source: IOE elaboration based on the assessment of the evaluation team.

## Key points

- COSOPs and operations are **well aligned with national climate priorities** including the NDCs.
- Due to their long duration and extensions, COSOPs were likely to lose their relevance to fast evolving and emerging IFAD climate approaches. However, **projects designed well into the COSOP cycle were aligned with IFAD approaches and priorities** despite this longevity of COSOPs.
- Grant instruments were well aligned with IFAD's priority to mainstream CCA, particularly in countries where rules prevented them from investing in CCA or climate change responses are yet to become a priority. However, case studies show instances where the modalities of financial instruments affect the coherence or synergies among CCA and other project components and cause delays.
- While most climate responses address community and geographic targeting, IFAD was **less consistent in addressing the needs of the most climate-vulnerable smallholders** (a third of case studies attempted to include climate vulnerability targeting and one succeeded). Formal guidance on this became available in IFAD's 2019 revised operational guidelines on targeting.
- CCA responses **prioritized establishing targets and quotas for women's participation** in benefits but are now beginning to address the root causes of gender inequality, such as gender norms and beliefs, income and asset ownership and access to credit.
- IFAD guidance and operations did not pay sufficient attention to assessing the potential competing interests among marginalized smallholders, particularly in **different production systems** (for instance, a third of the case studies facing conflicts between sedentary crop-livestock system and nomadic pastoralism, addressed the issue satisfactorily).
- IFAD's conceptual and results framework provide little guidance to track progress in strengthening climate resilience. Country offices are making efforts to address this gap without waiting for relevant corporate guidance to be put in place.
- Overall, the case studies show strong relevance of CCA projects to the climate threats, country priorities and needs of target groups, with 89 per cent of case studies showing moderately satisfactory or better ratings (figure 11).

## IV. Performance of IFAD response to CCA

<sup>146.</sup> This section presents the findings of analysis related to the performance of IFAD's response to CCA, based on the theory of change presented in annex II, which identifies four key milestones of the results chain: fitness of corporate resources and instruments for promoting CCA (column 1 of the ToC) and quality of design and implementation (column 2) contribute to the climate resilience outputs (column 3) and outcomes (column 4) when key assumptions are met, such as the collaboration and commitment from key partners, national and local government commitment to CCA, strong institutional governance and regulatory framework to support CCA. The immediate effects of lending and non-lending activities are discussed. This is followed by an analysis of the long-term effects of IFAD operations in terms of scaling up CCA results beyond farm level and the long-term effect of CCA response on ecosystems. The chapter also presents an analysis of the effectiveness of IFAD's climate response in reaching the most marginalized climate-vulnerable smallholders. The evidence base for this chapter comes from a review of related IFAD corporate documents, analysis of a portfolio of 256 projects and 93 COSOPs/CSNs with CCA response, two online surveys conducted among IFAD staff and project staff, lessons from the three learning notes (on KM, scaling up and human-ecosystem nexus interactions) and case studies in 20 countries. The analysis focuses on interventions approved between 2010-2019. An overall summary of the assessment of effectiveness of the 20 case studies is presented in annex V, table 1.

### A. Effectiveness of IFAD interventions

<sup>147.</sup> **At the corporate level, CCA-related commitments and development results of IFAD11 (2019-2021) were achieved or are on track to being achieved** (table 9). Portfolio analysis in chapter 2 showed that the earlier commitment under IFAD10 (2016-2018) to mainstream CCA in all new country strategies and operations was also met. All COSOPs in 2019 analysed their respective NDCs to align their climate interventions with NDC priorities.



TABLE 9

## Achieving IFAD11 CCA commitments

CCA attribute	IFAD11 commitment	2020 progress towards commitment
Country strategies	100 per cent of country strategies analyse NDCs.	100 per cent of country strategies approved in 2019 analysed the NDC of their respective country.
Climate finance	25 per cent of IFAD11 PoLG is 'climate-focused'.	As of 30 September 2020, IFAD11 reported committing US\$736 million in climate finance across 47 approved projects. 36 per cent of the IFAD11 PoLG approved between 1 January 2019 and 30 September 2020 was reported as climate finance. Of this, US\$665 million was identified as adaptation finance and US\$71 million as mitigation finance. <sup>111,112</sup>
Performance of projects in relation to CCA and ENRM <sup>113</sup>	90 per cent of projects completing in IFAD11 rated 4+ on ENRM at completion.	100 per cent of projects completed during IFAD11 were rated by IOE for ENRM as moderately satisfactory or better.
	90 per cent of projects completing in IFAD11 rated 4+ on adaptation to climate change at completion.	92 per cent of projects completed during IFAD11 were rated by IOE for CCA as moderately satisfactory or better.

Source: IOE and OPR elaboration.

111 Progress Report on *Applying the Multilateral Development Banks' Methodologies for Climate Finance Tracking*, p.1.

112 More recent data show that cumulative climate finance for 2019-2020 (up to the end of the year) amounted to US\$873 million, or 35 per cent of the PoLG relative to the same period (source: MDB Climate Finance Tracking page, OPR).

113 Based on ratings from the ARRI database.

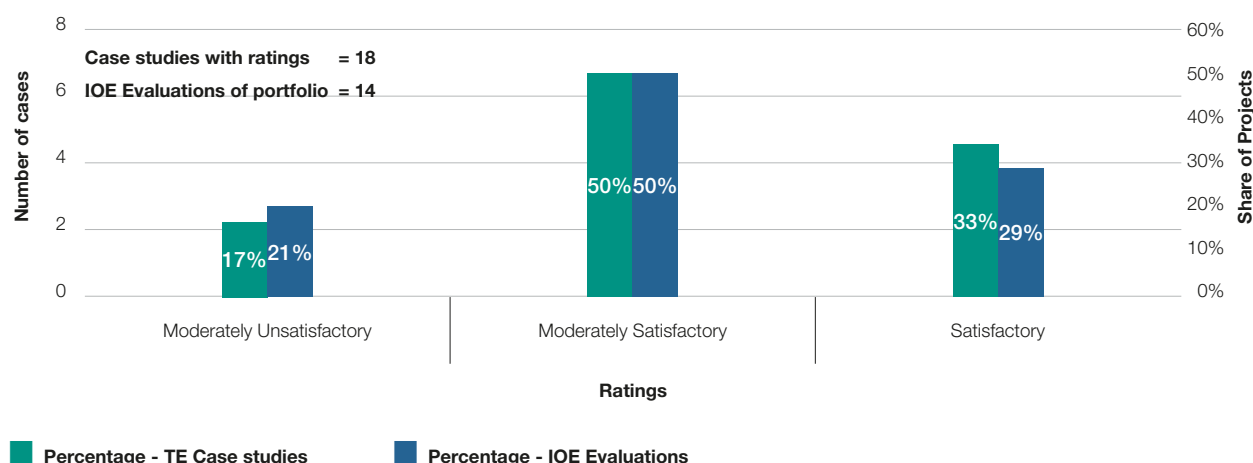
148. **As noted earlier, IFAD lacks a conceptual and results-orientated framework to measure the impact of its interventions in building climate resilience.** Not having results that demonstrate changes to resilience poses a challenge to assessing IFAD's actual effectiveness in strengthening the climate resilience of smallholders. Case studies in this evaluation took the conceptual approach to measure resilience that is outlined in chapter 1. This approach, as discussed, is aligned with the one pursued by IFAD's joint regional interventions with Rome-based agencies to assess changes to resilience (2014/2015).

149. The assessments of effectiveness of CCA responses in all case studies is summarized in table 1 in annex V. This assessment considered the following: the effectiveness of targeting the most climate-vulnerable, progress towards resilience outcomes from lending activities and performance in terms of contributions to scaling up, KM, partnerships, capacity development and policy engagement. The assessment focused on projects that were close to completion or those that were already completed; considered progress towards and likelihood of achieving resilience-related results; and in doing so, the assessment considered the results presented in the project results frameworks, as well as additional information on resilience outcomes.

150. **There was tangible progress towards resilience outcomes in 15 of the 20 case study countries with the likelihood of CCA responses and results scaling up evident in nine countries. These were rated 'moderately satisfactory' or better in terms of their effectiveness in building climate resilience.** The ratings were summarized below.

FIGURE 12

Effectiveness of IFAD CCA response: case study assessments and IOE evaluation ratings



Source: IOE elaboration.

151. The evaluation also analysed evidence from the project-level evaluations (PPE and project completion report validation) conducted by IOE of all projects in the climate portfolio that were completed. All IOE project-level evaluations rate the project’s contribution to CCA. From the IOE database, 14 such evaluations were identified. The CCA performance ratings are summarized in figure 12 above. As can be seen, these two distinct sources provide remarkably similar assessments of the effectiveness of climate responses.

### Factors contributing to effectiveness

152. The evaluation conducted a rapid evidence assessment of peer-reviewed and grey literature to analyse approaches to building the adaptive capacity of smallholders to climate change. It sought to provide additional and complementary learnings to inform the evaluation, by assessing interventions that were successful in strengthening smallholder climate resilience. Specifically, they tried to understand the factors contributing to smallholders switching to climate-friendly practices, to scale up approaches, to strengthen KM and to better understand the human-eco system nexus. The key findings of this study related to the adoption of climate change responses are summarized in box 1.

## Key factors contributing to smallholders switching to climate adaptation-friendly practices

**A number of factors determine smallholders' decision to adopt adaptation actions.** Awareness of the risks and available options to address them is an important factor. This awareness draws on their own local knowledge and expertise, on access to sound scientific and technical advice, and on the availability of timely, easy-to-use weather information.

**Access to knowledge alone may not be sufficient for farmers to adopt adaptation actions** that require investment of time and resources. In fact, the quality and extent of asset base, access to land and ownership of other productive assets significantly influence smallholders' decision to pursue adaptive measures. Experimentation and peer learning from demonstrations greatly facilitate farmers' uptake of new approaches and technologies necessary for adaptation. Their level of education (which is fundamental to use and trust the information they receive), their technical skills and farming experience are other important factors.

**Another important factor is their social capital,** being their degree of participation in community networks and membership of groups and organizations. This functions as a safety net as well as an enabling agent - enhancing and validating the knowledge base while sharing experiences with peers. It also supports the farmers to face multiple threats, including economic, health and food security risks.

**Behavioural changes at individual and community levels should ultimately address the necessary trade-offs and barriers to longer-term, sustainable results.** External institutions such as government and development actors can act across three scales - household, community and landscape levels - and also, importantly, provide the right economic incentives to compensate smallholders for investments that don't have immediate returns (such as in agroforestry).

**Adaptation support.** At the household level: i) capacity-building through training, knowledge exchange and peer-peer learning through participatory action research (PAR) and learning platforms; ii) efficient extension and advisory service; iii) access to usable weather information; and iv) financial support through targeted subsidies, economic incentives and payments for ecosystem services. The latter is especially important to encourage farmers to invest in ecosystem-based adaptation (EBA).

At the community level: Forming informal and semi-formal groups is helpful to strengthen community-based adaptation (CBA). Stimulate social learning by supporting local groups and institutions such as Farm Field Schools. Such groups can be sustained with local governance, encouraged to take collective action and help promote knowledge management.

At the landscape level: Planned adaptation should consider the entirety of the local landscape as its scope. External actors can preserve the actions implemented at individual and community levels against risks and vulnerability, for example, through watershed development, forest and landscape restoration or by building irrigation and other infrastructures. Investments towards restoration can take longer and it is important that the short-term needs of smallholders are addressed while the longer-term investments mature. They can also provide institutional and financial support to ecosystem- and community-based adaptation practices, and bring the two combined approaches to scale. Finally, adaptation interventions promoted at community and landscape levels should also consider creating or enhancing off-farm economic opportunities.

For adaptation pathways to be transformative and inclusive, the current policymaking process must become holistic, together with the research to provide the necessary evidence for policymakers. Silos must be broken between different disciplines (especially those between agricultural and ecological studies which must be better integrated) and appropriate analytical tools for monitoring and evaluating adaptation in agriculture must be developed and tested. A key role for international development organizations is to support the institutional mainstreaming of knowledge and innovation, ensuring that project outcomes and best practices inform policies and underpin new, integrated policy targets.

153. These findings complement those from the case studies. The theory of change (figure 3 of chapter 1 and annex II) and the conceptual framework for climate resilience (figure 2 of chapter 1 and table 8 of chapter III), provide a systematic basis to identify the pathways to strengthen climate resilience. These pathways were distilled from IFAD's CCA activities in case studies and contribute to the adaptive, absorptive or transformative aspects of climate resilience. The following section presents these pathways and illustrates IFAD's effectiveness in enhancing smallholder climate resilience through these pathways, drawing from the experience with the 20 case studies.
154. **Strengthened community networks and organizations (social capital).**<sup>114</sup> A number of case studies showed examples where IFAD successfully strengthened smallholder community organizations. Here, social capital supported smallholders during lean periods, helping them gain awareness of climate issues in a practical way and providing the essential support base to enable switching to more climate-resilient agricultural practices. In short, social capital helps reduce smallholder vulnerabilities. Moreover, addressing ecosystem restoration and environmental sustainability happens at the community or trans-community level or above. In Niger, the Food Security and Development Support Project in the Maradi Region (PASADEM) and the Family Farming Development Programme in the Maradi, Tahoua and Zinder Regions, (PRODAF) addressed the structural problems of food security caused by recurring droughts and lean hunger seasons. They formed smallholder cooperatives to produce and distribute improved (climate resilient) seeds, and water users' associations and advisory groups were introduced as social engineering practices which included the village women's granaries to build gender-responsive social capital. In the Plurinational State of Bolivia, the ACCESOS-ASAP project built community capacity to map climate vulnerabilities, identify priority issues, and engage with policymakers on managing climate risks. In Madagascar, the Project to Support Development in Menabe and Melaky regions (AD2M II) and the Climate Resilient Post-Harvest and Agribusiness Support Project in Rwanda (PASP), smallholder organizations were formed such as farmer field schools and water users' associations to strengthen community networks at the project level to promote CCA technologies. In Rwanda, PASP also demonstrated the scope for empowering smallholder organizations through the creation and support for farmer organizations linked to business hubs.
155. Community networks often go beyond project boundaries and, when successful, become a key instrument in influencing national development agenda and policies, while strengthening the bargaining positions of communities in negotiating prices for their products. For example, the Participatory Small-scale Irrigation Development Programme (PASIDP) in Ethiopia organized farmer cooperatives and, through bulking and joint marketing, helped them achieve greater efficiencies in product collection and delivery, improved market access, as well as more predictable and better prices. In the example mentioned earlier, PASADEM in Niger strengthened the technical, organizational and logistical capacities of farmer umbrella organizations, partner NGOs and the Regional Chamber of Agriculture, linking farmer organizations to decision-makers and service providers.
156. **Enhanced quality and size of asset base and financial services.** One of the intervention areas of PASADEM and PRODAF in Niger was the distribution of small ruminant stock for vulnerable households. Small ruminants are well adapted to the Sahelian environment, as they can provide sustenance from diverse feed sources. The provision of small ruminants to poor households served to strengthen their absorptive resilience capacity as these animals can easily be raised and sold when money was needed. For the poor, these animals were comparable to a living savings bank account. The projects provided goats as an asset to reconstruct vulnerable households' stocks. Unfortunately, the plan suffered from shortcomings in implementation and lacked follow-up by administrative and animal health services. In addition, some of the projects' shortcomings were due to a lack of preparatory studies on developing value chains for small ruminants. The support to vulnerable households through the distribution of 'poultry kits' was ineffective due to high mortality rates. The main reason for this was insufficient attention to animal health in areas where animal diseases were prevalent.
157. An area where these projects succeeded in Niger was in supporting women's storage granaries to improve food and nutrition security for poor and vulnerable households. The project constructed 53 women's granaries, supplying 530 tons in project areas, which enabled women to access food during difficult times. However, this activity lacked synergies with other project interventions.

114 More often, the community-level engagement focused on strengthening the human systems and tend to overlook ecosystem-based approaches to community-building.

158. Supporting land tenure provides the asset level necessary to face challenging times. Lack of land tenure can also lead to land degradation, as was the case in the Lake Tana watershed targeted by the Community-Based Integrated Natural Resources Management Project (CBINReMP) in Ethiopia. Lack of land tenure discouraged local investments in land improvements and in the absence of any societal arrangements to manage communal land and natural resources, effectively encouraged their over-exploitation.<sup>115</sup> The project supported Amhara National Regional State Land Service to issue land certificates<sup>116</sup> that included husband and wife's names or women's names in women-headed households and linked land certification to natural resources management interventions. This significantly strengthened gender equality within households and the community as well as reversed the land degradation. In addition, small landowners were able to use the title deed as collateral to access credit. In Madagascar, land certification for the landless led to significant economic gains for the poor.
159. **Climate-resilient technologies adopted.** Nearly all case studies involved one or more technology-based solutions. These involved introducing climate-smart cropping (in Belize, Burundi, Chad, Ethiopia, Honduras, Kenya, Republic of Moldova, Nicaragua and Niger), climate-resilient livestock (in Ethiopia, Kenya, Kyrgyzstan, Madagascar, Niger, Rwanda and Sudan), value chain development (in Nicaragua and Rwanda), and infrastructure (in Bangladesh, Burundi, Cabo Verde, Chad, Ethiopia and Mali).
160. IFAD's support to climate-resilient cropping systems at the farm and community levels involved supporting farmers to adopt CCA practices such as short-season and drought-tolerant crop varieties, crop diversification, soil and water conservation methods and natural resource regeneration. In many cases, such efforts were coupled with strengthening farmer organizations together with mechanisms to create broad awareness of the need for climate-adaptive technology among beneficiaries.
161. In addition to strengthening extension services, IFAD used farmer field schools (FFS) effectively in a number of climate responses in case studies. The FFS provided a tested platform to bridge farmers' own local experiential knowledge with sound scientific and technical advice and helped IFAD expand its outreach. For example, projects in Ethiopia, Madagascar and Niger were effective in supporting the increase in agro-pastoral production and the restoration of degraded lands using FFS.
162. Unlike extension services, FFS offered sustained support and allowed farmers to visually experience and justify how different CCA options worked through demonstrations. IRECR in the Republic of Moldova promoted conservation agriculture (CA) as an agro-technology particularly suited for the steppe agroecology that faced frequent droughts and wind erosion. The project supported 11 FFS that performed controlled experiments involving different crops (wheat, sunflower and maize) with select plots using conservation agriculture and other farming with regular tilling (as a control group). Farmers were able to see for themselves the comparative performance between CA and regular agricultural practices and also learn the techniques and required steps associated with CA. The extent of community ownership and inclusiveness varied across different case studies. For instance, women constituted only 16 per cent of the beneficiaries of the FFS in the Republic of Moldova. This low number mostly reflected the low demand for the technology among women. This was because the project promoted a mechanized no-till approach, which required more powerful machinery that was also significantly more expensive.
163. IFAD's support to livestock farming focuses on pastureland management, livestock health and production, and value chain development. IFAD's strategy and activities to promote climate resilience in livestock farming ranged from strengthening communities and community organizations such as cooperatives, supporting climate-resilient fodder production, proposing resilient breeds of high-yielding livestock and strengthening value chain links, such as milk cooling centres.

<sup>115</sup> Deininger et al. 2006.

<sup>116</sup> At completion, the project had issued first-level certifications to 287,704 landholdings (64 per cent of the appraisal target), and 9,577 second-level certifications. In addition, 25,370 cadastral surveys were completed. (Source: PCR).



164. In Kyrgyzstan, IFAD was successful in supporting government efforts to decentralize the governance of pasturelands. In 2009, the country decided to shift from centralized management and administration of pastureland to a locally-managed system with higher community participation. The project promoted ecosystem restoration of pastureland with the overall goal to reduce the pressure on pasture resources by improving access to more remote pastures and rehabilitating grazing land close to villages. This resulted in increased herd size with inadequate consideration of the consequences for landscape resilience.
165. Livestock depend on secure access to suitable pasture land and water. Throughout the Sahelian region, conflicts existed between the agro-pastoralists and nomadic pastoralists due to competition for these competing natural resources. Case studies in Chad, Mali and Niger showed that inadequate attention had been paid to this issue in IFAD's earlier designs. In some of the older projects and most recent projects in the region, inclusive community-based approaches were used to resolve or mitigate the conflicts between these groups. The LMRP in Sudan integrated ways to address this conflict within the broader issue of managing natural resources sustainably. Community adaptive plans were developed that included the priorities of all groups and investments in a community-based natural resource management approach that directly addressed stock route restoration, minimizing the conflicts between settled and nomadic pastoralist communities. This provides a good example of using community-based approaches to integrate managing natural resources with addressing tensions among different agricultural systems. This community-based stock route restoration was also being scaled up across the country. Most recent projects in the region addressed this issue well in their designs (for example, the recent LLRP in Ethiopia).
166. In addition to supporting pastureland management, IFAD introduced climate-resilient fodder varieties and upgraded the gene pool of livestock to boost productivity in nearly all its livestock-related interventions (thereby contributing to reducing the number of livestock and hence greenhouse gas emissions).
167. Value chain development support was effective only when IFAD followed a comprehensive strategy that included a clear end-user focus, empowered farmer organizations, made production systems more climate-resilient and strengthens value chain links, as the positive experience identified in Rwanda. Absence of such strategy limited the value chain effectiveness of IFAD in Kyrgyzstan.
168. **Climate-resilient infrastructure in place to ensure sustained functioning and market access.** IFAD's infrastructure support included repairing or constructing access roads to markets, rangeland roads, storage facilities, market facilities, and irrigation infrastructure such as canals. New irrigation infrastructure helped to reduce water losses, climate-resilient storage helped minimize post-harvest losses, while roads and market buildings minimized disruption to business functioning and enabled continued access to services.
169. As discussed in box 2, the CCRIP was a joint infrastructure project involving the Government of Bangladesh together with IFAD, the Asian Development Bank (ADB), and the German Credit Institution for Reconstruction (KfW). The project was among the first to address climate threats in the design of infrastructure the south-western coastal belt of the project area in Bangladesh, which was prone to recurrent cyclones and floods that were increasing in frequency and intensity, causing significant damage and disruption to livelihoods.
170. **Diversified livelihoods and agricultural systems.** The LLRP in Ethiopia targeted the dry lowland regions of Afar, Somali, Oromia, SNNP, Gambella, and Benishangul-Gumuz that faced more frequent and intense droughts. The project supported livelihood diversification and small-scale irrigation to pivot the rural poor away from rainfed agricultural systems. In Madagascar, the development of complementary systems of rainfed agriculture on the Tanety and flood and recession agriculture in the floodplains (when seasonal flooding allowed) effectively diversified household activities in the targeted areas. It ensured that each user adopted two cropping systems to promote climate resilience. Positive resilience results were observed at both household and community levels. In Sudan, the LMRP diversified livelihoods to improve climate resilience by contributing to a range of income-generating activities (including the fattening process, saving and lending, agriculture, forestry, rangeland, alternative energy and water service provision) by strengthening capacities in these areas.

171. **Improved capacities to manage climate risks by enhancing disaster risk reduction and management.**<sup>117</sup> One of the common situations related to the slow onset of climate threats was increasing water scarcity. This is a significant issue in the LAC region and the Sahel. The most successful disaster risk reduction and management (DRRM) practices and technologies supported by IFAD were the interventions that related to water mobilization and management. Small-scale irrigation interventions and water harvesting in Ethiopia, Madagascar and Niger were most effective in building adaptive capacities. For instance, the irrigation schemes of PASIDP II in Ethiopia,<sup>118</sup> were effective in providing sustainable irrigation water management and increased crop yields.
172. DRRM practices are community-based and demand from communities and the local government are key to success. The ACCESOS-ASAP project addressed the issue of water scarcity in the Plurinational State of Bolivia. The Government of Bolivia enacted several laws and regulations that tied budget allocation to municipal-level interventions to identify and propose solutions to manage various risks, including climate. IFAD's response included supporting 16 municipalities with tools and methods to map climate vulnerabilities and strengthening their capacities to use these tools. These maps helped identify and prioritize mitigating actions to address climate threats. Once it overcame the initial issues in fully integrating the ASAP element into all project components, the project became responsive to community demands and took into account in a serious way the local agroecological conditions. This was due to the participatory, community-based approach that was inclusive of indigenous peoples and enabled local knowledge to be integrated with scientific information on climate change.
173. This approach was used to develop vulnerability 'talking' maps.<sup>119</sup> Based on these, the communities and municipalities were able to successfully submit funding proposals to the Government for projects that addressed their climate priorities.<sup>120</sup> The project was successful in expanding the climate knowledge base of communities to gain new experiences, and learn about new technologies to build climate resilience.
174. This experience and its tools were replicated within the municipalities involved in the project and subsequently adopted by other municipalities. The climate expertise needed was acquired through partnerships with HELVETAS, an international NGO. The project achieved the level of youth participation it had targeted, however, women participation and their representation within communities remained weak. Notwithstanding this limitation, disaster risk reduction capacity-building for community adaptation achieved 123 per cent of the targeted outreach.
175. The community-based DRRM efforts in the PCDP-III project in Ethiopia were less successful due to the ad hoc manner in which community-based disaster risk management was introduced.
176. IFAD is investing in hazard insurance to help vulnerable smallholder farmers to cope with climate-related shocks and stresses when their assets and livelihoods are threatened. Even though this was tried in a few case studies (for example, PASSIP II in Ethiopia collaborated with the Micro Insurance Centre to pilot the agricultural insurance, PRECIS in Niger), evidence of their effectiveness is yet to materialize.

117 Disaster risk management involves identifying, reducing and transferring risks. Disaster risk reduction is about minimizing the exposure and sensitivity to hazards, which involves additional actions such as developing early warning systems, contingency planning, and training responsible people.

118 PASIDP II supported 61,625 households to increase their incomes by constructing 116 irrigation schemes in 82 woredas and 120 kebeles in drought-prone areas, covering a total irrigable land area of 13,808 hectares. To ensure the schemes' sustainable operation, 175 Water Users' Associations (WUAs) were established and supported by the project.

119 Talking maps' is a participatory mapping methodology that depicts layers of information documenting past, present and future scenarios that reflect the most important aspects of the local territory.

120 ACCESOS-ASAP produced 55 talking maps, and resulted in 4231 families increasing their natural and physical assets to manage climate risks.

177. **Degraded environment restored, integrated watershed management and sustainable land management introduced.** Restoration of already degraded land in integrated watershed management remains a critically important pathway to achieve climate-resilient food security. Restoration of degraded land is a measure of soil and water conservation and a pathway to replenish the land's potential to provide a wider range of ecosystem goods. A focus on sustainable land management and restoration of the land base is the central tenet of a better and sustainable future, where poverty is reduced, food and water are secured, biodiversity is safeguarded, and sustainable livelihoods are promoted (UNCCD, 2017).<sup>121</sup>

178. Case studies showed examples where climate responses addressed environmental fragility through taking relevant actions, such as the developing micro-watersheds, assisted natural regeneration, and the rehabilitation of rangelands. Each micro-watershed interfaced with wider landscapes. However, these interventions were not included in the master plans for integrated watershed management. In Ethiopia, CBINReMP focused on the rehabilitation of degraded land and natural resources in the Lake Tana watershed based on the assumption that this would address the challenges of food insecurity, declining soil fertility due to soil erosion and loss of vegetation cover, and vulnerability to the impacts of climate change and climate variability.<sup>122</sup>

179. Kenya's UTaNRMP project constitutes another successful example of an integrated approach which managed the Upper Tana catchment area of the country. The project rehabilitated 28 river basins with support from community forest associations (CFAs) to sustainably manage forest resources, and supported the development of 61 sub-catchment management plans; it rehabilitated 77 water resources to provide clean water for 94,550 households and 75,000 school children, and brought 1,576 ha under irrigation benefiting 39,400 farmers; it introduced energy-saving cook stoves and biogas allowing a 50 to 60 per cent reduction in fuelwood costs; and a solar-powered wildlife control fence reduced human-wildlife conflicts by 97 per cent and deaths and injuries by 99 per cent.

<sup>121</sup> Global Mechanism of the UNCCD and CBD, 2019.

<sup>122</sup> CBINReMP in Ethiopia supported community-driven participatory planning and the implementation of 650 micro-watershed plans, treating 227,500 ha of land as per the target. A total of 104 million fruit and forest seedlings were produced and 17,600 ha of tree plantations on degraded communal lands were established.

## Key points

- IFAD is achieving or showing demonstrable progress towards resilience outcomes in its operations, but corporate-level indicators are not yet equipped to capture and quantify this progress.
- Disseminating climate resilient agro-technology is important, but success depends on a host of other factors, including strengthening social, economic, socio-technical and human capital, managing climate risks and diversifying agricultural systems and livelihood options.
- Integrated approaches offer an effective means to address not only environmental sustainability, but also CCA and the economic needs of smallholders.

## B. Performance of scaling up and non-lending activities

180. As the ARRI 2016 noted, non-lending activities are mutually reinforcing actions to complement IFAD's investment projects (lending activities). They are increasingly recognized as essential instruments in promoting transformation at the country level and in scaling up the impact of IFAD operations for deeper results in rural poverty reduction. Non-lending activities such as establishing and strengthening partnerships for better results, KM, capacity development and policy dialogue also contribute to scaling up of IFAD-supported results and interventions. The main purpose of non-lending activities is to leverage project results to influence subnational and national-level decision-making for the benefit of smallholder agriculture. In this report, we focus on mutually reinforcing activities to scale up and promote KM.<sup>123</sup>

### Scaling up climate responses

181. IFAD recognized that scaling up the results of successful development is at the heart of what it does and defines it as "expanding, adapting and supporting successful policies, programmes and knowledge so that they can leverage resources and partners to deliver larger results for a greater number of rural poor in a sustainable way".<sup>124</sup> IFAD guidance also explicitly states that scaling up does not simply mean replicating or transforming small projects into larger projects, but rather how its interventions should focus on how successful local initiatives could leverage changes in policy, and secure additional resources to bring results to scale.<sup>125</sup>

182. **The degree of success in scaling up climate responses from the individual project level to deliver tangible national impact was generally low.** While there are examples of success from the case studies on how scaling up can be effectively incorporated into design and implementation as discussed below (and in annex V, table 2), for the majority of cases, the ambition or potential for scaling up has not been realized. As noted in chapter 2, nearly half of the climate response designs did not include the intent or pathways to scale up.

183. **The country case studies highlighted that there was no one approach to scaling up that works for all climate threat and project contexts.** Annex V, table A2 shows the different ways in which scaling up is likely to occur. Of the 35 projects in the 20 case studies, nine were scaled up or showed strong likelihood of scaling up (23 per cent). This could be interpreted as promising or problematic, depending on the standards that the organization sets itself. In either case, the evidence points to room for major improvement. Possible factors contributing to successful scaling up are described below.

184. **Success in scaling up depended to a large extent on the ownership of the government, strength of strategic and high-profile partnerships, and engagement from the outset by design.** Two examples illustrate this – ACCESOS-ASAP in the Plurinational State of Bolivia and CCRIP in Bangladesh, and in both local government ownership and partnerships were key to scaling up.

185. The Plurinational State of Bolivia's ACCESOS-ASAP showed that success can be achieved at a different level when scaling up nationally was not politically or operationally viewed as a priority by the government. ACCESOS found success at the municipal level when facing limited traction with the national government. Working with 16 Municipal Councils, the project pursued a community-based approach to strengthen their capacities to manage climate risks. The tools and methods for assessing vulnerabilities, such as talking maps, were taken up by other municipalities and communities (see annex V, table 2 for details).

186. The case of CCRIP is summarized below in box 2.

<sup>123</sup> IOE, 2016.

<sup>124</sup> <https://www.ifad.org/en/scaling-up-results>

<sup>125</sup> Ibid.

## Example of climate response with strong potential for scaling up: the Climate-Resilient Coastal Infrastructure Project (CCRIP) in Bangladesh

The Government of Bangladesh, along with IFAD, ADB, the German Credit Institution for Reconstruction (KfW) and the Strategic Climate Fund, invested \$150 million to build climate-resilient infrastructure along the south-west coast of the country. IFAD's component was \$60 million and the Government contributed US\$31.2 million. The Local Government Engineering Department (LGED), the government agency in charge of rural engineering and infrastructure, was the implementing partner.

The project was among the first to address climate threats in the design of infrastructure and was located in the south-western coastal belt of Bangladesh, an area increasingly prone to frequent and severe cyclones and floods causing significant damage and disruption to livelihoods. CCRIP constructed 462.3 km of roads and 184 markets. After the project was completed, the area experienced Cyclone Amphan and subsequent flooding in May 2020. The CCRIP-supported infrastructure faced minimal damage and continued functioning with minimal disruption to the flow of goods and services to the rural markets and localities.

The Performance Evaluation of the project noted that the first climate-resilient infrastructure constructed by LGED for CCRIP had also demonstrated resilience to extreme weather events and, therefore, the project was expected to provide the basis for the national technical standards for coastal rural roads and markets infrastructure that LGED was in the process of developing.

A number of factors contributed to the scaling of this climate-resilient design being used to inform national standards for infrastructure construction:

- Strong government ownership and the institutional strength of local government.
- A long-standing partnership with an influential government unit, LGED.
- High visibility and scale through a co-financing partnership with major players (ADB and KfW) enabling better uptake and mainstreaming of lessons from the project.

**Source:** Project performance evaluation of the Coastal Climate Resilient Infrastructure Project in Bangladesh and IOE.

187. **Level of coordination and shared ownership of adaptation priorities by all ministries were important for successful scaling up.** IFAD usually works with ministries of agriculture and finance, while adaptation measures may involve other ministries such as environment or transportation. In some cases, the ministries of agriculture and environment worked well together. In fact, in the Republic of Moldova, the ministries were combined into one following the recent reforms. However, this was not always the norm.

188. **Both KM and scaling up were inadequately mainstreamed in project conceptualization, design and implementation phases.** Labelling these as 'non-lending' also implies their importance or relevance is not mission-critical to project success. IFAD was more focused and driven by project-level activities and missed opportunities to weigh in scaling up opportunities to benefit the smallholders and to establish new partnerships needed to support effective scaling up activities outside their project boundaries. In this regard, mapping knowledge gaps and identifying partnerships for knowledge transfer which are necessary for scaling up, were found to be real gaps in many of its operations.

189. Analysis and considerations of the institutional options to support scaling up were also not adequately considered in the project designs, according to the Brooking study (2013).<sup>126</sup> These factors continue to be relevant.

<sup>126</sup> Brooking's assessment in 2013 was a two-phase study that assessed the extent to which IFAD identified relevant scaling up pathways as the drivers and spaces in eight countries and how it developed an operational approach to assure integration of scaling up into its project implementation processes. Case studies show that scaling up approaches were not explicitly incorporated into the COSOP strategies of some countries. Hence, there was not a systematic application of the principles and practice of scaling up.



190. **At the project level, weak capacities, lack of incentives and scarce resources further contribute to limited attention to scaling up.** It was apparent that staff within country projects did not fully understand the concept of scaling up and the different modes or dimensions it could take. They also lacked the resources and support to ensure scaling up became an essential output of their projects. Many projects still tend to focus too much on project management and delivery, and it was difficult to see where innovation, KM and scaling up were being given sufficient attention. In fact, monitoring and evaluation of operations as well as other implementation arrangements lack attention to scaling up efforts and the knowledge generation to support scaling up activities. Case studies pointed to the need for stronger incentives and support to country teams to maintain a focus and priority to develop scaling up pathways and promote the importance of institutional links to enable effective scaling up in the long term, especially post-project.
191. **Good progress was usually accompanied by IFAD supporting scaling up via engagement with national and local stakeholders and external partners (e.g. Bangladesh, Nepal) and proactively engaging in policy dialogue.** For example, in addition to the examples of Bangladesh and the Plurinational State of Bolivia provided above:
- a. Mali (Fostering Agricultural Productivity Project PAPAM (2010-2018): Following a political crisis at the very beginning of the project and weak coordination between government and partners, the well-designed potential to scale up was largely reduced. The ASAP component, that was added later, facilitated a partnership with the Agence de l'Environnement et du Développement Durable and directly contributed to the formulation of the National Strategy of Sustainable Development. The project also successfully advocated for the integration of the Communal Climate Change Adaptation Planning (PCA), a community-based large landscape approach, in the design and implementation of agricultural projects in the Sikasso Region.
  - b. Nepal (ASHA [2014-2022]) promoted important new practices through stakeholder consultations, in donor forums and by engaging with different ministries through existing platforms and committees, contributing to the practices being mainstreamed into Nepal's Local Adaptation Plans for Action Guidelines 2019.
  - c. In Nicaragua, NICADAPTA enhanced the government's technical and political commitment to environmental and climate issues by strengthening the national system for production, consumption and trade of coffee and cocoa, which are key elements of the national development strategy.
  - d. Rwanda's (Climate Resilient Post-Harvest and Agribusiness Support Project PASP 2014-2020) promotion of local farmer field schools' approaches in livestock is now being extrapolated from the livestock sector into the crop sector and into other livestock-related activities by the Government of Rwanda. IFAD's involvement was effective at the country level but missed opportunities in driving international scaling up initiatives such as Participatory Integrated Climate Services for Agriculture (PICSA). IFAD is not viewed as a key player for scaling up but more viewed as a deliverer of 'on the ground' projects.

#### Knowledge management and CCA response

192. IFAD defines KM as a set of processes, tools and behaviours that connect and motivate people to generate, use and share good practice, learning and expertise to improve IFAD's efficiency, credibility and development effectiveness.<sup>127</sup> This evaluation conducted a learning theme study on KM related to CCA response in IFAD. This study used the case studies and the REA conducted by this evaluation to generate lessons learned. These are discussed below and further elaboration of key findings from all case studies is presented in annex V, table 6.

<sup>127</sup> IFAD, 2019c.

193. **The case studies noted that considerable CCA knowledge was generated by projects.** Knowledge generated by projects enables smallholders to include more sustainable and forward-looking considerations in their plans when linked to their local knowledge, instead of considering only short-term solutions. This was supported by findings from the REA (2021) conducted by this evaluation. Its findings showed that learning platforms based on social inclusion and participatory action research that brought together different actors were likely to be effective in supporting adaptation strategies.<sup>128</sup> The farmer field schools (e.g. in Madagascar and the Republic of Moldova) were such a learning platform that integrated adaptation at different levels and scales. Its effectiveness and relevance were linked to the degree of farmer participation in assessing the needs of the community and designing training modules.
194. **Most case study examples of good KM practices were found at the local level, often associated with community-based approaches** (e.g. the Plurinational State of Bolivia). Only a few good examples of knowledge exchange at the national (e.g. Bangladesh) or international level were identified. The latter were often either South-South exchanges or emerged through informal exchanges, when project coordinators or consultants were involved in projects in more than one country. KM was often pursued through ad hoc interventions at the project level (13 of the 20 case studies), which reduced its strategic relevance to overall country-level interventions and to IFAD's corporate level. KM products were primarily targeted towards front-line beneficiaries and working-level counterparts and did not feed into the non-lending activities to reach decision-makers. As noted, examples of partnerships for KM exist. The examples in Brazil (the SSTC/KM centre), Burundi and Kyrgyzstan were discussed in earlier paragraphs. However, these were mostly limited to project-level KM activities and, in most cases, KM partnerships were limited to project-specific purposes and did not extend beyond the project level.
195. **Some projects with strong partnerships with universities saw their practices being embedded in scientific research and curricula.** In Kyrgyzstan, IFAD worked with the National Agrarian University to develop a pasture manual and a curriculum for teaching future pasture managers. The LMDP II project also worked with the Mountain Societies Research Institute and the University of Central Asia (UCA) to develop a curriculum component on community-based pasture management. The curriculum offered the opportunity to educate future resource managers about the findings of the project.<sup>129</sup>
196. The case study of Burundi flagged the issue that such partnerships with academic institutions would also require considerable time investment and continuity to allow knowledge products to be developed. There were a few good examples of emerging KM partnerships with regional institutions (e.g. ICA) as well as on cross-country collaborations (e.g. Brazil-Mexico). In Mali, there was an international collaboration with Rwanda and Burkina Faso to promote household biodigesters.
197. The SSTC/KM centre in Brazil pushed for a broader KM agenda within LAC and notable cross-country opportunities were identified (e.g. support to an IFAD project in Rwanda with financial support from the African Banking Corporation (ABC)). These new examples showed that KM could be driven by demand when the right frameworks and incentive structures were provided.
198. **The launch of IFAD's Knowledge Management Strategy (2019-2025) increased the attention given to KM in recent projects** (e.g. Belize and, in particular, Brazil) where KM aimed to serve more strategically as an input for scaling up strategies and policy engagement and included closer collaboration or partnerships with universities or research institutes.

<sup>128</sup> IOE, 2021, Building adaptive capacity of smallholders to climate variability and change: key findings from a rapid evidence assessment (REA) Final Technical Report 06 April 2021.

<sup>129</sup> According to the Kyrgyzstan case study, the curriculum was completed in 2019. Due to the COVID-19 outbreak, KNAU was closed during the period when the evaluation was collecting evidence. Hence, no information was available on the quality or use of this curriculum.

199. **Yet, the supporting structure and functions offered by IFAD headquarters for KM and scaling up were found to be insufficient. Incentives, guidance and support to country teams fell short of ensuring a focus on prioritizing KM in COSOPs as well as in the design and implementation of projects. KM continued to be considered mainly as a measure to comply with, and was often activated only after recommendations from MTRs and supervision missions. ARRI 2020 also observed a declining KM performance rating post-2015 (after being at a stable level in the period 2010-2015).<sup>130</sup> Even though recent COSOPs made more explicit reference to KM and SSTC, the focus continued to be mainly on the investment portfolio with less strategic attention given to the role of non-lending activities. The linkages between lending and non-lending activities needed to be further strengthened for KM to play the important role envisaged in IFAD's Knowledge Management Strategy for the period 2019-2025.<sup>131</sup>**

### Partnerships for CCA results

200. The case studies show examples of effective partnerships for scaling up, managing knowledge and achieving results. However, in general, partnerships for results were not identified and pursued based on a clear strategy.

201. **Partnerships for scaling up were not systematically forged.** As noted earlier, partnerships were critical to success in scaling up. Bangladesh (see box 2) provided a good example of a long-standing partnership with LGED that was one of the key factors of its success. The case study also pointed to the important role played by the cofinancing partnership with ADB and KfW in providing scale and visibility for the project. Most of the case studies did not observe such good examples of systematic engagement by IFAD with key national stakeholders and international development partners to promote higher-level impacts and scaling up. Instead, partnerships were established for one-off activities and for implementation, consultation or coordination roles.

202. **The following three case studies indicated that IFAD had weak engagement with the Ministry of Environment and other public entities relevant to scaling CCA at the national level.** The AD2M project in Madagascar generated experiences that could inform development strategies to scale up CCA practices. The findings were relevant to the Ministries of Agriculture, Livestock and Fisheries as well as the Ministry of Environment, Ecology and Forests (MEEF). Yet IFAD's engagement with the MEEF was relatively weak and IFAD missed an opportunity to scale up. Similarly, the case study noted the weak linkages of PASP to the Rwanda Environmental Management Authority (REMA), with which IFAD was expected to partner to address climate risks. In Chad, PARSAT appeared to have minimal interaction with the Ministry of Environment, resulting in the project inadvertently setting up activities in internationally-recognized protected areas (for example, the Ramsar site of Lake Fitri, and the National Park of Zakouma).

203. Where IFAD had to work at the local government level, the effectiveness of partnerships was varied. As noted, ACCESOS in the Plurinational State of Bolivia developed effective partnerships with municipalities and communities. Similarly, the ASHA project in Nepal forged partnerships with local governments to develop local adaptation plans and integrated them in local development planning. However, AD2M in Madagascar did not have strong partnerships with the decentralized authorities in Menabe and Melaky to co-manage a CCA response.

204. **Partnerships for CCA technical support. Partnerships with national and international organizations helped IFAD mobilize scientific knowledge for IFAD projects and acquire necessary technical capacities.** Such mobilization depended on the availability of long-standing partnerships and the presence of technically capable partners in the country. Key examples and experiences of such partnerships are presented below.

<sup>130</sup> IFAD, 2020c.

<sup>131</sup> IFAD, 2019c.

205. In Nepal, the International Center for Integrated Mountain Development (ICIMOD) provided technical support to ASHA to undertake GIS analysis and sub-watershed assessments. The sub-watershed assessment became the main fulcrum of the preparation of local adaptation action plans. In Ethiopia, PASIDP II was particularly effective in mobilizing partnerships to bring in technical support, such as the collaboration with the World Agroforestry Centre (ICRAF) to promote tree and fruit crops, with the International Crop Research Institute for Semi-Arid Tropics to develop the germplasm for climate resilient varieties of crops, and with the International Water Management Institute to use germplasm in water harvesting schemes. In Niger, the collaboration with the International Crop Research Institute made it possible to demonstrate the effects and impacts of 55 new plant varieties during 2014-2016. In Belize, regional centres of expertise were important knowledge sources (e.g. the Caribbean Meteorological Office and the Centro Agronómico Tropical de Investigación y Enseñanza (CATIE)). In Nicaragua, NICADAPTA facilitated collaboration among different actors, including government institutions, in providing public services to coffee and cocoa producer organizations that resulted in new and sustained working relationships.
206. However, IFAD in Niger missed the opportunity to capitalize the partnership with this institution and introduce innovations. PRODEFI II in Burundi partnered with the Institute of Agricultural Sciences of Burundi (ISABU) but misjudged the time required to conduct a scientific analysis of climate change and response and failed to gain traction from the partnership of seven months.
207. Partnerships were established with the private sector to facilitate market access or acquire technical capacities in some countries. An example is NICADAPTA in Nicaragua, which linked coffee and cocoa cooperatives with the private sector and provided access to the coffee and cocoa markets through certifying farms and their produce (for instance, only 10 per cent of the dry cocoa produced went to the local market while 90 per cent went to Ritter Sport, for export).
208. As with scaling up and KM, partnerships were not treated as a core part of a strategy that mapped needs, identified the possible partnerships and developed a plan to establish partnerships with clear idea of the eventual outcomes sought. To do so, as in the case of other non-lending activities, financial resources and capacity would be needed to implement partnership strategies along with incentives and mechanisms to hold staff accountable for results.

## Overview of non-lending performance

209. Typical IFAD interventions serve a fraction of the total rural poor in a country. As such, while adding value, the impact at a project level is not at a sufficient scale to exert system-wide influence – which is a necessary characteristic of transformative change as elaborated in chapter 1. **As such, IFAD’s aspirations for a transformative country programme are highly unlikely if impact remains only at the project level.**
210. Besides, as noted by IFAD12 and the Rural Resilience Programme (2RP), there is an urgent need to act swiftly to prevent irreversible and cataclysmic climate consequences before the window of opportunity closes. This need calls for climate interventions that are more than effective and contribute significantly to addressing the climate challenges.
211. Case study examples (see annex V, table 2) point to interventions that could be potentially scaled up to have influence at the national or subnational scale. These successes are linked to the ability to generate a robust knowledge base and establish strategic partnerships, among other things. In short, non-lending activities are the primary vehicle for IFAD to reach beyond project level and contribute to significant system-wide changes to address the climate challenges. **Yet the case studies point to the fact that non-lending activities lacked the guidance, capacities, resources and prioritization needed to become effective.**
212. **Interviews with headquarter staff showed that there was clear recognition of the deficits in performance related to non-lending activities.** These were highlighted in several evaluations and the ARRIIs produced by IOE. At the same time, mechanisms to fund these activities were highly limited for systematic action to be taken to address this gap. IFAD regular grants were potential sources for some projects. However, the short duration of the grants (a maximum of three years, while the project life is typically six years) and the limited supply of grants, which is reduced and capped under the forthcoming grant policy (2022), leaves few options for project management units and IFAD Management.

213. **IFAD12 and 2RP offer a programmatic approach to address this challenge.** 2RP includes a Technical Assistance Fund, sourced from the Trust Fund set up for the programme (up to 10 per cent of the pooled funds). This assistance could be used to strengthen KM and other non-lending activities. This is clearly a step in the right direction. However, challenges remain. First, funds are yet to be mobilized for the 2RP and as such, the future remains unclear. Second, 2RP components (the Great Green Wall Project, the 3S project, and ASAP+) are geographically focused in Africa. Though ASAP+ is global, it is restricted to low-income countries. Consequently, not all climate responses in other regions are in a position to benefit from this programming approach and funds to support non-lending activities.

214. **Integrating non-lending activities into project components.** Recent projects have begun to recognize the importance of KM and scaling up for achieving impact and have included KM and scaling up as one of the project components. LLRP in Ethiopia and PCRP in Brazil (see annex V, box 1) are two such examples where KM and scaling up are included as one of the project components, with dedicated resources to support them.

### Key points

- Case studies showed successful examples of non-lending activities enabling CCA outcomes and impact through scaling up, knowledge management and partnerships.
- However, the supporting structure and functions offered by IFAD headquarters to support non-lending activities were insufficient. Incentives, guidance and support to country teams fell short of ensuring the prioritization of these activities.
- Non-lending activities were pursued in an ad hoc manner without the benefit of clear strategy, results-orientation, oversight or monitoring systems to track progress.
- The limitations of non-lending performance were widely recognized within IFAD, yet significant challenges persist in identifying suitable mechanisms to systematically address the resource gaps.



## C. Impact of CCA operations in case studies

215. According to international evaluation criteria, “impact addresses the ultimate significance and potentially transformative effects of the intervention.”<sup>132</sup> As such, the impact effects were analysed along the dimensions of changes characterizing transformational change identified in chapter 1, in addition to the effects on the incomes of smallholder households. Hence, impact will be analysed in terms of the ability of the CCA results to: i) achieve long-term sustainability – the ability to restore degraded natural systems or the environment (nexus); ii) be paradigm-shifting; iii) lead to systemic (multi-sectoral) changes; iv) be scaled to system or sectoral level; v) have enduring benefits; and, vi) improve the economic security of smallholder farmers.
216. As such, the impact analysis included the effects of the lending and non-lending activities of IFAD. Given that the first batch of IFAD’s climate response interventions were completed in 2019, it may not be realistic to expect impact effects. Hence, the analysis assesses the progress of changes and thereby their potential to achieve impact.

### Impact on environment: the environmental sustainability of CCA responses – the nexus of human systems and natural systems interactions<sup>133</sup>

217. **The nexus approach provides a comprehensive ecosystem-wide analysis of sustainability of CCA responses.** It recognizes that the overall impact of CCA responses can be sustainable in the long term, provided they strengthen the resilience of both human and natural systems. The subsequent discussion recognizes that it may not be feasible to identify sustainable solutions in all contexts, and even when such solution is identified, government buy-in may not follow automatically. The evaluation is premised on the assumption that IFAD will pursue sustainable solutions to the fullest extent possible, and endeavour to persuade governments, if necessary, of the need to include such climate response.

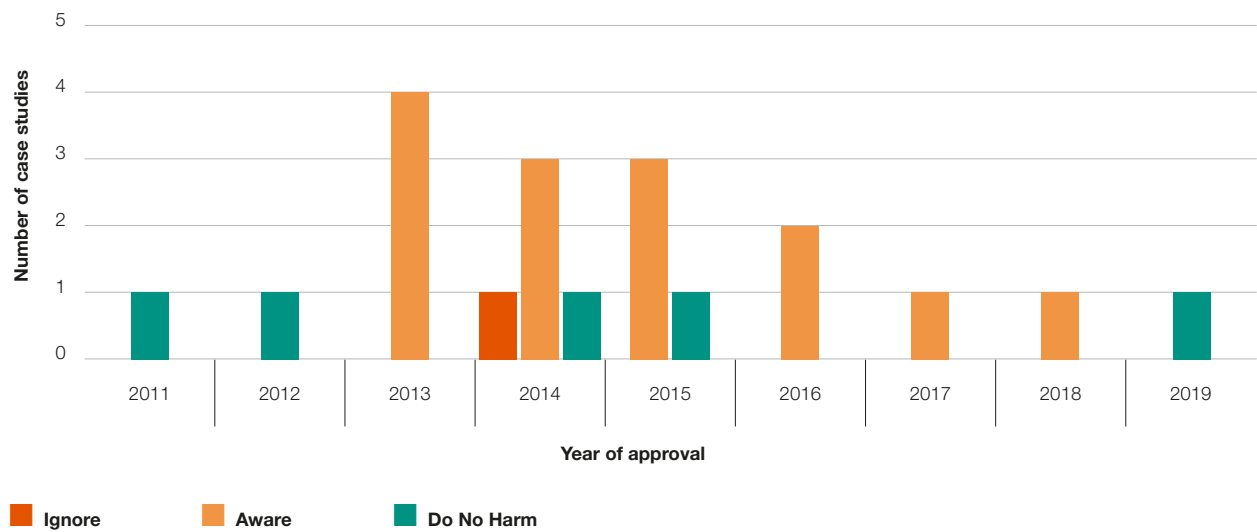
218. IFAD guidance on climate and environment provided by the 2015 SECAP and its updated version in 2017, called for looking beyond do-no-harm towards doing good to the environment. As such, the guidance requires that environmental conditions should be no worse following IFAD interventions and they should actively seek to leave the environment better off by providing restorative contributions wherever feasible.
219. Assessing interactions among human and natural systems involves inherent ambiguity and uncertainty. This complexity is amplified given the likelihood that during implementation, projects may deviate from their intended design. For completed projects, nexus analysis could be evidence-based, subject to the availability of relevant data. However, the assessment of ongoing projects, particularly those recently implemented, will have to assume that project will be implemented as designed. The Kyrgyzstan case study discussed below illustrates how changes to the design during implementation reduced the assessment from a likely do-no-harm to being assessed as aware. In all other case studies, changes during implementation did not alter the nexus ratings based on design. It is also important to recognize that projects dated prior to the SECAP guidance should not be held accountable to the SECAP guidance. However, there is no systematic shift towards do-no-harm subsequent to SECAP, indeed most of the do-no-harm projects predated SECAP in 2015 (see figure 13 below).

132 OECD-DAC Evaluation Criteria. Accordingly, the term impact is not used in the sense of results that are attributable to IFAD. It refers to the extent to which the intervention has generated or expected to generate significant positive or negative, intended or unintended, higher level effects.

133 The age distribution of portfolio of case studies is pertinent here. The 20 country case studies analysed involved 35 projects with few country cases involving more than one project. Nearly half (17) involved ASAP funding; 15 (43 per cent) were approved after SECAP was introduced in 2015; 10 (29 per cent) were completed and the remaining 25 (71 per cent) are ongoing.

FIGURE 13

Stance towards the environment 2011-2019



Source: IOE elaboration.

220. Do-no-harm refers to the likelihood of not causing harm. Conversely, when the do-no-harm measure fails, it does not always mean that harm has actually occurred, but it has increased the likelihood of a harmful outcome. In a given context, activity is assessed for the likelihood of harming the environment in the longer term. For instance, if the climate response involves an increased use of fossil fuels or chemical pesticides or drawing down water from a closed aquifer without any offsets<sup>134</sup> planned, the harm may not be immediate but very likely. Annex V, table 4 provides the type of net harm to natural systems that could result from a climate activity.

221. The nexus learning study applied a typology<sup>135</sup> to indicate the stance of interventions with respect to the natural system. Four stances represent the evolution of how interventions regard the natural system. The first, where the natural system was ignored, was described in evaluations by UNDP.<sup>136</sup> The second level in the typology is where interventions are aware of connections to the natural system and their importance, but projects prioritize development gains over environmental effects. IFAD's SECAP guidance seeks interventions that achieve development gains without impairing the natural system – a do-no-harm stance, the third level in the typology. The 2015 SECAP also recognizes that restorative actions are required for environmental sustainability and to reach 2030 and 2050 goals, which move toward the fourth level in the typology – restoration. The case studies developed for this evaluation were reviewed by the nexus study author and case study authors to categorize the stance of projects with respect to the typology. Interventions taking the now-dated stances of ignoring or being aware of the nexus of human and natural systems but taking no action cause harm to the environment. Table 10 illustrates the ratings and their rationale.

<sup>134</sup> Activities that could compensate partially or fully the damage done to the natural systems, for instance, replacing the water drawn from the aquifer.

<sup>135</sup> See Rowe (forthcoming) *Evaluation at the Endgame: Evaluating sustainability and the SDGs by moving past dominion and institutional capture* in J. Uitto (forthcoming) *Transformational Change for People and the Planet: Evaluating Environment and Development*, Springer.

<sup>136</sup> UNDP, 2010 GEF IEO, 2006.

222. Agriculture is frequently harmful to the environment, despite many important improvements over the past several decades. Offsetting efforts will often be necessary to counter the harmful environmental effects of agriculture, for example planting and maintaining buffers to limit nutrient migration into waterways or efforts to improve the capture and retention of rainfall to offset draws and replenish aquifers, even when drip irrigation is used. Recent developments emphasize the importance of scale differences between the farm and the local ecosystem on which it rests, and the mutually influencing connections and contingencies with landscapes and ecosystems. The importance of integrated approaches is also emphasized, for example, in agroforestry and integrated pest and watershed management.<sup>137</sup> The assessments of the stance of the climate responses in case studies is a judgment made by the nexus study and case study authors,

based on the detailed reviews of each case. The assessments indicate overall what difference the project has made to the environment and were applied systematically using the professional expertise of the study team and using all the sources involved in the case studies to answer the question. Assessing the effects of human system interventions on the environment is relatively rare in evaluation.<sup>138</sup> The assessments were conducted without the benefit of information about the environmental effects of IFAD projects since these were not conducted for any of the projects in the 20 case studies. In addition, some projects were relatively recent, while others were well advanced or completed. Finally, the case studies were not selected to provide an estimate of the overall stance of the IFAD projects relative to the environment. These are important considerations in reading the assessment but do not diminish the strength of the observations provided.

137 Refer to the Rapid Evidence Assessment Report (REA).

138 Refer to UNEG assessment.

TABLE 10

Illustration of nexus typology assessment

Nexus typology	Country	Project(s)	Description
Aware (Project acted to reduce the negative impact on natural systems, but ended up doing net harm.)	Chad	Project to Improve the Resilience of Agricultural Systems in Chad (PARSAT)	<p>The project design was to improve access and sustainable management of water resources and access to input and produce markets in value chains where rural poor people have a comparative advantage. Water capture and agricultural water management improved, for example, by building relevant structures on the level of rainfed cropping areas (e.g. stone bunds, zaï, herbal ridges), vegetable gardens (wells or boreholes), and periodically flooded areas used for recession crops (<i>seuils d'épandage</i>).</p> <p>Some actions were classed as "respecting ecosystem integrity and restoration", "respecting integrity" or "enhanced natural resource management". However, actual ecosystem actions such as water capture and intensified cropping were not in fact restorative.</p> <p>Some implementation challenges did not favour the natural system. For instance, opening more remote production areas is potentially harmful; the project was operating on globally valued hotspots of biodiversity such as the Ramsar site of Lake Fitri and the National Park of Zakouma (Lake Fitri starting to be addressed in 2019).</p> <p>Improved agricultural management, tree planting (especially planting five community forests) and environmental education will be beneficial. Overall the project seems to move, albeit slowly, in the right direction on environmental concerns.</p>
Do-no-harm	Kenya	(UTaNRMP) 2012-2020, Cereal Enhancement Project – Climate Resilient Agricultural Livelihoods Programme	<p>Project addressed the nexus between rural poverty and ecosystem health in a densely-populated and environmentally fragile water catchment area of critical national and global significance. It emphasizes biodiversity conservation and ecosystem services and building absorptive, adaptive, and transformative capacities.</p> <p>It used participatory natural resource management and biodiversity conservation strategies by mainstreaming ecosystem services in farming and land management practices, in particular water security and nature conservation.</p> <p>The project employed integrated participatory natural resources management to enhance smallholder farmers' CCA while proactively contributing to nature conservation objectives.</p> <p>To mainstream ecosystem services, the project design included mobilizing a wide range of technologies and land management practices to ensure that farming and land management practices contribute to ecosystems resilience. The aim is to address local communities' water needs through water harvesting and storage ('blue' water), crop production requirements ('green' water) through soil and water conservation activities and agroforestry, and activities to recharge the aquifers.</p> <p>UTaNRMP was effective in enhancing the capacity of community-based organizations to integrate CCA options and ecosystem services in human-dominated areas and conservation landscapes of the River Tana Basin.</p>

Source: IOE elaboration.

223. **This review shows an important subset of IFAD CCA responses in the case studies were not likely to do net harm to the environment and do good for smallholders and ecosystems at landscape scales.** The six projects (30 per cent) reaching or exceeding do-no-harm stances provide solid evidence that development goals can be achieved without harming the environment, and since most are pursuing long-term sustainability through restorative actions, they also show that sustainable development can contribute to achieving the 2030 and 2050 goals. An additional five projects approach but are unlikely to quite achieve do-no-harm levels. It is also interesting to note that of the five case study countries with climate responses that do-no-harm, four were designed before the introduction of SECAP in 2015.<sup>139</sup> That an important portion of the case studies in this evaluation is reaching or exceeding do-no-harm levels and others are close to doing so, is an impressive level of achievement given the social, cultural, economic and technical challenges of changing production processes and practices in a sector so directly connected to livelihoods, especially those of poor smallholders. The definitions and nexus typology are provided and discussed in annex V, tables 3 and 4.
224. Nine projects were assessed as taking an aware stance, short of do-no-harm, but judged as being reasonably close to it. Kyrgyzstan is one which, if it had been implemented with greater fidelity to design, would have been assessed as taking a do-no-harm stance. Its focus was on pasture infrastructure improvement and the rehabilitation activities definitely improved the accessibility of remote mountain pastures, which in some cases had not been used since the Soviet era. As a result, more livestock was being sent to high pasture areas, which was planned to reduce the grazing pressure on pastures closer to the villages. However, what has been observed instead is that livestock owners are not actually reducing their herd size – but rather enlarging it and sending additional livestock to the high pastures. This appears to be a risk management effort to reduce the impact of losing even a small number of animals in a small herd. The new pastures are also said to be prone to incursions from urban investors with roots in the remote mountain areas investing in the livestock sector and hiring local herders to take their livestock to these remote areas. Groundwater pumping is also occurring without controls to ensure the sustainability of draws, especially as climatic effects reduce replenishment from glacier-fed mountain rivers and shifting seasons of glacial runoff.
225. The six projects achieving or exceeding do-no-harm levels, together with the additional six projects judged as closer but falling short of do-no-harm, represent over half of the interventions in the country case studies. This cannot have been easy to achieve given the many barriers and limited institutional incentives and capacity issues. While climate responses in almost half (9 of the 20 case studies) were judged as not even coming close to the SECAP requirement of doing no harm, it is important that half are achieving or close to achieving this goal. This clearly demonstrates that the guidance can be achieved even to the more ambitious do-good level or what the evaluation refers to as a restorative stance.<sup>140</sup> At the same time, nearly half of the IFAD projects reviewed as part of this evaluation were falling short and posed net harm to the environment. Thus, while achieving the ambition of the SECAP guidance is clearly attainable, too many IFAD projects reviewed fall short of the SECAP standard.
226. **The projects reaching or exceeding the SECAP direction generally involved significant engagement of key stakeholders in design and focused on landscape-scale integrated interventions targeting natural solutions to underlying climate threats such as drought.** Case studies in Burundi, Kenya, Mali, Nicaragua, Niger and Sudan provide examples of projects meeting or going beyond do-no-harm to natural systems and towards restoring them. Box 3 provides details on the UTaNRMP project (2012-2020) in Kenya. The project employed integrated participatory natural resources management to enhance smallholder farmers' CCA and income while proactively contributing to nature conservation objectives. All these projects achieved significant development goals without impairing the natural system.

<sup>139</sup> The six case study countries with climate responses that did no harm or better were from Burundi, Kenya, Mali, Nicaragua, Niger and Sudan. Only the Burundi case study had all projects designed during or after 2015.

<sup>140</sup> The nexus study describes a recently approved project in north-east Brazil that is thoroughly restorative in design and in early stages of implementation.

### Going beyond do-no-harm – restoring degraded ecosystems

- The Upper Tana Catchment Natural Resource Management Project (UTaNRMP) in Kenya is a good example of an IFAD project that exceeds the do-no-harm standard for the environment, improving CCA and achieving significant development gains for poor rural households.
- The project began in 2012 and was completed in 2020 with a total investment of US\$87.37 million. An IFAD loan of US\$46.6 million was the largest contribution, with additional contributions of US\$17 million from the Spanish Fund, US\$11.34 million from the Government of Kenya and US\$2.56 million from beneficiaries. Earlier IFAD investments focused on agricultural production, business development and rural financial innovations. By contrast, the Upper Tana Catchment natural resources management project used integrated participatory NRM to enhance smallholder farmers' CCA while also proactively contributing to nature conservation objectives and environmental governance.
- The goal of UTaNRMP was the reduction of rural poverty in the Upper Tana Catchment. Its development objective was to increase sustainable food production and the incomes of poor rural households in the project area, while promoting sustainable management of their natural and environmental resources. The distinguishing characteristic of the UTaNRMP project was its strong emphasis on participatory biodiversity conservation and ecosystem services and building climate resilience. It addressed the nexus between rural poverty and ecosystem health in a densely-populated and environmentally fragile water catchment area of critical national and global significance. Its conservation strategies were based on developing environmental governance that facilitated dialogue and agreement among stakeholders and proved effective in achieving environmental outcomes and ecosystem services, in addition to increasing smallholder farmers' CCA outcomes.
- By mainstreaming ecosystem services into agricultural production UTaNRMP enhanced smallholder farmers' CCA, and addressed the inherent conflicts between agricultural production and nature conservation, in particular water security and nature conservation, farming and land management practices, thereby contributing to ecosystem resilience. The project targeted around 205,000 poor rural households whose livelihoods revolve around the use of natural resources. Integrated participatory natural resources management actions with smallholders and CBOs enhanced CCA while proactively contributing to nature conservation objectives and environmental governance, water harvesting and storage, soil and water conservation activities and agroforestry while addressing local water needs and supporting the recharging of aquifers.
- To mainstream ecosystem services, the project design mobilized a wide range of technologies and land management practices to ensure that farming and land management practices contributed to ecosystems resilience. The aim was to address local communities' water needs through water harvesting and storage ('blue' water), crop production requirements ('green' water) through soil and water conservation activities and agroforestry, and to recharge the aquifers.

**Source:** Elaboration by IOE based on the Kenya case study and the learning thematic study on human-ecosystem nexus conducted as part of this evaluation.

227. Another important distinguishing characteristic of the successful projects is that they address the adaptive needs of smallholder farmers via interventions using nature-based solutions, for example, by providing community water needs while also restoring aquifers. Sustainable natural resource management is a critical element in all five projects and in each a highly participatory approach was employed. These projects reflect important elements of good practice using holistic approaches which treat agriculture as an integrated system alongside natural resource management and climate, operating at ecosystem and landscape scales and using social networks and collective actions to address smallholder and environmental outcomes.

#### Climate response impact at farm and national scale

228. **Impact at subnational and national scales is more likely when CCA approaches are scaled up.** As discussed earlier, nine of the 20 cases showed a strong likelihood of climate responses being scaled up. The examples of Bangladesh, the Plurinational State of Bolivia, Ethiopia, Kyrgyzstan, Mali, Nepal, Nicaragua, Niger, Rwanda and Sudan offer a wide range of contexts and approaches to scaling up and are summarized in annex V, table 2 and some of the key factors contributed to these successes are also presented (see box 3).



229. Other pathways to achieving significant impact were considered. Contributing to a paradigm shift can be seen at different levels since CCA paradigms exist at the farm, community, subnational and national levels. IFAD's general objective to shift smallholders from subsistence-based livelihoods to market-oriented ones constitutes a paradigm shift at the farm level and plausibly contributes to their climate resilience. An example of this is NICADAPTA in Nicaragua. This brought together institutions in key sectors to work towards the common goal of combining CCA considerations with promoting production as well as access to markets. Similarly, transitioning from relying solely on rainfed agriculture to irrigated water could be considered as paradigm shift at the community level (Niger, PASIDP II and LLRP in Ethiopia, AD2M in Madagascar). Shifting to no-till (conservation) agriculture from regular agriculture was an example of a paradigm shift at the subnational or national level (in the Republic of Moldova, Ethiopia and Madagascar).
230. At the national level, IFAD supported the introduction of conservation agriculture (CA) in the Republic of Moldova (IRECR (2013-2020) and RRP (2016-2024)). As discussed under the dimension of effectiveness, this approach addressed the specific threats faced by dry regions, namely, frequent droughts and soil degradation due to wind erosion. As noted under the effectiveness discussion, FFS demonstrations showed that CA offered much higher income, (130 per cent) per hectare, compared to regular agriculture when faced with acute climate stresses such as an absence of rainfall and rising temperatures. The evaluation noted the disadvantages were that this approach required the precise administration of prescribed steps and also the mechanized CA pursued in the Republic of Moldova did not address the needs of smallholders or women.
231. Another example of IFAD's support to drive a paradigm shift was in Kyrgyzstan (see earlier discussion). The government decided in 2009 to decentralize the governance of pasturelands from the central government to local authorities and communities. IFAD provided effective support to this paradigm shift by strengthening the capacities of local authorities and communities and helping to implement the new regulations. In doing so, it promoted community-based ecosystem restoration of pastureland. The evaluation also noted that the project did not take into consideration the long-term sustainability of pastureland but was focused on increasing the herd size that could be supported by the restored pasturelands.
232. Contributing to system-wide changes is another pathway towards significant impact. No examples of system-wide changes were noted in the case studies, although integrated approaches to manage land, water and the environment at landscape level offer the best opportunities to permit multi-sectoral system-wide effects when scaled.
233. These were pilot exercises and there is no evidence to show that they are likely to be scaled or pursued by other partners. On this basis, the impact of these pilots cannot be regarded as sustained or system-wide. This lack of scale, among other things, is a testament to the important role of government ownership in achieving impact.

## Key points

- Ensuring that IFAD interventions do not harm ecosystems was recognized as an important priority in IFAD's CCA mainstreaming guidance (SECAP 2015, 2017 and 2020).
- The extent to which IFAD interventions address this concern in their design and implementation varies. Six of the 20 country case studies of this evaluation found successful CCA responses that do-no-net-harm to the ecosystems or go some distance towards restoring degraded environments; five additional country case studies were close to achieving this goal but not quite there, and nine were some distance from achieving this goal.
- The subset of successful IFAD climate projects was landscape-scale, integrated interventions targeting nature-based solutions to the underlying climate threats and involved strong engagement with beneficiaries and stakeholders during design and implementation.
- Five of these six successful CCA case studies were designed prior to the introduction of the SECAP guidance for mainstreaming in 2015. This study also shows that IFAD already has the capacities and vision needed to design and implement interventions that achieved economic and environmental priorities at the same time, and concerted action is still needed to achieve these outcomes in all IFAD's interventions.
- Environmental sustainability (the effects on the ecosystem) is better addressed at the landscape level. Interventions focused at the farm level without addressing the interconnected effects at the landscape level are unlikely to address adverse effects on the environment.
- Considering that the land areas covered by the vast majority of IFAD projects are at sub-ecosystem level, it is essential to consider their linkages to ecosystems and scale up CCA responses to achieve environmental sustainability.

## D. Effectiveness of targeting the climate-vulnerable

<sup>234</sup>. In general, several earlier evaluations and the ARRI have adequately covered the effectiveness of IFAD interventions, including many in the climate portfolio. These assessments covered the effectiveness of direct, geographic and community targeting approaches. Therefore, this study focuses on the effectiveness of IFAD's climate interventions in reaching the most climate-vulnerable.

<sup>235</sup>. In most cases, projects pursued geographic targeting based on poverty or deprivation maps issued by the programme country. Within these areas, marginalized communities were effectively targeted in a number of case studies. In Ethiopia, PCDDP III's design focused on pastoral and agro-pastoral systems in arid and semi-arid areas. The design effectively targeted the underserved and deprived pastoral and agro-pastoral communities to provide social and economic services. The LLRP in Ethiopia pursued a landscape orientation and also effectively targeted agro-pastoralist communities. Projects in south and south-east Asia and Latin America targeted indigenous peoples (for example, the Plurinational State of Bolivia and Honduras).

236. As discussed in chapter 3, **earlier designs did not target climate vulnerability clearly, but more recent ones were addressing this issue.** In the Be-Resilient project in Belize, the design used climate vulnerability maps to refine their targeting. These maps are planned to be updated periodically during implementation. In many cases, climate vulnerability assessments were not conducted to inform the project or programme design process, which limits the climate benefits that could be achieved by the intervention.

237. **In some of the more recent projects, targeting effectively incorporated multiple concurrent considerations.** In Kenya, the overall development goal of the Kenya Cereal Enhancement Programme - Climate Resilient Agriculture Livelihoods Programme (KCEP-CRAL) was to reduce rural poverty and the food insecurity of smallholders in the arid and semi-arid lands (ASALs). The project sought to achieve this in an increasingly fragile ecosystem by developing their economic potential, improving their natural resources management capacity, and improving their resilience to climate change. Context-specific targeting criteria included poverty incidence, gender responsiveness, and climate vulnerability. However, the effectiveness of targeting agro-pastoralist and pastoralist communities in CCA response was limited.

### Summary of chapter IV

- Overall, IFAD interventions were on track to achieve targeted results, which are mostly defined at the output level.
- Climate response largely targeted geographic areas where the poor and the marginalized were concentrated. Data were not available to assess if interventions reached the most climate-vulnerable within these areas or determine the socio-economic status of beneficiaries. Women and youth were targeted well in some projects. However, a systematic strategy and capacity to implement these strategies were absent at the project level.
- IFAD guidance, monitoring systems and results frameworks were not geared to assess the extent to which the Fund's interventions strengthened the climate resilience of smallholders.
- Non-lending activities, critical to ensure an impact beyond project boundaries and lead to transformative changes, were found to bear weak results. Yet, the systematic prioritization of these activities and the provision of necessary guidance and resources continue to remain weak. Mechanisms to address this challenge are evolving at the project level. Due to a lack of resources, these remain elusive at the organizational level, despite management awareness and efforts.
- The majority of IFAD climate projects were not likely to have a significant longer-term impact on the climate resilience of smallholders. However, a strong subset of interventions clearly demonstrates results in improving economic, climate and environmental resilience in the long term. This shows that IFAD has the capacities and vision at its disposal, should it wish to institutionalize its successes.

## V. Assessment of IFAD's readiness to deliver on climate change adaptation commitments

238. This chapter assesses IFAD's readiness (being fit-for-purpose) to deliver on its commitments to support smallholder farmers to adapt to climate change. The institutional readiness analysis assessed the adequacy of proposed corporate strategies and the current mainstreaming approaches, as well as programming arrangements and guidance to meet the CCA demand and related targets of the 2030 Agenda. In particular, it reviewed the underlying reasons behind the gaps identified in the earlier chapters between the Fund's aspirations and achievements between 2010-2019 and assessed whether the changes proposed will be sufficient to close those gaps.
239. Evidence shows that while many corporate aspirations were achieved, significant gaps persisted between IFAD's aspirations and the performance of its CCA interventions. For instance, all new interventions addressed CCA and SECAP provided a framework for integrating CCA responses in IFAD interventions. At the same time, nearly half of the interventions in the country case studies fell well short of adhering to the SECAP principle of do-no-harm. Similarly, the ASAP concept note (2011) expressed the need for restoring degraded natural systems. However, the case study analyses confirmed that none of the ASAP projects that were part of these case studies actually promoted restoration.<sup>141</sup>
240. Therefore, it is necessary to identify the underlying causes for such gaps to ensure that ongoing and future IFAD-supported interventions address these issues. The theory of change (chapter 1 and annex II) identified bottlenecks to performance that needed attention based on the lessons and evidence emerging from IFAD's CCA responses over the last decade and provides the necessary framework for this chapter.
241. The analysis for this chapter was based on evidence drawn from the 20 country case studies, four learning theme studies, online surveys of IFAD staff and project staff, a document review, an analysis of IFAD's business model, and interviews with key informants in IFAD headquarters. As noted in chapter 2, nearly 76 per cent of the projects in the 20 case studies were ongoing and nearly half (44 per cent) were approved during IFAD10 or IFAD11. The four studies covered the following thematic areas: scaling up, KM, the nexus of human-natural ecosystems, and the rapid evidence assessment (REA) of existing scientific and grey literature.<sup>142</sup>

<sup>141</sup> As noted in chapter 1, the case studies covered 35 projects or 14 per cent of the portfolio. Half of the case study projects were ASAP-funded.

<sup>142</sup> The analysis of the business model covered the following: the Fund's emerging climate priority under IFAD12; resources mobilization strategies and partnerships; revisions to strategies, action plans, guidance, and related policies; analysis of necessary human and financial resources. Related documents were: IFAD12 replenishment documents submitted to the Executive Board; updates to the SECAP in 2020; submissions to the Executive Board related to 2RP; revised IFAD's regular grant policy (to become effective in January 2022); revised operational guidance to targeting (2019); Knowledge Management Strategy (2019); the three phases of McKinsey's Analytical HR study on IFAD's current and future workforce composition; People, Products and Technology paper (2020); Decentralization 2.0 (2021-2023); Procedures and Guidance to Country Strategies – President's Bulletin (April 2019); and climate-related how-to-do-notes published by technical units.

## A. Assessment of IFAD climate priorities and resources

242. **Priorities of IFAD12 (2022-2024) recognize the importance of contributing to the 2030 Agenda for Sustainable Development** as well as drawing on synergies among the three treaties emerging from the Rio Convention. Namely, the UN Framework Convention on Climate Change (UNFCCC, 1992),<sup>143</sup> the Convention on Biological Diversity (CBD)<sup>144</sup> and the Convention to Combat Desertification (CDD). The UNFCCC seeks to stabilize greenhouse gas concentrations in the atmosphere to a safer level that would allow ecosystems to recover and adapt naturally to a changing climate, to ensure that food production and natural systems are not threatened. Members agreed to voluntarily establish nationally determined contributions (NDCs), which constituted an important implementation measure of the UNFCCC Treaty agreed at the Conference of Parties (COP) 21, held in Paris in 2015. These involved plans to mitigate and adapt to climate change and report progress annually. The Convention on Biological Diversity (CBD) signed in 1992, is a multilateral treaty “that seeks to conserve the diversity of life on Earth at all levels - genetic, population, species, habitat, and ecosystem. It recognizes that setting social and economic goals for the use of biological resources and the benefits derived from genetic resources is central to the process of sustainable development, and that this, in turn, will support conservation.”<sup>145</sup> The Convention to Combat Desertification came into force in 1996 as a product of Rio conference, with the aim to mitigate the effects of drought through national action programmes that incorporated long-term strategies supported by international cooperation and partnership arrangements.

243. **IFAD’s priorities towards the national climate adaptation agenda continue to expand.** IFAD12 (2022-2024) recognizes the urgent need to step up its action to achieve the 2030 targets by increasing the PoLG climate finances to 40 per cent from the 25 per cent set under IFAD 11 (2019-2021), as well as committing to strive for transformative country programmes. Equally importantly, it recognizes the short time frame available to act to prevent natural systems from being degraded beyond critical thresholds. One of the three pillars of IFAD12, operational results, prioritizes transformational country programmes<sup>146</sup> and one of the Fund’s new programming arrangements for providing climate response, the Rural Resilience Programme (2RP) states that the “focus of the programme will be on shifting from unsustainable extractive livelihoods to regenerative ones”.<sup>147</sup>

244. **The Fund continues to expand its partnerships and aspires to mobilize over US\$500 million during 2019-2025.** It should be noted that it took IFAD over ten years to mobilize this amount in the past (2010-2019). In addition to existing partnerships with GEF and the AF, expanded partnerships with GCF and the private sector are all planned. To achieve this, IFAD is also proposing significant shifts to existing practices, including adopting a programming approach and focusing more on restoring degraded environments (discussed further in paragraph 262). In addition, ASAP+ was set up in 2020 with the goal of mobilizing a further US\$500 million, considerably higher than the US\$360 million pledged for ASAP1 and US\$17 million for ASAP2.

<sup>143</sup> The United Nations Framework Convention on Climate Change (UNFCCC) is an international environmental treaty addressing climate change, with 197 signatories. It originated at the United Nations Conference on Environment and Development in Rio de Janeiro, June 1992. The UNFCCC seeks to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent irreversible human-induced interference with the earth’s climate system.

<sup>144</sup> The objectives of the Convention on Biological Diversity (CBD) are the conservation of biodiversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources (Article 1).

<sup>145</sup> <https://www.cbd.int/gbo1/chap-02.shtml>

<sup>146</sup> Report of the Consultation on the Twelfth Replenishment of IFAD’s Resources, IFAD12/4//R.2/Rev1, 10 -11 December 2020.

<sup>147</sup> Rural Resilience Programme, EB 2020/131(R) /INF.4, Executive Board -131st Session, Rome 7-9 December 2020.



245. Chapter 4 highlighted two key factors that facilitated CCA responses with significant impact. Firstly, improved design quality which depends on a number of factors including a responsiveness to the local and national context, cognizance of the climate vulnerabilities of target groups and local agricultural systems and identifying and analyzing critical pathways to strengthen smallholder resilience in the country. Similarly, chapter 4 highlighted the importance of non-lending activities to facilitate the impact of CCA responses and noted weak prioritization and investments in operational non-lending activities. Despite recurring evaluation recommendations, and management recognition of this issue, systematic improvements to non-lending activities prove to be elusive. Financial resources are critical to improving designs and non-lending activities, but resources mobilized by IFAD for climate resilience may restrict their use for such purposes hindering necessary improvements.

## **B. Assessment of the IFAD Strategy and Action Plan on Environment and Climate Change (2019-2025)**

246. **The IFAD Strategy and Action Plan on Environment and Climate Change (2019-2025) was a step in the right direction to update the climate strategy of 2010 to better reflect the priorities of the Strategic Framework (2016-2025) and IFAD11 (2019-2021).** The strategy correctly identified the need to enhance learning among IFAD staff, and to improve KM. More importantly, it also recognized the need for IFAD operations to better reflect national contexts and go beyond mitigating risks and generate adaptation- and environment-related benefits to smallholders.

247. **Yet the strategy missed an opportunity to identify and address bottlenecks to performance from CCA response experiences, including resource constraints, and to identify pathways to address them.** For instance, while it presented the need to promote learning and KM, it did not provide strategies or mechanisms to achieve this, nor did it ensure necessary capacities and resources were available for support. It provided no mechanisms or incentives that translated into identifying and learning systematically from successful CCA responses to replicate their success across the Fund (for example, those that were able to scale up CCA results). It identified the need for SECAP to go beyond mitigating risks and identifying CCA solutions to generate related benefits, but did not analyse the bottlenecks to implementing the SECAP. In light of the fact that 75 per cent of case study operations reviewed in this evaluation were not consistent with the SECAP principles of do-no-harm, this represents a major gap. Without adequate, evidence-based understanding of the underlying causes of the strengths and weaknesses of CCA responses, the new Climate Adaptation Strategy remains aspirational rather than action-oriented in improving IFAD's climate adaptation effectiveness.

248. **Partnerships of IFAD helped successfully mobilize significant resources (US\$518 million between 2010-2020) to address climate priorities** due to key partnerships with ASAP donors, GEF, GCF and AF, supplemented by its own resources in the form of Debt Sustainability Loans. Going forward, it is expanding its partnerships with GCF and others and envisages further partnerships with the private sector. However, given the downturn in many donor countries due to the COVID-19 pandemic, IFAD is likely to face challenging circumstances in meeting its resource mobilization targets by 2025.

249. At the country level, the case studies noted instances where partnerships with farmer organizations (the Plurinational State of Bolivia and ACCESOS), UN agencies (FAO, the Republic of Moldova, IRECR and RRP), multilateral development banks (the World Bank in Ethiopia, LLRP), bilateral agencies (KfW in Bangladesh, CCRIP) as well as research or academic institutions (Kyrgyzstan, LMDP; Nepal, ASHA), allowed IFAD to acquire technical capacities, achieve better results or leverage its results to scale up. Partnerships with major actors in country gave IFAD greater visibility and opportunities to scale up (for example, in Bangladesh). However, as noted in chapter 4, partnerships for results were not systematically forged with strategic intent but were only established as one-off activities for implementation, consultation or coordination roles.

## C. Assessment of IFAD guidance for country strategies and operations

250. **IFAD was successful in integrating CCA responses in country strategies and operations.** IFAD took the first and significant step of creating an enabling environment to address climate threats in all its interventions (from country strategies to operations). It was able to deliver on its commitment to mainstream CCA in all its new COSOPs and operations. Most recent COSOPs analyse NDCs to determine IFAD strategy, as per IFAD11 commitments. Moreover, IFAD surpassed the goal of focusing 25 per cent of its PoLG on climate responses.
251. SECAP is the primary instrument to mainstream CCA in IFAD's country strategies (COSOPs/CSNs) and operations, and it primarily serves two functions. First, it required climate risks to be assessed, and thereby, enabled country strategies and operations to identify appropriate responses; second, it provided safeguards to limit the social, environmental and CCA risks posed by IFAD operations. To this end, it required projects facing higher risks to conduct (social, environmental and climatic) impact assessments and to identify risk mitigation strategies to prevent damage posed by IFAD interventions.
252. Interviews with headquarter key informants identified three concerns. Firstly, SECAP 2015 and 2017 had minimal ownership by technical and project management units outside IFAD's ECG. Secondly, project management units in countries expressed the need for the right kind of capacities to support, interpret and use SECAP during implementation. Often, general environmental experts without SECAP experience or relevant climate and conservation smallholder agriculture were involved, which added little value. Thirdly, SECAP served as a risk identification and mitigation tool, rather than a tool to identify specific pathways to achieve and strengthen smallholder climate resilience. These constraints further reinforced the perception among many users that SECAP was an instrument for compliance rather than one that advanced sustainable development. Indeed, an online survey of IFAD staff showed that only half of its staff considered that they had received adequate guidance from IFAD in integrating CCA into their work. Moreover, case study analysis showed that only 25 per cent of the projects analysed were consistent with the SECAP principles of do-no-harm. **While SECAP served the important function of providing an enabling environment for operations to pursue integrating climate considerations, it faced limited ownership and capacities to operationalize and to point to pathways to strengthen the climate resilience of smallholders.**
253. SECAP 2020 tried to address these limitations. It endeavoured to go beyond risk management standards to optimize positive (social, environmental and climate adaptation) benefits. It was accompanied by new tools such as the Adaptation Framework (see chapter 2 for details) to assist new designs by providing a database of successful adaptation options and a framework to prioritize among the available, appropriate adaptation options. In addition, it was developed with involvement from units such as the Sustainable Production, Markets and Institutions Division and the Project Management Department (through the interdivisional SECAP review group) which is likely to facilitate broader ownership and uptake.
254. Nevertheless, some key challenges remain. Although it envisaged going beyond do-no-harm, as with its predecessors, the primary focus of technical guidance remains focused only on ensuring no harm was done to the social and natural systems. It does not offer substantive guidance in shaping CCA responses that restore degraded natural systems. There is no evidence to indicate that other forms of guidance, such as How To Do Notes were available to identify and design win-win solutions and to develop more integrated approaches. **SECAP and other IFAD guidance are yet to learn from win-win successes<sup>148</sup> and have not provided effective guidance to interventions. Such guidance is essential to fully understand the multidimensional environmental consequences (such as on biodiversity, land and water quality) of climate responses and identify pathways that promote climate, environment and economic resilience.**
255. This integration also needs to be linked to results in the form of anticipated improvements in climate resilience for target communities. Corporate guidance to conceptualize and measure climate resilience, monitoring systems to track resilience results, and functioning adaptive management practices that use the monitored evidence to make course corrections are all key steps needed to ensure effective climate responses.

<sup>148</sup> Some examples of IFAD projects contributing to climate adaptation for smallholders and to restoration of the environment are presented in annex V, box 1 and table 3. There is also a growing literature in this area, for example Heather M Tallis et al. (2018).

256. **IFAD and SECAP are yet to provide guidance to conceptualize and track climate resilience to manage for climate effectiveness.** As noted earlier, some regions are addressing this issue by developing their own frameworks to monitor improvements in climate resilience. Drawing from the How-to-do-Note of September 2015 on Measuring Climate Resilience produced by the Environment and Climate Division (ECD), the Latin America and the Caribbean (LAC) Region has piloted a method to monitor and track climate resilience. This was also piloted in the Asia Pacific Division (APR) with support from ECG. Recent projects in Ethiopia, such as the LLRP, followed the resilience framework adopted by the World Bank and other IFIs. This framework is similar to that adopted by IFAD in its joint projects with the Rome-based agencies in 2014 (see chapter 1 for details). However, these diverging approaches would render aggregation or comparison of performance of operations very difficult and are the direct result of an absence of more global IFAD-wide guidance to assess resilience.
257. IFAD12 commits to working towards ‘transformative country programmes’. Transformative changes require the following four interdependent prerequisites. The first is the construct of the intervention logic and the quality of project design. Its ability to address root causes and develop critical pathways to climate resilience in an innovative manner provides the platform for its uptake; IFAD plays the lead role along with nationally-assigned counterparts and has substantial control of the desired quality. The second prerequisite is the responsiveness and constraints faced by groups that should benefit from the project, such as smallholder farmers, community groups, and vulnerable target groups (such as women, youth, indigenous peoples and the most marginalized), and the local government functionaries. Building and sustaining capacity, developing processes to coordinate responses and resolving differences among communities, as well as resourcing and supporting these groups to navigate constraints, are also necessary to facilitate truly transformative behaviour. The third prerequisite is the capacities and shared commitment of service delivery institutions, technical agencies, and policymakers at national and subnational levels. Their commitment to support transformative dimensions with appropriate policies, resources and services plays a crucial role in scaling and sustaining transformation. Finally, all transformative changes ultimately require autonomous behavioural change in supporting markets. Hence, the role of the private sector in powering transformation is key. Its engagement and partnership from the outset have to be planned and supported by the members of the other three pillars.
258. IFAD shapes the design of the intervention but not the other three prerequisites. However, transformation synergy needs to permeate through all four. IFAD can play a resourcing and catalytic role in planning inclusivity, processes, capacity-building, ensuring coherence and cross-synergy among the various components. But it needs to marshal evidence and partnerships to advocate scaling up and ensuing transformation. The following analysis recognizes both the scope and limits of IFAD’s role in effecting transformative changes.
259. **To date, IFAD has not yet articulated a definition or set of characteristics of transformative CCA responses** in the rural agricultural sector. This limits the evaluability of transformative country programmes to which IFAD12 aspires. Providing a working definition of transformative climate response is neither the remit of this evaluation, nor desirable to attempt in this way. The evaluation agrees with the premise that to be a relevant concept, transformative solutions should be distinguished from a good or very good solution - every solution that is scaled up does not automatically become transformative. To identify key features that distinguish transformative solutions from effective ones, the evaluation analysed the treatment of transformational change related to CCA by other IFIs and funding mechanisms such as the Climate Investment Fund (CIF), Global Environmental Facility (GEF) and Green Climate Fund (GCF). The key characteristics of the transformative solutions were: prompted a paradigm shift (qualitative rather than quantitative improvements); systemic influence (influencing multiple sectors or system-wide), and therefore, likely to involve scaling up (at landscape, regional or national level); success in addressing climate, environmental and economic vulnerabilities together (win-win solutions); and offering enduring benefits even when there are social, climate, economic or political shifts). As discussed in chapter 4, the longer-term effects of climate response along these areas will be explored to assess impact.
260. **It is not feasible for every intervention to change the CCA paradigm or be scaled up or have system-wide impact – in short, to be transformative.** Nor would it be feasible for such a change to be within the control of a single agency or actor. Other IFIs and funding mechanisms such as GCF have already explored operationalizing this concept of transformative change with their available resources. IFAD is yet to undertake such a feasibility assessment.

## D. Assessment of IFAD capacities

261. As discussed in chapter 2, IFAD commissioned two studies to assess the adequacy of its human resources, their capabilities and the business processes to deliver on its mandate and maximize its contribution to the 2030 Agenda.<sup>149</sup> That study determined that IFAD had a combined capacity gap in programme management and technical specialists equivalent to 33 existing full-time equivalent workers as of December 2019<sup>150</sup> – a gap that was estimated to increase by 2024. The study also identified a high skills capability gap among staff engaged in the cross-cutting theme of the environment and CCA (where the current average proficiency level was 2.51 while the required proficiency level was 3.65, on a scale of 1 to 5 where 1 represented the lowest level of capacity and 5 the highest). In summary, it could be inferred from that study that **there was a major deficit in staff capacity and necessary skill sets associated with climate mainstreaming interventions in IFAD.**

262. To address these gaps, the Fund put in place the Targeted Capacity Investment Implementation Plan (December 2019). This sought to identify skills gaps in each division, to train staff for upskilling or reskilling, and to provide performance management training and support. It also developed the 'People, Processes and Technology Plan' (April 2020) to bridge the gaps in workforce and corporate processes. The results of these efforts are yet to be assessed. Moreover, the McKinsey (2019) study did not analyse the capacity gaps in the specific area of CCA response. This is particularly important because while the overall PoLG may not be increasing significantly, climate financing will increase by 15 per cent (the model considered different increases to replenishment, but these were well below 15 per cent). **A targeted study to determine capacity and capabilities (skills) gap estimates for CCA and other mainstreaming activities is therefore needed.**

263. In addition to having the right capacities, the case studies and interviews showed that innovative climate responses require the integration of sustainable CCA considerations at the concept note stage and must then continue right through the design and implementation phases. In short, the right capacities are needed at the right time and in the right place. **Appropriate and adequate CCA technical capacities are not fully in place within IFAD and project management units to achieve such integration from the design to implementation.**

264. **Adequacy of capacities in a decentralizing IFAD.** The IFAD Strategic Framework 2016-2025 views decentralization and closer proximity to clients, beneficiaries and partners as being essential to maximize IFAD's operational impact. Under IFAD10 and IFAD11 replenishments, the Fund will continue to deepen its corporate decentralization and move staff closer to their programme countries. The proportion of staff based in IFAD Country Offices has doubled from 18 per cent in 2016 to 33 per cent in 2020. The target is to have 45 per cent of staff in IFAD Country Offices by 2024,<sup>151</sup> which are then envisaged to manage about 70 per cent of the projects and 80 per cent of the total financing. The proximity is expected to improve the relevance of projects to the country context and target groups and, thereby, the design quality. The proximity is also expected to strengthen the implementation oversight and support and, consequently, is anticipated to lead to improvements in portfolio performance. Finally, such proximity is envisaged to strengthen non-lending activities through enhanced partnerships, closer client contact, and deeper policy engagement.

<sup>149</sup> An analytical study to assess its current and future workforce composition was carried out by McKinsey & Company, (2019). Another study assessing IFAD's business processes was carried out by Alvarez & Marsal, (2019).

<sup>150</sup> McKinsey, Phase II PPT Slide #23.

<sup>151</sup> IFAD Report of the Consultation on the Twelfth Replenishment of IFAD's Resources, 18 February 2021 (page 39).

265. **Decentralization 2.0** (2021-2023) aims to accelerate decentralization and introduces additional key measures. For instance, Regional Offices will be established during 2021-2023 and Regional Divisions at headquarters will be moved to these new offices, including their Directors and staff. Such extensive changes will require a considerable transition period. Uncertainties associated with transition pose a threat to providing timely CCA response. Moreover, challenges could be anticipated in recruiting and retaining the right capacities capable of designing and supporting the implementation of innovative CCA responses with the transformative potential needed, pursuing partnerships for scaling up, advocacy and policy engagement, and contributing to building a knowledge base of adaptive solutions that promote climate and natural systems resilience (win-win solutions). Given the short time frame to 2030, the gains of regionalization are urgent, and guarding against delays and under-fulfilment is critical. As such, all risks arising from decentralization 2.0 need to be identified, and risk mitigation plans prepared and implemented.

266. **Ongoing decentralization is perhaps a necessary step and offers potential longer-term benefits to all IFAD operations, including climate response. However, in the short and intermediate term, it is highly likely to involve risks that need to be identified and managed.**

## E. Assessment of programming arrangements and results focus

267. Earlier discussions noted that the design of COSOPs and operations needed more attention to identify critical pathways to strengthen smallholder climate resilience. Achieving enduring smallholder climate resilience requires leveraging project-level results to benefit a broader spectrum of the rural poor through scaling up results and pursuing non-lending activities. The non-lending activities help strengthen the knowledge base of innovative experiences for advocacy use, help build the institutional capacity of farmer organizations and state service delivery mechanisms and help develop policy engagement and the necessary partnerships while also contributing to scaling up CCA results and responses. However, IFAD was unable to use administrative budgets or supplementary funds (reserved for lending activities only) to pursue non-lending activities. Over the last decade, most supplementary funds did not allow sufficient resources to be devoted to analyzing critical CCA resilience pathways or strengthening project designs.<sup>152</sup> Moreover, supplementary funds were restricted from investing in non-lending activities, which are important for policy engagement, scaling up and KM – critical elements indeed for project successes to become transformative. But these were not covered under the administrative budget. IFAD regular grants could support non-lending activities. However, the available grant resources are only a small fraction of those that are actually needed.<sup>153</sup> Therefore, a lack of sufficient, predictable and sustained financial resources has severely limited IFAD's ability to pursue non-lending activities to achieve a tangible impact.

<sup>152</sup> ASAP II did dedicate resources to improve tools for climate adaptation (total disbursed was US\$14.47 million) and GCF did allow resources for improving the quality of design. However, at the time of writing the report, these resources were not a significant part of IFAD's climate funding.

<sup>153</sup> For the period 2015-21, only US\$80.5 million was approved as grants for the country level. Of this amount, only US\$17.6 million was approved for standalone grants that could have been used to strengthen non-lending activities. IFAD grants cannot be used for activities that are usually undertaken using administrative budget.



268. **Addressing resource challenges and strengthening impact level results.** IFAD proposes to shift from a project-oriented approach to a programme approach, under IFAD12 (2022-2024). As described in chapter 2, an illustration of this approach for climate responses is the new umbrella programme 2RP that brings together the enhanced Adaptation of Smallholder Agriculture Programme (ASAP+), the Sustainability, Stability and Security (3S) initiative in Africa and the Green Climate Fund umbrella programme for the Great Green Wall for the Sahara and Sahel Initiative (GCF-GGWI). It has a dedicated trust fund and seeks supplementary funds from its partners.
269. The 2RP Trust Fund envisages 5-10 per cent of its programme resources will be used for technical assistance that, among other things, will support improving the design and selection of appropriate non-lending activities. This arrangement would also provide the flexibility to seek non-sovereign implementing partners such as farmer organizations and NGOs and enhance the pool of qualified candidates to be included in the project management units (PMUs). This added flexibility does indeed address some of the critical challenges faced by the climate responses over the last decade in finding financial resources, capacities and partnerships to leverage the project results to impact on others beyond the project boundary.
270. Resources are a critically important consideration but not the only constraint. The IFAD portfolio of 256 climate projects analysed in this evaluation showed that only 50 per cent properly considered measures for scaling up. Discussion in chapter 4 pointed out the importance of **ensuring that project design reports explicitly set out the strategies, expected results, and monitoring system for non-lending activities critical to scale up innovative climate response.**
271. Recent designs have begun to address the issues of resources and the prioritization of non-lending activities by directly integrating KM or scaling up as part of the project components, for instance, in the Lowlands Livelihood Resilience Project (2019-2025) in Ethiopia and Planting Climate Resilience in Rural Communities (PCRPR) of north-east Brazil. This approach allowed these projects to recruit dedicated capacities, allocate resources for such activities, and provide systematic attention from the very early stages of project implementation.
272. **IFAD's ability to demonstrate improvements to climate resilience is constrained by the limitations of its indicator framework.** At the corporate level, IFAD11 provided core indicators to track capacities for CCA, such as the number of smallholder households adopting CCA technologies, or the number of hectares brought under climate-resilient practices. However, as discussed in chapter 4, these measures are helpful in ensuring that necessary steps to strengthen climate resilience are in place, but do not convey the extent to which resilience has been changed. Indeed, corporate-level resilience outcome indicators do not exist, such as reduced variability in crop yield per hectare, or change in income per hectare. Achieving the targets of these core indicators does not necessarily confirm that smallholders have acquired the absorptive, adaptive or transformative capacities to deal with climate risks.
273. **Lack of effective monitoring of results is another major challenge.** All projects in the case studies had results frameworks, but the majority did not have indicators relating to resilience outcomes to monitor actual results or project progress. IFAD relies on surveys to collect outcome-level data. An analysis of surveys in case study countries (8 of the 20 case study countries had such outcome surveys)<sup>154</sup> found them to be of weak to moderate level quality. The main issues were related to the quality of data, the methods, analysis and interpretation of surveys. For instance, seven of the eight surveys analysed had small samples (n<1000) and did not use inferential statistics. Many involved a high margin of error (up to 31 per cent) due to weak cross-tabulations. In most cases, disaggregated data to identify progress achieved by different target groups (such as women and youth) were not available. As such, the existing monitoring system is not adequately equipped to provide the inputs needed for results-based adaptive management and decision-making. In 2020, IFAD launched Core Outcome Indicator Measurement Guidelines (IFAD 2020f) to assist project staff to design robust questionnaires to measure outcome indicators. However, while improving the questions to collect relevant data, these guidelines offer little to address the prevailing weaknesses in survey methodology outlined above.

<sup>154</sup> Bolivia (Plurinational State of), Burundi, Ethiopia, Honduras, Nepal, Nicaragua and Sudan.

274. **Technical advances, including the increasing availability of satellite imagery and geospatial information, hold considerable potential for monitoring CCA responses manipulated through GIS and using applied remote sensing.** IFAD recently invested in collecting and using GIS information in collaboration with partners such as WFP. The evaluation conducted an evaluability study of the monitored data using GIS indicating of the 20 case study countries, GIS information was available in nine cases. Of these, four were assessed to be of moderately satisfactory or better quality, which were then used in this analysis. The data available was mainly limited to the locations of beneficiaries and project sites. Consequently, the analysis used GIS data mainly to validate geographic targeting (Republic of Moldova) and ensure that projects were not located within protected areas (Chad) (see figures in annex VIII). Challenges include the quality and the current limited scope of GIS data, low technical capacities at the project level, low awareness of the potential of GIS, and weak understanding of the activities that need to be monitored (See annex VI, table 1).
275. **Coherence for results.** Successful climate responses require projects to align with the country's climate needs to facilitate their ongoing ownership by local and national authorities. In addition, success also depends on different IFAD units working together and IFAD working constructively with countries to support the design and implementation of IFAD interventions.
276. Key informants were clear in noting that coherence among IFAD units is essential to produce a climate response that addresses the central climate needs of smallholders. Climate considerations, particularly in high climate-risk countries, need to be central to the rural development challenges addressed. They also noted that if the project concept is not properly formulated to reflect this, it cannot be corrected later in the design or during implementation. It was not evident that climate and environmental experts were also involved along with the Sustainable Production, Markets and Institutions Division and Project Management Department staff during the concept note stage.
277. To address this gap, the 2RP initiative proposes important changes to the programming arrangements. Its governance structure to manage the day-to-day affairs of the programme involves a new interdivisional coordinating unit comprising of experts from all key IFAD divisions. Although it is not clear how the new arrangement will ensure the right capacities are available at the right time and place for programme activities, this is a step in the right direction to ensure coherence within IFAD. The other governing mechanism of having an external panel of advisors comprising donor and programme countries could also serve to facilitate coherence within programme countries.
278. Staff commitment to achieving organizational priorities is essential to attain corporate climate targets. The importance of CCA to IFAD's mission to reduce rural poverty and food insecurity is a corporate priority. Yet, an online survey of IFAD staff showed that only 24 per cent of the staff shared this conviction.<sup>155</sup>
279. **Government commitment to CCA is mediated by political and economic realities, including other immediate priorities.** For instance, there was strong leadership and ownership in Bangladesh for CCA, which is a national priority given the country's high exposure to climate hazards that are recurring more intensely and frequently. The coherence of other actors in climate-resilient infrastructure (e.g. GCF, KfW), government institutions (LEGD) and IFAD operations facilitated an enabling environment for scaling up the CCRIP approach to climate-resilient design of infrastructure (see box 2 in chapter 4). In the Republic of Moldova, the portfolios of agriculture, environment, forestry and livestock were grouped within a single ministry, which made it easier to manage the different project components such as shelter belts (under forestry), and conservation agriculture (under agriculture). The case studies encountered other situations where the communication lines among ministries were weak. As noted earlier, weak links between IFAD and the ministries of environment and agriculture often lead to issues such as the project locations being set in protected areas during the early stages of project implementation. Such challenges are likely to persist during the remaining period of IFAD11 and forthcoming IFAD12.

<sup>155</sup> Thirty-seven per cent strongly agreed, 39 per cent somewhat agreed and 18 per cent neither agreed nor disagreed with the statement "CCA is the current flavour of the month of IFAD and will fade in time as with many other previous priorities". Only 24 per cent disagreed with the statement.

## F. Learning and adaptive management

280. Despite the limitations identified above, the climate responses from IFAD over the last decade include some notable successes. The case studies showed that nearly one third of the countries are at or beyond the do-no-harm standard and nearly a quarter of the projects (8 of 35) were likely to be scaled up. **This confirms that parts of IFAD have the right capacity and vision to achieve impactful results, even though the majority of its projects are not likely to achieve long-term impact.**
281. **IFAD has plenty of scope to learn from the experiences of these successful projects.** Unfortunately, the knowledge base of successful experiences that captured the underlying factors that led these projects to develop climate responses that significantly improved the resilience of beneficiary groups and ecosystems is not available. Of particular interest would be how they achieved this success when they had the same corporate guidance, tools and resources available to others. Lessons from successful experiences acquired over a range of contexts offer sound material for IFAD's future updates of CCA guidance.
282. **Creating platforms of repositories for successful climate resilience solutions is important but not sufficient to replicate these successes across IFAD.** Little evidence exists to show that effective, systematic learning processes and initiatives exist in IFAD, over and above the existing ad hoc efforts and one-off events. There are currently no mechanisms in place to systematically promote intra- and inter-group discussions among Regional divisions of the Project Management Division (PMD) and technical experts in ECG and PMI to improve new designs and pursue course corrections for the existing ones.
283. Similarly, attempts to identify and validate factors contributing to successes through discussion with country agencies, project participants and others vital to the success of the project were absent. Good examples of such mechanisms exist at the regional level. For instance, the Administrators Forum that is regularly convened in West Africa by IFAD has over 50 administrative officials from the governments in the region. The forum meets to address CCA issues of concern facing their countries and also to get feedback on project performance. Keeping in mind that 2030 is just a project cycle and a half away, there is a need for shorter cycle adaptive management. Such cross-fertilization of evidence is needed from the very beginning of the project cycle (the concept note), in designing and throughout implementation. **Thematic studies such as this evaluation have highlighted that IFAD provides insufficient support for KM efforts and more dedicated capacities and resources are much needed.**

## Summary of chapter V

- Overall, IFAD met its commitments to integrate climate response in all its new country strategies and operations. It also succeeded in ensuring that country strategies analyse NDCs and climate risks to guide their operations in the country. Most importantly, it provided an enabling environment through priority setting, mainstreaming guidance, tools and providing a dedicated institutional set-up. IFAD made significant advances over the last decade since it declared CCA as corporate priority.
- Despite this progress, IFAD does not have an adequate framework to demonstrate results even though its projects are making significant contributions to smallholder climate resilience. A clear conceptual framework, measures of climate resilience and a monitoring system to track progress towards resilience outcomes is yet to be put in place. In this regard, work of significance is happening at country level.
- IFAD does not have the relevant capacities yet. It needs the right capacities at the right place at the right time, as demonstrated by the performance of project studies. Additional relevant capacities are needed to deliver 40 per cent of PoLG, under IFAD12, particularly at the project level.
- IFAD is trying to step up its support and guidance to non-lending activities, which are critical for achieving wider impact. However, weaknesses in prioritization, an overemphasis on results orientation, and a lack of a strategic and systematic approach to these activities has undermined performance. Programme arrangements may address resource issues in Africa. Recent projects have incorporated key actions to enhance impact, such as scaling up and KM as part of project components, to address the resource gaps.
- IFAD has demonstrated its ability to establish and expand partnerships for mobilizing climate finance. Successful case studies provide examples of partnerships that strengthened results achieved with farmer organizations, academic institutions and regional think tanks, providing exemplars of collaborative partnership. Yet these successes are very country-specific and limited in number.
- Ongoing decentralization efforts will help in the long-term to strengthen the effectiveness of climate responses. However, the short- and intermediate-term risks to delivering IFAD11 and IFAD12 commitments are yet to be sufficiently assessed and reduced with a mitigation plan.
- IFAD has demonstrated the capacity and vision to develop select CCA responses with significant potential impact, despite these significant challenges. However, there is very limited institutional learning from these successes to drive improvements in the performance of CCA responses IFAD-wide.







## VI. Conclusions and recommendations

284. This evaluation focused on the extent to which IFAD-supported initiatives have helped smallholders adapt to the impacts of climate change. The salient conclusions are summarized below, aligned to the three overarching questions (Q1-Q3) that guided the evaluation from its outset. In identifying the conclusions, this evaluation summarizes the bottlenecks to past and future performance identified in chapters III, IV and V. This is followed by concrete, actionable recommendations.

### A. Conclusions

Q1. *What difference have IFAD interventions made in the ability of smallholders and their communities to adapt to climate change, particularly in the case of those most vulnerable to climate change, such as women, youth and indigenous peoples? What has worked and why, and what opportunities have been missed?*

285. IFAD used its comparative advantage to make constructive and important strides in integrating climate adaptation considerations in all its interventions in a manner relevant to client country needs. It continues to evolve its business model to provide CCA responses in terms of prioritizing CCA, mobilizing climate finances, providing dedicated institutional support, providing programming arrangements (design and implementation support), technical and managerial capacities, as well as safeguards and tools to mainstream CCA. It is ready to move to the next level of CCA mainstreaming to meet the urgent need to address food insecurity and climate change through concurrently promoting climate, environment and socio-economic resilience. This is elaborated below.

286. **IFAD's experience in working with marginalized communities in the rural agricultural sector, often facing adverse climatic and environmental conditions, has positioned it well to address the accelerating risks from climate change and to place climate change and adaptation as a strategic institutional priority.** Over the past decade, the Fund has achieved important progress in supporting smallholder CCA. It made climate response an explicit corporate priority, mobilized climate finances and focused an increasing share of its PoLG on climate support. It also set up a dedicated unit with technical capacities to mainstream climate responses across all interventions and developed relevant guidance and tools to support implementation.

287. **IFAD assessed climate risks in all its country strategies and operations and integrated climate response in interventions facing 'moderate' or 'high' climate risk.** In addition, all COSOPs and operations approved after 2015 were relevant to country NDCs. Most interventions targeted communities and areas where the poor were concentrated. The recent revised operational guidelines on targeting (IFAD, 2019) emphasized the importance of including climate vulnerability as a consideration and the recent projects are beginning to integrate this critical aspect into their targeting.

288. **IFAD's targeting approaches continue to improve.** In addressing gender inequality and women's empowerment in climate responses, the majority of earlier designs showed strong emphasis on establishing targets and quotas for women's participation in benefits. Recent designs are increasingly addressing the root causes of gender inequality, such as gender norms and beliefs, income and asset ownership and access to credit. One in three projects approved in 2019 were designed to be gender transformative, exceeding IFAD 11's target of 25 per cent.

289. **Projects are paying increasing attention to addressing existing tensions arising from competition over use of land and water resources** among different stakeholders and production systems. Deep social tensions exist between sedentary crop-livestock systems and (semi-) nomadic pastoralists in most of the Sahel region of Africa. Four of the six case studies in the sub-Saharan Africa project designs and implementation approaches lacked differentiated analyses and engagement strategies pertaining to these groups. Strong IFAD guidance on community-based approaches to address social conflicts and tensions in project designs would have helped.
290. **IFAD's mainstreaming efforts lack a clear conceptual framework and operational guidance on how to strengthen climate resilience together with environmental and socio-economic resilience.** Corporate guidance to objectively assess climate resilience and track resilience outcomes is not yet in place. This has limited the ability of country strategies to analyse the critical pathways to better achieve climate resilience. It has also limited IFAD's ability to make resilience an evaluable concept in all project designs, design quality assurance processes and implementation oversight functions (such as project supervision missions). In the absence of clear corporate guidance, there is a risk of proliferation of ad hoc conceptual frameworks that pose challenges to comparing performance across projects or aggregation of resilience results. Clear guidance is also lacking to identify CCA responses that go beyond doing no harm and transition to restoring degraded ecosystems while also ensuring the nutritional and economic security of smallholder farmers.
291. **The evaluation finds that in 15 of the 20 case studies, IFAD is achieving or showing progress in climate resilience outcomes.** However, IFAD's results frameworks and monitoring systems are not geared up to demonstrate the extent to which its interventions have actually strengthened the climate resilience of smallholders. This gap is linked to the absence of a clear conceptual framework which can measure climate resilience, as stated above.
292. **Insufficient capacity constitutes a major bottleneck to improving CCA performance.** IFAD's analysis highlights important gaps in the technical capacity to mainstream and monitor CCA responses at headquarters and project levels; this is likely to continue until 2024 and beyond. Efforts are underway to address these skills gaps. The Targeted Capacity Investment Implementation Plan and the People, Processes and Technology Plan are in their early stages of implementation. CCA capacity will need to expand further when the climate focus of PoLG increases from 25 per cent under IFAD11 to 40 per cent under IFAD12. There is currently no evidence to show that an assessment of the anticipated increase in CCA capacity is being planned.
293. Addressing the capacity needs of IFAD is critically important. However, as noted earlier, CCA outputs and impacts, including those related to the environment (the nexus effects) also depend on the capacities of project implementation units to understand and implement SECAP guidance, the underlying premises of CCA response and monitor the impact of IFAD's CCA response on smallholder climate resilience. The feasibility of acquiring additional project-level capacities commensurate with the expanded CCA commitments is yet to be formally recognized and assessed.

- Q2. *To what extent has IFAD been able to leverage its operations to strengthen smallholder farmers' CCA capacity at the local, subnational and national levels through partnerships and by scaling up successful interventions, promoting enabling policies, strengthening institutional capacities and improving the financial architecture for adaptation? What has worked and why, and what opportunities have been missed?*
294. **IFAD is trying to step up corporate support to strengthen non-lending activities such as fostering KM and partnerships for scaling up positive results. The future of IFAD's ability to successfully strengthen smallholder climate resilience at scale depends on additional funding to promote non-lending activities.** Resources remain a challenge and the performance of non-lending activities is a recurring weakness identified by several independent evaluations. Given the close interlinkages between climate change and ecosystems, long-term climate resilience cannot be achieved by focusing only at the farm or community levels. At the same time, in the absence of resources, the systematic pursuit of scaling up non-lending activities or providing the necessary guidance and human resources to support their implementation remains weak. Programme arrangements such as the Rural Resilience Programme may provide the flexibility to dedicate a proportion of programme resources to strengthen non-lending activities. However, this mechanism is yet to be implemented and will mainly be available only for interventions in Africa and selected low-income countries.
295. **Faced with the persistent lack of the necessary financial and human resources to pursue non-lending activities, IFAD lacks operational experience to address non-lending activities in a systematic manner.** Project designs do not systematically prioritize them, identify results expected from non-lending activities or develop strategies to implement them. Monitoring them to track progress was also largely absent. This limits the depth and reach of IFAD's climate-resilient outcomes. Recent projects have incorporated important actions to enhance project impact, such as scaling up and KM as part of project components, as a way to address the gaps identified above.
- Q3. *To what extent is IFAD equipped to address the existing and projected adaptation challenges facing smallholder farmers and to meet its commitments under IFAD11 and beyond?*
296. **As it learns from experience, IFAD's approach to CCA is evolving and progressing in the right direction.** Over the past decade, IFAD has developed and updated its climate strategy and it continues to improve the institutional environment for CCA responses. It established a dedicated unit with technical capacities to integrate CCA in its interventions, and continues to revise policies, strategies, and guidelines (e.g. the grants policy, operational guidelines for targeting, KM strategy and guidance to country strategies and operations). IFAD also developed mainstreaming guidance (SECAP 2015) and introduced new tools to guide CCA. It updated mainstreaming guidance twice (SECAP 2017, 2020) and introduced new tools such as the Adaptation Framework with a database of adaptation options that would help to bring into sharp focus the need to move beyond risk management and to ensure the benefits of appropriate climate responses for smallholders are materialized. These actions have helped IFAD progress in the right direction to address many of the bottlenecks that hindered early performance.
297. **IFAD has demonstrated capacities and vision at its disposal to improve economic, climate and environmental resilience of smallholders through a strong suite of appropriate interventions.** Climate responses in six of the twenty case studies are performing at or beyond doing no harm through their restorative actions at landscape scales. These were landscape-scale integrated interventions targeting natural solutions to the underlying climate threats and they involved strong engagement with beneficiaries and stakeholders during design and implementation. These cases offer important lessons to improve other interventions, such as the climate response in the five case studies that were getting closer to doing no harm, and to the responses in the remaining nine case studies that were being aware of the risk but a distance from doing no harm to ecosystems.

298. **At the same time, challenges remain in ensuring no harm is done to the environment.** In fact, climate responses in nine of the twenty case studies were found to be some way from doing no harm and in six cases studies they were close to doing no harm to the system but fell short of the goal of supporting CCA and resilience interventions for smallholder farmers in the long-term. The limitations of CCA capacities in project management units, coupled with a lack of commitment to CCA issues, design issues and the absence of corporate guidance have contributed to this negative outcome.
299. **This evaluation found significant gaps need to be addressed first for IFAD to be able to deliver on its CCA commitments under IFAD12:**
- a. Putting in place mechanisms to ensure systematic organizational learning from operational experience – to reproduce the success achieved by the climate responses of the five case studies in doing no harm to ecosystems, and ensure that interventions that are close to doing no harm, as well as those that are distant from this goal, learn lessons to build the environmentally sustainable climate-resilience of smallholders. A monitoring system to identify successes and capture knowledge to replicate these ‘islands of success’ more broadly is one critical element to achieve this;
  - b. Shifting to a results-orientated mainstreaming of CCA with adequate support and guidance from headquarters;
  - c. Investing adequate time and resources to strengthen the design quality of CCA responses and to facilitate government buy-in;
  - d. Designing and achieving do-no-harm and win-win CCA responses, to the extent feasible;
  - e. Having systematic approaches to leverage project results to generate impact at landscape scales and above through effective non-lending activities;
  - f. Having a robust results framework and monitoring system to track IFAD’s progress in strengthening climate resilience and identify best practices;
  - g. Addressing the skills gaps in appropriate and adequate CCA technical capacities within IFAD and project management units, and;
  - h. A shared vision and commitment of management and staff to deliver much needed CCA action.
300. **Ongoing decentralization efforts are necessary to bring IFAD capacities in closer proximity to clients, beneficiaries and partners to enhance the impact of its operations,** including those linked to CCA response. At the same time, transitioning to the new arrangements during 2021-2023 is likely to have consequences for addressing the above bottlenecks and, thereby, to deliver IFAD11 and IFAD12 CCA commitments. Hence these risks need to be identified and managed to ensure timely delivery of CCA results.

## B. Recommendations

301. As noted earlier, the IPCC has warned that life on earth faces catastrophic consequences unless drastic and immediate action is taken to address climate change. Therefore, IFAD needs to address the bottlenecks identified in the conclusions and a set of actionable recommendations are presented below. These recognize the interlinkages among these bottlenecks. Furthermore, these recommendations also reflect the fact that mainstreamed CCA responses are not only affected by the challenges to achieving CCA resilience outcomes but intertwined with the bottlenecks to overall operational performance.
302. **Recommendation 1: Update IFAD Strategy and Action Plan on Environment and Climate Change 2019-2025 to comprehensively address the bottlenecks to CCA performance,** including but not limited to the following: As part of the update to the Strategy, present a resources and results framework with estimated financial and human resources needed for each output of action areas.
- a. Drawing from IFAD’s recent operational experience and those of other development actors, establish and disseminate a corporate conceptual framework for climate resilience to guide designs, develop a results framework and monitor project-level results. Capacities must be in place within project implementation units to understand and track the resilience results. To the extent feasible, such a framework should be consistent with the practices of other international actors to facilitate joint work and coherence among country-wide efforts to track CCA resilience outcomes.

- b. Update the CCA-related corporate key performance indicators to capture actual changes to climate resilience, in line with this conceptual framework. Taking stock of its experience in implementing and tracking CCA responses, IFAD should periodically refine the corporate-level indicators to measure outcome-level changes to climate resilience.
- c. IFAD's results-based monitoring and evaluation framework of operations should dedicate adequate financial and human resources to integrate the use of relevant spatial information (derived from increasingly available satellite imagery or spatial databases) to systematically track resilience outcomes and to validate these observations with site visits.
- d. Getting the design for CCA right requires in-depth knowledge of climate change challenges and practices at the project and national levels. To ensure the availability of such expertise in IFAD's quality assurance processes based in Rome, and in line with the practices of other IFIs, establish an external peer review panel. For a given intervention, the panel will constitute context-specific experts with knowledge of local conditions, and thereby, enhance and ensure the relevance of CCA response. The panel review will be seamlessly integrated into the existing quality assurance process and take place concurrently with inputs sought from all other reviewers. IFAD should ensure necessary time is allocated for this external review. The panel is expected to reduce the frequency and need to make substantial modifications to designs mid-course thereby enhancing the effectiveness and efficiency of CCA responses.

303. **Recommendation 2: Expand CCA guidance to include restorative solutions**, to not only fulfil IFAD's commitment to do-no-harm but to surpass it, and to actively seek to restore the environment. Select IFAD CCA responses have already exceeded the do-no-harm stance to provide solid evidence that development goals can be achieved without harming the environment. Since these cases were pursuing long-term sustainability through restorative actions, they also show that sustainable development can contribute to achieving the 2030 and 2050 goals. Where feasible, the guidance will include win-win solutions – CCA responses that achieve economic, climate and environmental resilience concurrently.

- a. The guidance should draw from the successful examples of IFAD (including those identified in the case studies). To ensure the relevance and effectiveness of such guidance, include representation from the project delivery teams responsible for successful projects in drafting the guidance.
- b. In addition, IFAD should take concrete steps to promote government buy-in of win-win solutions when necessary. To this end, IFAD should build a knowledge base of viable restorative CCA solutions based on its CCA experience and ensure it allocates sufficient capacities, financial resources and time to advocate at all levels, from local to national.

304. **Recommendation 3: IFAD should undertake an analysis of staff capacity and the skill sets needed to design, implement and monitor the ability to deliver climate finance of 40 per cent of PoLG under IFAD12.** This could be built on the recent HR study and focus on the HR needs for CCA responses. The needs assessment should cover not only IFAD staff but also project staff. The study should fully assess the interim risks posed by the ongoing decentralization process to delivering IFAD11 and IFAD12 CCA commitments and determine the requisite capacities and skills at all levels of a decentralized IFAD in order to manage these risks. Based on the findings of this study, IFAD should address the capacity deficits identified.



305. **Recommendation 4: IFAD should systematically prioritize scaling up and other non-lending activities with dedicated resources.** The future of IFAD's ability to strengthen smallholder climate resilience successfully at scale depends on additional funding to promote these activities at the country level, and, when feasible, at regional and global levels. To this end, IFAD should:
- a. Learn from its successful experiences and facilitate government ownership and partnerships;
  - b. Dedicate sufficient resources, capacities and time to pursue these activities;
  - c. Include these activities in project designs with appropriate goals and targets and delineate a strategy to pursue these targets. Related activities should continue throughout project implementation, and not just emerge towards the end of a project cycle;
  - d. Ensure adequate support and guidance to facilitate non-lending activities, as agreed under Decentralization 2.0, and;
  - e. Establish incentives and accountability mechanisms to achieve (or make progress towards) increased results through these activities.
306. **Recommendation 5: Develop and implement a framework and strategy for partnership which is necessary to achieve the results identified in COSOPs and related operations.** The framework should: i) identify the specific partnerships needed to scale up, expand outreach, manage knowledge and strengthen the CCA technical capacities of IFAD and the project management unit; ii) propose approaches to establish these partnerships; iii) articulate expected outputs and outcomes of the partnerships; and iv) and estimate costs involved (if any).
307. **Recommendation 6: IFAD should ensure sustained organizational learning from operational experience to improve current and future CCA performance.**
- a. Learning from success requires identifying the successful CCA responses; putting in place discursive mechanisms to understand the factors that contributed to success; based on this discussion, identifying design opportunities where this experience will be relevant and ongoing operations that could benefit from this experience; and finally, using the discussion to take steps to improve relevant designs and strengthen ongoing interventions.
  - b. At the minimum, discussions should include relevant project delivery teams, supervision mission members, as well as relevant staff in the Strategy and Knowledge Department and the Programme Management Department. As needed, other partners and implementing partners, and external subject experts could be included.
  - c. Establish corporate as well as unit goals and targets and accountability for achieving learning results. To this end, IFAD should review progress periodically and update its approaches as knowledge develops. The learning outcomes should be included as part of the Results Management Framework and therefore be reported annually.
  - d. At the corporate level, the learning framework should be linked to the Climate Strategy and Action Plan (under Action Area 2).

# Annexes





# Annex I.

## List of projects selected for case studies

TABLE 1  
List of projects selected for case studies

Country	Project ID	Project abbreviation	Approval date	Closing date	Supplementary funds for CCA	Project name	Field visits
<b>Bangladesh</b>	1100001647	CCRIP	10/04/2013	31/03/2020	None	Coastal Climate Resilient Infrastructure Project	No
<b>Belize</b>	2000001247	Be-Resilient	15/04/2018	30/06/2025	GCF	Resilient Rural Belize	No
<b>The Plurinational State of Bolivia</b>	1100001598	ACCESOS-ASAP Programme	13/12/2011	31/03/2020	ASAP	Economic Inclusion Programme for Families and Rural Communities in the Territory of Plurinational State of Bolivia	No
<b>Burundi</b>	2000001009	PRODEFI-II	15/09/2015	30/06/2022	ASAP	Value Chain Development Programme Phase II	Yes
	2000001146	PIPARV-B	14/12/2018	31/12/2025	None	Agricultural Production Intensification and Vulnerability Reduction Project	
<b>Cabo Verde</b>	1100001604	POSER-C	21/09/2012	30/09/2022	ASAP	Rural Socio-Economic Opportunities Programme	Yes
<b>Chad</b>	1100001691	PARSAT	01/12/2014	30/09/2022	GEF, ASAP	Project to Improve the Resilience of Agricultural Systems in Chad	Yes
<b>Egypt</b>	1100001745	SAIL	16/12/2014	31/12/2023	GEF, ASAP	Sustainable Agriculture Investments and Livelihoods	Yes

Country	Project ID	Project abbreviation	Approval date	Closing date	Supplementary funds for CCA	Project name	Field visits
Ethiopia	2000001134	PASIDP-II	22/09/2016	30/09/2024	ASAP	Participatory Small-Scale Irrigation Development Programme II	No
	2000001598	LLRP	12/09/2019	10/04/2026	None	Lowlands Livelihood Resilience Project	
	1100001522	PCDP III	11/12/2013	08/11/2019	None	Pastoralist Community Development Programme III	
	100001521	RUFIP II	15/09/2011	30/06/2021	None	Rural Finance Intermediation Programme II	
		CBINReMP	17/03/2010	31/03/2019	GEF	Community-Based Integrated Natural Resources Management Project	
Honduras	1100001682	PRO-LENCA	17/08/2013	30/09/2022	GEF	Competitiveness & Sustainable Rural Development Project in South-western Border Corridor	Yes
Kenya	1100001651	KCEP-CRAL	22/04/2015	31/03/2023	ASAP	Cereal Enhancement Programme - Climate Resilient Agriculture Livelihoods Programme	Yes
	1100001544	UTaNRMP	03/04/2012	30/06/2023	None	Upper Tana Catchment Natural Resource Management Project	
	2000001132	ABDP	11/12/2017	31/12/2026	None	Aquaculture Business Development Programme	
	1100001378	PROFIT	16/09/2010	31/12/2019	None	Programme for Rural Outreach of Financial Innovations & Technologies	
Kyrgyzstan	1100001626	LMDP	17/12/2012	31/03/2020	None	Livestock and Market Development Programme I	Yes
	1100001709	LMDP II	11/12/2013	30/09/2021	ASAP	Livestock and Market Development Programme II	
Madagascar	2000000850	AD2M Phase II	15/09/2015	30/06/2024	ASAP	Project to Support Development in Menabe & Melaky Regions Phase II	Yes
Mali	1100001444	PAPAM	16/09/2010	31/01/2019	ASAP	Fostering Agricultural Productivity Project	Yes
Republic of Moldova	1100001669	IRECR	09/12/2013	30/09/2021	GEF	Inclusive Rural Economic and Climate Resilience	Yes
	2000001156	RRP	26/11/2016	31/03/2024	ASAP	Rural Resilience Project	
Nepal	1100001723	ASHA	13/09/2014	31/01/2023	ASAP	Adaptation for Smallholders in Hilly Areas Project	No
Nicaragua	1100001683	NICADAPTA	25/11/2013	30/06/2021	ASAP	Adapting to Markets and Climate Change Project	No



Country	Project ID	Project abbreviation	Approval date	Closing date	Supplementary funds for CCA	Project name	Field visits
Niger	2000001810	ProDAF-Diffa	29/09/2018	30/09/2025	None	Family Farming Development Programme in the Diffa Region	Yes
	1100001688	ProDAF	22/04/2015	31/03/2024	GEF, ASAP	Family Farming Development Programme in Maradi, Tahoua and Zinder Regions	
	1100001646	RUWANMU	21/09/2012	31/12/2018	None	Ruwanmu Small-Scale Irrigation Project	
	1100001625	PASADEM	13/12/2011	30/09/2018	None	Food Security and Development Support Project in the Maradi Region	
	2000002678	PRECIS	12/09/2019	31/03/2027	GCF	Project to Strengthen Resilience of Rural Communities to Food and Nutrition Insecurity	
Rwanda	1100001497	PASP	11/12/2013	31/03/2021	ASAP	Climate Resilient Post-Harvest and Agribusiness Support Project	No
	2000001195	RDDP	22/09/2016	30/06/2023	None	Rwanda Dairy Development Project	
Sudan	1100001732	LMRP	16/12/2014	30/09/2022	GEF, ASAP	Livestock Marketing and Resilience Programme	Yes
	2000001517	IAMDP	11/12/2017	30/09/2024	None	Integrated Agricultural and Marketing Development Project	
	2000002105	SNRLP	12/09/2019	30/06/2026	None	Sustainable Natural Resources and Livelihoods Programme	
Uganda	1100001681	PRELNOR	16/12/2014	31/03/2023	ASAP	Project for the Restoration of Livelihoods in the Northern Region	During Country Strategy and Programme Evaluation Uganda

## Annex II.

# Theory of change: strengthening smallholder farmers' CCA

TABLE 1

Theory of Change: strengthening smallholder farmers' climate adaptation

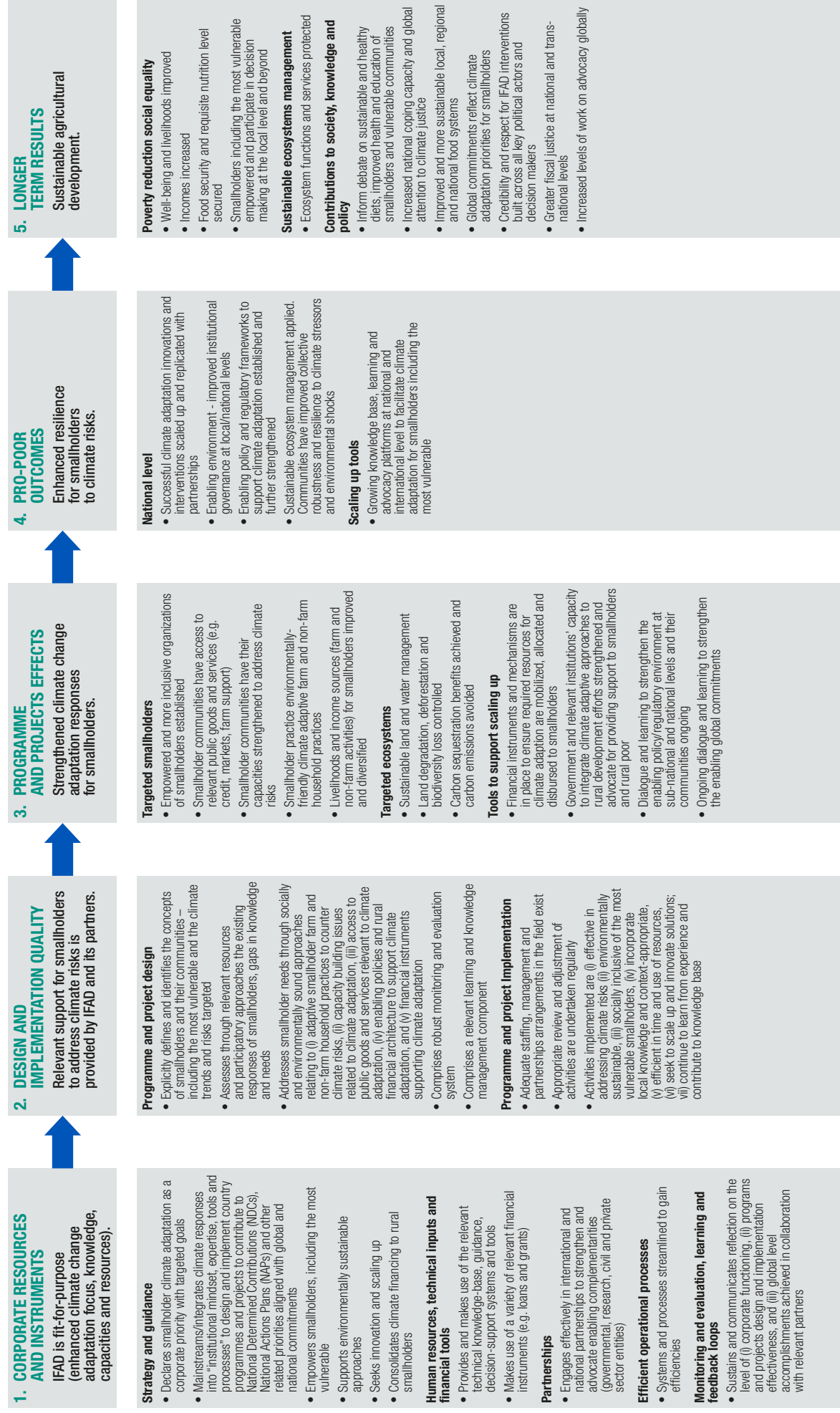
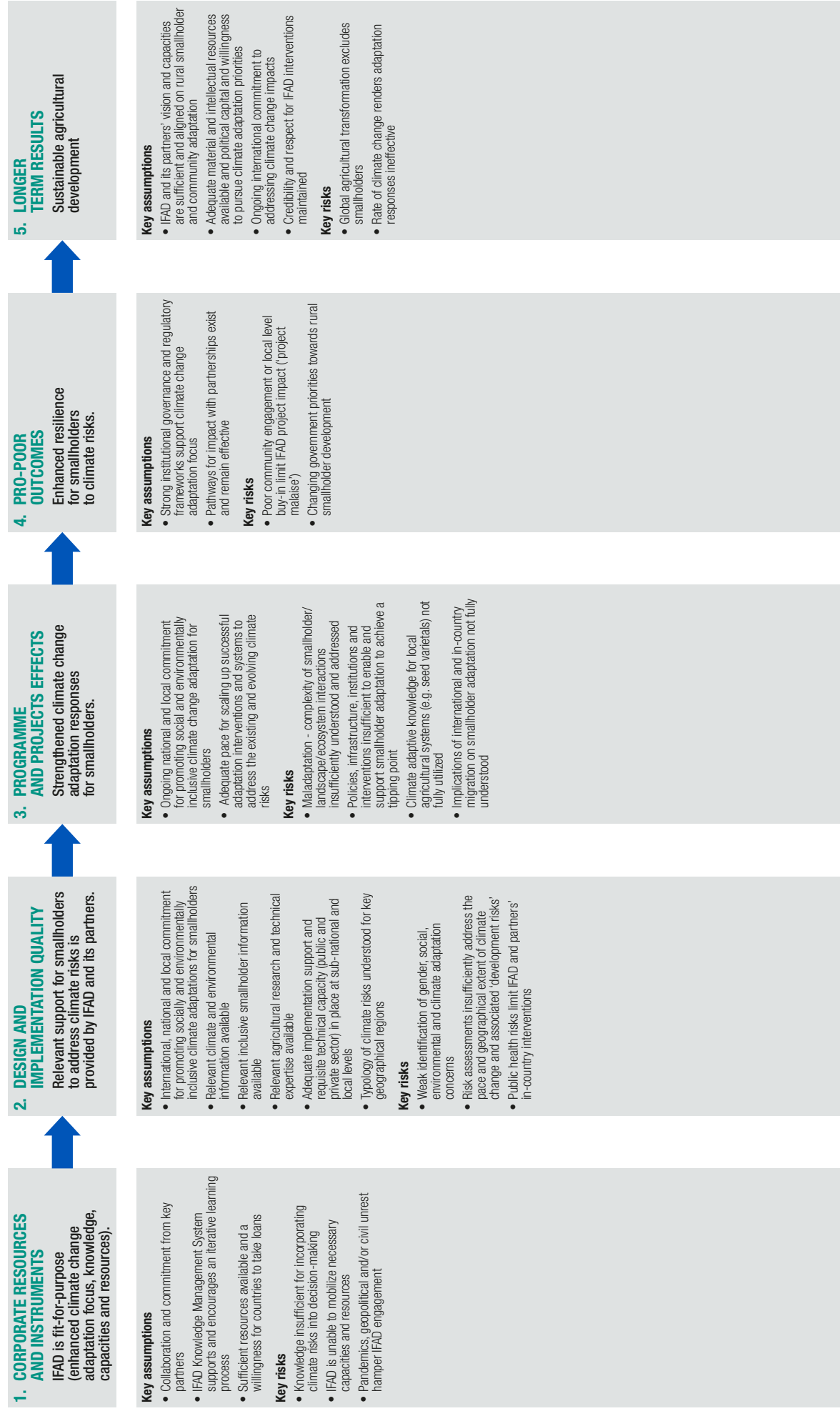


TABLE 2

## Key assumptions and key risks for theory of change



## Annex III.

# Additional guidance for climate adaptation response

1. How to do note: Crop selection for diet quality and resilience. March 2021. <https://www.ifad.org/en/web/knowledge/publication/asset/42498563>
2. Adaptation Framework Tool. January 2021. <https://www.ifad.org/en/web/knowledge/publication/asset/42259302>
3. Climate Adaptation in Rural Development (CARD) Assessment Tool. March 2019. <https://www.ifad.org/en/web/knowledge/publication/asset/41085709>
4. Toolkit: Supporting smallholder seed systems. March 2018. <https://www.ifad.org/en/web/knowledge/publication/asset/40250887> (This mostly relates to the management of seed systems, but its approach is well adapted to the local agroecologies and adapted to climate change).
5. How to do note: Design of gender transformative smallholder agriculture adaptation programmes. January 2018. <https://www.ifad.org/en/web/knowledge/publication/asset/40215442>
6. Toolkit: Designing and implementing conservation agriculture of IFAD investments in sub-Saharan Africa. December 2016. <https://www.ifad.org/en/web/knowledge/publication/asset/40196422>
7. Gender in climate-smart agriculture, Module 18 for the Gender in Agriculture Sourcebook. <https://www.ifad.org/en/web/knowledge/publication/asset/39192471>
8. How to do note: Fisheries, Aquaculture and Climate Change. November 2015. <https://www.ifad.org/en/web/knowledge/publication/asset/39182309>
9. How to do note: Climate change risk assessments in value chain projects. September 2015. <https://www.ifad.org/en/web/knowledge/publication/asset/39181457>
10. How To Do Note: Measuring Climate Resilience. September 2015. <https://www.ifad.org/en/web/knowledge/publication/asset/39181417>
11. Scaling up note: Climate-resilient agricultural development. <https://www.ifad.org/en/web/knowledge/publication/asset/39181197>
12. The potential for scale and sustainability in weather index insurance for agriculture and rural livelihoods. March 2010. <https://www.ifad.org/en/web/knowledge/publication/asset/40239774> (This document focuses mostly on developing weather risk insurance, but is related to the CCA issue and may be especially relevant for countries prone to disasters).



## **Annex IV.**

### Relevance of CCA response - summary of evidence from case studies

TABLE 1

## Relevance of IFAD interventions in case studies

Country	Relevance to NDCs	Overall assessment of relevance	Ratings by evaluation team
Bangladesh	The project directly contributes to the priority area of climate-resilient infrastructure of the National Adaption Plan for Action 2009 due to activities aimed at developing infrastructure resilient to floods, cyclones and tidal surges.	In addition to alignment with NDCs, this infrastructure project was highly relevant to the needs of beneficiaries and IFAD priorities. However, the project relied largely on geographic targeting and the participation and impact on women could not be sufficiently ensured.	Satisfactory
Belize	The programme responds directly to the country's needs to increase food security and rural livelihoods by improving agricultural production for selected value chains, enhancing smallholders' resilience to climate adversities, and improving their ability to access markets.	Highly relevant. The project focused on assisting the targeted population in highly vulnerable areas, prone to the negative effects of CCA. It is directly relevant to the national priorities. The finance instruments supported enhancing the CCA knowledge base.	Satisfactory
Plurinational State of Bolivia	ACCESOS-ASAP investments aimed at reducing vulnerability in access to and efficient use of water for irrigation, reducing water losses and supplementing the need for water in periods of scarcity. This contributes to the Plurinational State of Bolivia's NDCs, which focus on structural solutions to the climate crisis, highlighting the need to tackle climate change from a change of means of living, connected with nature and developed from a community perspective.	Highly relevant. The project considered the country's climate threats and priorities as well as agroecological characteristics. The integration of ASAP in ACCESOS led to mainstreaming climate response into all project components. Its community-based approach resulted in a project responsive to community demands with good targeting.	Highly satisfactory
Burundi	PRODEFI II contributed to the NDC via its activities of integrated water resources management, protection of aquatic- and land-based ecosystems and enhanced research and extension of drought-resistant forest species. PIPARV-B contributed with integrated water resources management, protection of aquatic- and land-based ecosystems.  CCA was one of the strategic objectives of COSOP 2016-2021 and was well aligned with NDCs and NAP.	Political tensions renewed since 2015, just before PRODEFI-II was approved. Yet, IFAD remained among the few agencies still active and the project continues. PRODEFI-II did not adequately target the most marginalized. However, this issue was addressed in the follow-on PIPARV-B project where sex-disaggregated data was available.	Satisfactory
Chad	The PARSAT project contributed to agricultural sectorial priorities but also to cross-cutting priorities such as reinforcing the capacities of the stakeholders towards CCA and fostering resilience. The project financially participated in the National Strategy against CC (2017) and covers the regions (Batha, Guéra, and Hadjer-Lamis) prioritized on the NDC (2015).	In addition to the NDCs, PARSAT contributed to policy dialogue, and met the needs of smallholders.	Satisfactory
Cabo Verde	The projects contributed to the 2015 NDC on integrated management of water resources, adaptation of agro-sylvo-pastoral systems, development of water-efficient small-scale irrigation and soil protection against erosion.	The ASAP Project was in line with the national CCA priorities and NDCs. However, the recent enduring droughts during the rainy seasons point to the risk of relying too much on water-related CCA activities.	Moderately unsatisfactory
Egypt	The project interventions such as farmer field schools, trainings and EWS, were in line with the national list of adaptation activities. The list included capacity-building and human capital building and collection of additional data on effects of climate adaptation, as well as with the third national communication. In addition, land reclamation remains one of the priority interventions of the Government of Egypt.	The project interventions were relevant to the climate risks in the short term and the project contributed to the NDC priorities. However, the financial instruments could have better laid out against the adaptation rationale. While the project was potentially harmful to the environment and a threat to sustainability in the very long term, it addressed the pressing present needs of the most vulnerable human systems.	Moderately satisfactory

Country	Relevance to NDCs	Overall assessment of relevance	Ratings by evaluation team
Ethiopia	<p>PASIDP's objectives in the agricultural sector were: market-based agricultural development, specialized support services for differentiated agroecological zones, and special efforts for pastoral development, and are aligned with the Federal Government's frameworks of ensuring food security and combatting poverty reduction.</p> <p>CBINReMP, with its focus on the rehabilitation of degraded land, was in line with the strategies to develop sustainable forestry and reduce fuelwood demand.</p> <p>LLRP stands out as a project that was designed to build resilience of livelihood systems by strengthening three specific capacities: adaptive, absorptive, and transformative capacity, which also are aligned with the Federal Government's frameworks.</p>	<p>All four projects were considered highly relevant. Designs systematically aligned with national policies and priorities related to CCA, trends in climate threats and were conflict-sensitive. The Lowlands Livelihood Resilience Project approved in 2019 stands out as a project designed to address CCA and foster climate resilience among competing systems (mixed system of sedentary crop-livestock and nomadic pastoralism).</p>	Highly satisfactory
Honduras	<p>PRO-LENCA responded to a strong interest expressed by the Government of Honduras to address the developmental needs of the poor rural population in the south-western border corridor of the country, by focusing on agricultural production in the context of climate change. As part of its Nationally Determined Contributions, Honduras has committed to adopting sustainable agricultural and livestock practices.</p>	<p>Highly relevant. PRO-LENCA responded to the country's climate threats, and priorities and modified its conceptualization of CCA response to reflect the country's needs. GEF funds provided an opportunity to create wider impact on resilience. However, coordination and implementation delays associated with GEF-funding mechanisms posed challenges.</p>	Satisfactory
Kenya	<p>The assessed programmes and UTaNRMP are aligned to the Kenya Vision 2030 and to Kenya's climate change and environmental priorities. However, PROFIT design did not explicitly include CCA strategies, aimed at climate-resilience outcomes. It did not clearly show how the proposed activities would contribute to climate-proofing the value chains to be developed.</p>	<p>All projects were highly relevant to the country context and CCA needs. UTaNRMP is particularly relevant to Kenya's climate-related policies, especially on the nexus between social-ecological systems, livelihoods, and climate resilience. Meanwhile, the KCEP-CRAL made use of ASAP funding to adjust and mainstream its CCA activities in line with the priorities of the new government.</p>	Satisfactory
Kyrgyzstan	<p>The components of the LMDP, which are community pasture management, livestock health and production services, market value chain development and project management, are aligned with the priority of land use on the Intended Nationally Determined Contributions, as well as with the priority of natural resource management mechanisms in the National Sustainable Development Strategy of the Kyrgyz Republic.</p>	<p>Overall, LMDP I and II interventions were relevant to the climate risks in the country. However, the activities should have focussed more on systemic long-term climate change trends and the considerable impacts these will have on target groups.</p>	Moderately satisfactory
Madagascar	<p>The project contributes to the following objectives of the NDC (2015): 1) intensive awareness-raising campaigns communicating the adverse effects of climate change and environmental degradation; 2) development of resilient agriculture 3) promoting climate-smart agriculture; 4) promotion of intensive/improved rice farming system.</p>	<p>Political ecology issues that lead to marginalization of the poor and women were addressed at the local level but not at the landscape level. The project did not adequately serve the needs of internal migrants of poor people from the south of the country fleeing the severe impact of climate change. Also not addressed is the issue of cow theft, a constraint to integrating livestock development in CCA responses.</p>	Moderately satisfactory
Mali	<p>PAPAM contributes to the following priorities of the NDC (2016): 1) forest management for the restoration of degraded ecosystems; assisted natural regeneration and the fight against silting up in waterways and the reinforcement of the protection of protected areas; 2) the development of intelligent agriculture that is resilient to climate change; 3) development of renewable energy and promoting energy efficiency.</p>	<p>CCA components of PAPAM-ASAP responded to the threats of erratic climatic conditions involving higher temperatures, prolonged dry seasons and frequent flooding in Mali. The project continued even after the major political turmoil and armed conflict that began in Mali. The project adapted well by restricting activities to the southern region not affected by conflict (Kayes and Sikasso). ASAP activities accelerated the overall project disbursement.</p>	Satisfactory

Country	Relevance to NDCs	Overall assessment of relevance	Ratings by evaluation team
Republic of Moldova	The projects in the case studies covered the whole country and pursued the goals of improving the climate resilience-focused agrotechnology, water management, value chains, infrastructure, and financing which are included in the Republic of Moldova's NDCs and First National Adaptation Plan 2014-2017. Conservation agriculture, promoted by IFAD-funded projects, was a timely intervention to help the Republic of Moldova meet its NDCs and advance its National Adaptation Action Plan.	The project was highly relevant to the climate threats and the government priorities. However, the project was not successful in targeting smallholders ("many beneficiaries had land holdings over 200 Ha") due to focus on heavy-machinery-based conservation agriculture. This focus restricted women participation.	Moderately unsatisfactory
Nepal	The project works in operationalizing NAPAs at local level, therefore, it is directly aligned with national priorities. The project worked towards preparation and implementation of Local Adaptation Plans for Action (LAPAs). Are local-level iterations of NAPAs based on local-level analysis of risks, vulnerabilities and interventions required.	Overall, the project is highly relevant and it operationalizes the National Adaptation Plan for Action at local levels and is relevant to the country CCA priorities and those of the smallholders.	Satisfactory
Nicaragua	NICADAPTA contributed to the consolidation of results achieved by the national coffee and cocoa policy and to the NDCs through: i) strengthening the position of smallholders in the relevant value chains; ii) promoting collective action by smallholders (cooperatives and associations).	The project is highly relevant. In particular, it provided an integrated platform for implementing social policies, agroecology, food sovereignty and CCA responses. The project is also highly relevant to national policy and institutional guidelines. The targeting of rural poor smallholders and women was good. However, more could have been done to ensure inclusion of the indigenous peoples.	Satisfactory
Niger	PASADEM contributed to the 2015 NDC by dealing with aspects of resilience in the rural environment. Despite the close alignment to the I3N initiative 'Niger people nourish Niger people', the project's designs did not establish approaches to other government plans that are relevant to CCA or related targeting. The projects' designs are not aligned to respective national frameworks and do not consider the integration of appropriate climate-proofing measures.	Interventions were quite well aligned with the national flagship food security initiative, I3N. ProDAF Diffa innovatively paid special attention to local conflicts around pastoral resources and populations displaced by Boko Haram violent conflict. Risks of insect and diseases infestation were addressed. In addition to food security, the new project PRECIS addresses the issue of nutrition security.	Satisfactory
Rwanda	PASP goals were to align directly with the Ministry of Agriculture and Animal Resources' policy framework and investment programme. The RDDP had directly contributed to improved policy and dialogue, informing discussions linked to the National Strategy for Transformation and providing evidence on discussions with UNFCCC regarding livestock impacts on climate change adaptation and mitigation.	Overall, PASP and RDDP's interventions are relevant to climate risks. However, such risks are not the primary driver of project interventions.	Moderately satisfactory
Sudan	The Livestock Marketing and Resilience Programme (LMRP) and Integrated Agricultural and Marketing Development Project (IAMDP) do not have clear contributions to the NDCs highlighted in the case study. However, the Sustainable Natural Resources and Livelihoods Programme (SNRLP) is in line with national priorities for supporting the agricultural sector and local governance systems for natural resources management avoiding conflicts. SNRLP will contribute to the objectives of the Sudan National Adaptation Programme of Action. It is also aligned with the Sudan's National Agriculture Investment Plan.	Highly relevant to the country context and CCA needs. Some improvements were needed in conceptualizing the resilience of the competing priorities of the different agricultural systems benefiting from past project experience. For instance, the project did not sufficiently address the risk of exacerbating the tensions between nomadic pastoralists and sedentary livestock-crop farmers when assigning land rights.	Moderately satisfactory
Uganda	Climate-resilient roads and crop technology were in line with Uganda's NDCs.	Overall project worked with highly marginalized communities in a climate risk-prone area.	Satisfactory

Source: IOE elaboration based on case studies.

## **Annex V.**

# Effectiveness of CCA response - summary of evidence from case studies



TABLE 1

## Effectiveness – overall assessment and rating

Country case study	Effectiveness of targeting & outreach - benefits reaching communities, women, youth, indigenous peoples, and other marginalized groups	Progress towards resilience outcomes of CCA response	Performance of non-lending activities	Overall assessment
<p style="text-align: center;"><b>Bangladesh</b> CCRIP (2013-2019)</p>	<p>The project's geographic targeting precluded the project from tailoring solutions for women and poorer sections of the population. In addition, the project's focus on infrastructure did not lend itself to meeting inclusion needs beyond the participation of women and poor.</p>	<p>The project is very likely to be scaled up. The project infrastructure proved to be climate resilient to regular monsoons and cyclones. Disruption of traffic in monsoon season was substantially reduced. Similarly, market infrastructure and roads were able to withstand Cyclone Amphan.</p>	<p>Good cofinancing partnerships between international development partners. Scaling up of results through mainstreaming of practices into national infrastructure building codes and into LGED's practices. Knowledge-sharing within IFAD (between CCRIP and newer project, Promoting the Resilience of the Vulnerable through Access to Infrastructure, Improved Skills and Information) and with partners (LGED).</p>	<p><b>Satisfactory</b></p> <p>The project focused mainly on providing climate-resilient infrastructure. Overall the project was highly effective in reaching its output targets. Constructed structures proved to be climate resilient. IFAD had long-term partnerships with relevant government authorities and entered into this project with strong partnerships with ADB and KFW, which proved to be useful in making the project more visible. It is very likely that CCRIP design will inform the national standards for climate-resilient infrastructure that is being developed. Gender considerations were included in design but women's participation in the markets was lower than anticipated when they opened.</p>
<p style="text-align: center;"><b>Burundi</b> PRODEFI-II (2015-2021) PIPARV-B (2018-2025) *</p>	<p>Projects target overlapping provinces in the central plateau of the country. The earlier PRODEFI-II focused primarily on developing marshlands through value chains for rice and dairy. MTR recognized that the project was overlooking the more vulnerable groups inhabiting the adjoining hillsides. As a result, PRODEFI-II and the more recent PIPARV-B started to focus on a more landscape-based (integrated watershed management) and community-driven approach targeting all the production systems involved. Also, both projects and guidance expressed awareness of the importance of assessing the specific CCA needs of the different vulnerable groups and cross-cutting beneficiaries involving women, youth and the Batwa minority. Project beneficiaries were 39% women (targeted 40%), according to the latest supervision report.</p>	<p>The project focus shifted from a value chain-centric approach focussed on marshlands under the earlier years of PRODEFI-II towards a more climate change adaptive and social and environmentally inclusive and community-driven integrated watershed management approach, covering a more diverse portfolio of value chains development catered to the needs of different beneficiary groups.</p>	<p>PRODEFI-II contributed to the national policy against soil erosion and established the national technical standards for climate-resilient rural engineering of hydroagricultural infrastructures. Knowledge management and communication were handled at national level but inadequately. Key partnerships with national agencies (Institut Géographique du Burundi and Institute of Agricultural Sciences of Burundi) and national NGOs exist but need strengthening to build institutional capacity and also to produce solid knowledge products.</p>	<p><b>Moderately satisfactory</b></p> <p>IFAD's country strategies and the evaluated projects reflect a clear CCA mainstreaming awareness and approach. Both projects were environmentally and socially inclusive and involved integrated watershed/ landscape management. More attention could still be given to CCA vulnerability of target groups, the role of wildlands, overall spatial planning, monitoring and evaluation (GIS, remote sensing) and coordination with other international development partners.</p>

Country case study	Effectiveness of targeting & outreach - benefits reaching communities, women, youth, indigenous peoples, and other marginalized groups	Progress towards resilience outcomes of CCA response	Performance of non-lending activities	Overall assessment
<p><b>Belize</b> Be-Resilient (2018-2025)</p>	<p>No available information on the effectiveness of targeting and outreach. Design and implementation used climate vulnerability maps to target. These maps were to be updated periodically.</p>	<p>The project has a strong potential to achieve its CCA objectives and strengthen resilience of targeted communities and populations.</p>	<p>KM: The project design included KM and partnerships as one of its core activities for sustainability and impact. However, there is no available data on the project's effectiveness on KM. Scaling up: Scaling up is seen as a potential, from the design of the programme and its activities. The project has the potential to expand and replicate the interventions in other communities that have similar characteristics and challenges of the beneficiary groups.</p>	<p>N/A - Project became effective only recently.</p> <p>The project is in its very early implementation stages. Its design and overall approach show potential for transformative effects, particularly for building resilience among the most vulnerable population. Climate response systematically analysed related vulnerabilities and used climate vulnerability maps to identify target groups.</p>
<p><b>The Plurinational State of Bolivia</b> ACCESOS-ASAP (2013-2019)</p>	<p>The ASAP MTR (2018) noted that the project responded well to community demands and its design took into account project-level agroecological characteristics. The project reduced the workload of women beneficiaries (mainly in relation to accessing water) and increased their assets. Youth-related outcomes were observed, related to entrepreneurship as well as natural resource management (60% women, 40% men and 50% youth).</p>	<p>All 16 municipalities involved in the ACCESOS-ASAP integrated CCA risk management plans into their territorial development plans. 4,231 families increased their natural and physical assets to manage climatic risks. 4,321 households received targeted information on climate change. The project enhanced the capacity of community groups, providing them with skills to reflect on priority issues and engage with policymakers and other interested parties on disaster risk reduction and CCA. However, the strong focus on climate resilience elements to some extent, came at the cost of biodiversity.</p>	<p>The KM approach was successful in allowing target groups and communities to gain new experiences, learn about new technologies to build resilience building and manage climate risks. Learning was mainly at a local level, and not at national level. Concepts and experiences from the Plurinational State of Bolivia were being used in other countries in the region. A good potential for scaling and replication was demonstrated at municipality and community level (horizontal scaling). Partnerships were established with HELVETAS and UN Women. The cooperation with HELVETAS contributed importantly to strengthen climate change/risk capacities within the IFAD implementation team. It allowed them to adapt these tools and apply them in the assessment of interventions within other ACCESOS municipalities (non-ASAP municipalities).</p>	<p><b>Satisfactory</b></p> <p>The implementation pursued a community-based approach. Youth inclusion was successfully achieved. Challenges remain, including weak women participation and their low representation within communities. The project played a significant role in supporting community-based land mapping that effectively tapped available local, indigenous knowledge and experience within the communities. Overall, the response to climate change/risks was effective. Vulnerability was reduced through investments in risk reduction and adaptation measures implemented within the target areas.</p>

Country case study	Effectiveness of targeting & outreach - benefits reaching communities, women, youth, indigenous peoples, and other marginalized groups	Progress towards resilience outcomes of CCA response	Performance of non-lending activities	Overall assessment
<p><b>Chad</b> PARSAT (2015-2022)</p>	<p>The targeted regions in the Sahel zone represent the most food-insecure, poorest and climate-change-vulnerable areas. Targeting of women and youth was satisfactory. Project was on track or ahead of design expectations: beneficiaries included 47% women and 30% youth. Awareness of the need to assess CCA vulnerability in targeting was in its very early stages. The design respects the needs of transhumant pastoralists. However, no guidance was given to operationalize this during implementation. At the beginning, the project established activities within ecologically sensitive/protected areas. Only recently has the project developed a Cadre de gestion environnementale et sociale document.</p>	<p>PARSAT carried out education activities (literacy, environment and nutrition) and engaged with youth and women to raise awareness of climate adaptation needs. It improved agricultural water management practices but lacked an inclusive approach. It did not pursue a community-based larger landscape CCA planning process involving anti-erosive, ecosystem restorative and protective activities. The project constructed climate-resilient infrastructures for water management, roads and storage. It also supported climate-resilient income-generating activities. It established a GIS system and in collaboration with ICRAF, initiated an impact study of agricultural practices it introduced.</p>	<p>The project did not have a systematic approach to policy dialogue on CCA. It planned to support NAPA via validation of policy and strategic documents and integration of CC in local development plans. It established a partnership with the EU on the Alliance Mondiale Contre le Changement Climatique project to support the national Strategy Against Climate Change. The geoportal developed by ICRAF was found useful by other Ministries as planning/monitoring tools. Communication tools were available while work on knowledge products started recently.</p>	<p><b>Moderately satisfactory</b></p> <p>Mainstreaming CCA was carried out well and project was effective, efficient and sustainable. Areas of Improvement include: assessing the CCA needs of diverse vulnerable groups, improving guidance to respect competing needs of transhumant pastoralists, adhering to environmental and social values and respecting and mapping environmentally protected areas. It is recommended that the project work towards a more community-based and wider landscape approach, and respect the role of wildlands.</p>
<p><b>Cabo Verde</b> POSER (2013-2022) mid-2017 onwards added ASAP funds, and became POSER-Climate</p>	<p>Overall, targeting was satisfactory. The POSER parent project targeted rural areas of 7 of the 10 islands, based on poverty and agricultural potential. Of these, POSER-C targeted 4 islands to support integrated water basin management. 50% of the project beneficiaries were women (MTR). However, only 27% were represented in management bodies. The project was aware of the need to better assess the specific CCA vulnerabilities of the targeted beneficiaries.</p>	<p>In its final phase, the project was working on monitoring approaches to integrate CCA concerns into rural poverty plans and activities. The integrated watershed management activities were fragmented and yielded limited results. These focused on solar-powered drip-irrigation infrastructure development rather than anti-erosive and ecosystem restorative activities. Renewable energy through solar panels for water pumps would have led to significant savings in energy costs (50 to 90%). A major drawback was the absence of rains during the last three years. The project design did not include CCA activities which were less water/rain dependent.</p>	<p>The project worked reasonably well with the Government, NGOs and private sector. Partnerships were established with relevant national agencies (e.g. University of Cabo Verde, INMG and ANAS) to contribute to the policy dialogue on agricultural water management and pricing. More involvement and coordination with other international partners were needed (e.g. with Luxembourg). Some advances were made in monitoring (a GIS system was established), communications and knowledge product development.</p>	<p><b>Moderately unsatisfactory</b></p> <p>The performance of POSER and POSER-Climate was weak in terms of effectiveness, efficiency and sustainability. There was limited potential for mobilizing water availability for agricultural use during the drought in the last three seasons was the main constraint. The project would have benefited from diversifying rural livelihoods (e.g. agro/eco-tourism and/or off-farm activities, household water or energy use) to manage CC risks better.</p>
<p><b>Egypt</b> SAIL (2014-2023)</p>	<p>Limited M&amp;E data was available to assess targeting. Project documents do not spell out the targets for outreach to different sections, including women.</p>	<p>The project was highly relevant to the needs of the country. However, no progress towards outcomes was noted. The project faced long delays and its output delivery was expected to come to speed only in 2021.</p> <p>SAIL's climate solutions such as hydroponics and aquaponics lack clarity on the sustainability of the intervention.</p>	<p>Limited progress in non-lending activities thus far.</p>	<p><b>Moderately unsatisfactory</b></p> <p>Overall, the project was very relevant to the country priorities. However, implementation was affected by delays. Bottlenecks to progress were beginning to be addressed. SAIL's climate solutions such as hydroponics and aquaponics lack clarity on the sustainability of the intervention. Limited progress in non-lending activities thus far.</p>

Country case study	Effectiveness of targeting & outreach - benefits reaching communities, women, youth, indigenous peoples, and other marginalized groups	Progress towards resilience outcomes of CCA response	Performance of non-lending activities	Overall assessment
<p style="text-align: center;"><b>Ethiopia</b></p> <p>RUFIP II (2012-2019) - CBINReMP (2013-2019)  PASIDP-II (2017-2024) - PCDP III (2015-2019)  LLRP (2019-2025)</p>	<p>RUFIP II: The project served 8.6 million rural households (46% females).  CBINReMP: No information available.  PASIDP-II: No information available.  PCDP III: 1) Cumulatively, 617,104 enrolled in project schools (Baseline: 73,784); 2,526,632 had access to improved water sources (Baseline: 800,000); 1,457,714 with access to a basic package of health, nutrition, or reproductive health services (Baseline: 510,000); Public services address the priority needs of 83% of male-headed and 77% female-headed households in project kebeles (Baseline: 43% male and 28% female); 15.3% of households in target project kebeles were members of savings and credit cooperatives (Baseline: 5.4%).  LLRP: No data on beneficiaries reached, project started in 2019.</p>	<p>PASIDP II was effective in providing sustainable irrigation water and increased yields.  RUFIP II was effective in supporting poor rural households to have access to financial services.  CBINReMP was effective at improving farming systems on degraded hillsides in kebeles. But in the other kebeles, project investment per household was insufficient to help target groups improve their livelihood gains. CBINReMP accorded land certificates that included husband and wife's names or women's names in women-headed households. This contributed significantly to strengthening gender equality in decision-making within the household and the community  PCDP III was effective in implementing absorptive, adaptive, and transformative strategies that supported the maintenance of properties of pastoral and agro-pastoral systems such as mobility and land use flexibility in time and space, in a landscape approach. However, woreda implementing structures exhibit weaknesses about culturally appropriate technical support to beneficiary communities.</p>	<p>KM: CBINReMP and RUFIP II had important design and implementation gaps in knowledge management. This was corrected in the later projects, PASIDP II, PCDP III and LLRP.  PCDP III was designed to support policy studies and applied research, knowledge management and networking to enhance relevant stakeholders' capacities to engage in policy dialogue on pastoral issues. Similarly, LLRP design included a sub-component on knowledge management, research, and policy support.  Scaling up: the designs of PCDP III and LLRP include activities on policy engagement. However, evidence was not available on scaling up performance.  Partnerships: PASIDP II was particularly effective in mobilizing partnerships which proved useful in integrating CCA in its different interventions. In addition to government partners, the CGIARs played a key role in implementing innovative CCA-related activities. LLRP planned to establish partnerships with research institutions, universities, the private sector, etc., for strategic support where they possess a comparative advantage and high capacity.</p>	<p><b>Moderately satisfactory</b></p> <p>The projects were effective in improving smallholders' access to water and other natural resources. Women were well targeted and CBINReMP adopted a gender transformative approach (mainly focused on land tenure). PCDP III was effective in building pastoral and agro-pastoral climate resilience as well as capacities and knowledge of smallholders to engage in policy dialogue. PASIDP II was effective in building partnerships with government units and research organizations. LLRP provided a rigorous framework for tracking climate resilience of smallholders, and included KM as a project sub-component while aiming to establish partnerships with research institutions and the private sector. The recent projects effectively addressed the gaps in KM of the earlier projects. However, landscape approaches to enhance CCA showed mixed results. The results were not mainstreamed across the COSOP nor in national strategies and plans. The approach lacked pathways to influence national-level CCA practices and frameworks.</p>

Country case study	Effectiveness of targeting & outreach - benefits reaching communities, women, youth, indigenous peoples, and other marginalized groups	Progress towards resilience outcomes of CCA response	Performance of non-lending activities	Overall assessment
<p style="text-align: center;"><b>Honduras</b> PRO-LENCA (2013-2022)</p>	<p>PRO-LENCA did not include any direct activity to support women and did not adequately consider gender concerns. However, the supported organizations were highly gender-responsive<sup>1</sup> which contributed to almost half the beneficiaries being women (compared to the target of 30%). This increased women's active participation in production activities. Likewise, the vast majority of project beneficiaries were indigenous peoples. Youth were attracted by the new technologies introduced by the project (the 25% target was reached for youth participation). By the end of 2020, PRO-LENCA strengthened the capacities of more than 7,000 families from 258 organizations (55% men and 45% women) on issues of climate change and the identification of vulnerable areas and adaptation measures.</p>	<p>PRO-LENCA was an important and major project in the Honduran development context. It contributed to developing technologies, to local mobilization and engagement and to strengthening capacities. However, it did not have sufficient scope and depth to drive wider transformative change processes in the country. New, simple and innovative climate-resilient technologies and practices were developed and introduced by the project, making use of traditional and indigenous knowledge. Field observation showed that these technologies made the production more resilient. The production system successfully survived the recent tropical storms faced by Honduras.</p>	<p>KM: No specific Knowledge Management (KM) strategy or plan for systematizing and recording KM activities was in place. The project team did not include specific skills and competencies on KM. However, the project developed partnerships to strengthen KM. This resulted in useful and important knowledge platforms being installed for sustaining and scaling up the supported interventions. Partnerships: A partnership with the Inter-American Institute for Cooperation on Agriculture (IICA) was very promising. Cooperation and coordination agreements were made with Alianza para el Corredor Seco (ACSUSAID) and Global Communities and Cooperation of Taiwan to develop some of its activities. The project had limited interaction and coordination with other UN agencies in Honduras. There is scope for stronger partnership with FAO and the WFP in Honduras. The project was not very successful in establishing alliances with the private sector for future activities related to market access. Scaling up: PRO-LENCA showed potential for scaling up, particularly within the project areas, through increased efforts to inform and link to other development actors within the departments. An improved interaction with municipalities and Mayors was generating a useful platform for expanding project interventions.</p>	<p><b>Moderately satisfactory</b></p> <p>PRO-LENCA was an important and major project in the Honduran development context. It contributed to developing technologies, to local mobilization and engagement and to strengthening capacities. The technologies used traditional and indigenous knowledge and made agricultural production more resilient as evidenced by its performance during the recent tropical storms. The project design was not adequately gender-responsive although women constituted half of the beneficiaries. The project developed strong partnership agreements with institutions and other development organizations in the country.</p> <p>Yet, challenges remain for achieving results in relation to natural resource and ecosystem management, mainly due to late start-up of the implementation of the activities contained in the micro-watershed management plans. The project did not present sufficient scope and depth to drive wider transformative change processes in the country, related to CCA and resilience.</p>

<sup>1</sup> IFAD defines gender sensitivity as the ability to acknowledge and highlight existing gender differences, issues and inequalities and incorporate these into strategies and actions (IFAD, 2017b).



Country case study	Effectiveness of targeting & outreach - benefits reaching communities, women, youth, indigenous peoples, and other marginalized groups	Progress towards resilience outcomes of CCA response	Performance of non-lending activities	Overall assessment
<p style="text-align: center;"><b>Kenya</b> PROFIT (2010-2019) - UTaNRMP (2012-2023) KCEP-CRAL (2015-2023) - ABDP (2017-2026)</p>	<p>PROFIT: Reached 441,091 households of smallholder farmers, fishers, pastoralists, women, landless labourers and youth with access to financial services (baseline: 180,000). UTaNRMP: Reached 188,235 households representing 941,175 people, against the target of 205,000 households and 1,025,000 beneficiaries. KCEP-CRAL: The project reached 102,051 smallholders (44% women, 21% youth and 35% men) 55% of overall target. ABDP: No information was available.</p>	<p>The projects achieved successful dissemination of CCA technologies that saved energy, boosted agricultural production or prevented crop losses. They included innovative practices such as introducing biogas to boost returns to dairy farmers, and e-vouchers to enable cash-constrained cereal farmers. The projects fostered financial empowerment and strengthened the resilience of target groups and community networks of smallholder farmers. However, there was no significant investment in broadening social networks that went outside project boundaries. While UTaNRMP was effective in supporting processes with a potential for much improved climate-resilience governance, for the other three programme initiatives, the segmented vision of the natural and human systems led to a sporadic focus on ecosystem-based approaches.</p>	<p>KM: The four initiatives did not sufficiently contribute to the climate change adaptation-related knowledge base. PROFIT lacked knowledge-sharing mechanisms. UTaNRMP made efforts to work with county and sub-county teams to collect success stories, document them, disseminate and transfer the captured knowledge to all stakeholders. KCEP-CRAL is yet to have a KM strategy. ABDP: Efforts to improve the KM strategy were put in place, following recommendations in supervision reports.</p> <p>Scaling up: UTaNRMP developed a functional scaling up strategy. In the context of devolved governance, PROFIT, KCEP-CRAL, and ABDP fostered political scaling up. UTaNRMP developed horizontal and vertical scaling up. PROFIT implemented organizational scaling up.</p> <p>Partnerships: All projects sought to establish partnerships for climate resilience capacity-building and natural resources management. KCEP-CRAL signed MoUs with the Kenya Meteorological Department, the Centre for Training and Integrated Research in ASAL Development, the International Centre for Research in Agroforestry (ICRAF) and the National Drought Management Authority (NDMA). The project also brought together several ASAL-related initiatives such as FAO's research, WFP's activities, EU funding, Swedish International Development Agency's work with NDMA, and Equity Bank's experience on input vouchers. UTaNRMP built effective working relationships with Kenya Wildlife Service, Kenya Forest Service, Rhino Ark Foundation and the Mount Kenya Trust.</p>	<p><b>Satisfactory</b></p> <p>The projects showed substantial results in building resilience among its targeted population. They successfully disseminated appropriate CCA technologies that saved energy, boosted agricultural production, and prevented crop losses. UTaNRMP was effective in supporting processes with a potential for transformative climate-resilience governance. In the other three initiatives, a lack of holistic approach to engage with the natural and human systems led to weak focus on long-term environmental sustainability. Partnerships were a strong feature among all projects. KM was weak, while scaling up was likely at different levels.</p>

Country case study	Effectiveness of targeting & outreach - benefits reaching communities, women, youth, indigenous peoples, and other marginalized groups	Progress towards resilience outcomes of CCA response	Performance of non-lending activities	Overall assessment
<p style="text-align: center;"><b>Kyrgyzstan</b> LMDP (2012-2019) LMDP II (2013-2021)</p>	<p>LMDP primarily targeted vulnerable households among small livestock producers. Women and youth were also considered in the project activities. Social mobilization activities ensured the participation of smallholders and poor households to engage in pasture management and access project benefits.</p>	<p>Pastoral systems were strengthened by the competitive micro-projects of the LMDP. Ecosystem restoration of pasturelands was addressed, however, the outcome of gaining better pasture resources was beneficiaries increased the herd size rather than focusing on better landscape resilience. The new focus on the promotion of climate services is yet to yield results. This is in part due to technical shortcomings and partly due to weak institutional embedding and value chain deficiencies (a diffuse end-user focus).</p>	<p>The KM system was poorly developed hampered by the technical software problems that affected its development. KM was perceived as a technical issue. There were noteworthy KM activities, such as the videos to disseminate good practices. However, dissemination was weak. The project planned climate-related knowledge management through partnerships with institutions, donors, and practitioners at the national level, and by informing key policy processes. However, there is no evidence that these partnerships materialized.</p> <p>The project formed partnerships with local NGOs and government agencies (Department of Pastures, Livestock and Fisheries, Kyrgyz Scientific Research Livestock and Pasture Institute) to develop methodologies and tools for pasture management.</p>	<p><b>Moderately unsatisfactory</b></p> <p>Overall, the projects contributed to strengthening climate resilience in the short term by focusing on weather variability and extreme climate events. However, the activities showed limited understanding of climate change risks that have long-term systemic effects. LMDP activities focused on strengthening the resilience of pastoral production systems. IFAD's approach with locally-implemented competitive micro projects was key to strengthening pastoral systems. Substantive partnerships were established with implementing agencies and relevant actors to strengthen methods and tools to improve pasture management. The new focus on the promotion of climate services was yet to yield the expected results - partly due to technical shortcomings and partly due to weak institutional embedding and value chain deficiencies (a diffuse end-user focus). KM produced only limited results, and the KM strategy must be strengthened. The current dissemination of weather information was inefficient.</p>

Country case study	Effectiveness of targeting & outreach - benefits reaching communities, women, youth, indigenous peoples, and other marginalized groups	Progress towards resilience outcomes of CCA response	Performance of non-lending activities	Overall assessment
<p style="text-align: center;"><b>Madagascar</b> AD2M Phase II (2015-2024)</p>	<p>AD2M's support to developing hydroagricultural systems and promoting climate-smart agricultural production was effective in targeting poor smallholder farmers, who were supported to improve crop production, food security, and income (85% of beneficiaries owned plots between 0.5 and 1 ha).</p>	<p>The effective development of complementary systems of rainfed agriculture on the Tanety and flood and recession agriculture in the floodplains within the same agroecological zones (traditional agriculture practised at flooding recession continues to be practised only when seasonal flooding allows). Rice cultivation became increasingly important in the valleys, made possible by forming smallholder organizations (such as farmer field schools) and water users' associations. The approach effectively diversified household activities in targeted areas and ensured each user adopted two cropping systems to promote CC resilience. Positive resilience results were experienced at household and community levels.</p>	<p>Insufficient capitalization to influence other stakeholders or policy processes. Project did not sufficiently capitalize on the CCA issues of smallholder farmers and disseminate lessons to potential users across the country and to inform national policy processes. Relatively weak interactions with MEEF, no national-level partnerships with key stakeholders to inform CCA policy processes. Good collaboration with WWF on environmental education, CC awareness, improved stoves and meteorological data. Partnership with FAO on locust control effort.</p>	<p><b>Moderately satisfactory</b></p> <p>IFAD was a significant presence in the country. It effectively targeted the most marginalized, diversified their means of incomes to successfully promote resilience at household and community level. It did not sufficiently capitalize on these successes to share knowledge or influence policies. The project should adopt more effective strategic planning of climate resilience responses. It would benefit from enhancing its focus on developing capacities of target groups to achieve CCA rather than merely conforming with SECAP. There is a need to rescale CCA from local to landscape level and consider the internal migrations processes. There is also space remaining to enhance government leadership. Missed the opportunity to pilot and demonstrate transformative approaches.</p>
<p style="text-align: center;"><b>Mali</b> PAPAM (2011-2018)</p>	<p>The original nationwide targeting of areas with potential for irrigation was reduced to only the southern regions after the start of civil conflict in the northern region in March 2012. As a result, the project targeted the regions of Kayes and Sikasso. The project outreach was 120% of the target. 57% were women and 76% youth. However, the beneficiaries of the biodigesters were required to own 10-15 heads of cattle, and this would not be classified as smallholders in Mali.</p>	<p>Low-lands development and related activities improved access to water for agriculture, and reached 85.4% of the objective. Access to climate information was increased and actions to open up roads allowed people to move around even during periods of heavy rain. Biodigesters would have saved trees, eased women's workload and aided the use of natural fertilizers. Improved the overall awareness of communes, multisectoral government agencies and services providers on the issues related to CCA and linkages with sound environmental management involving a broader landscape. However, the sustainability of most of the activities was compromised by the limited time available to accompany the activities with appropriate training, due to the delay in obtaining additional ASAP funds.</p>	<p>PAPAM/ASAP collaborated well with the Ministry of Agriculture as well as with the Ministry of Environment and contributed to the formulation of the National Strategy of Sustainable Development, the National Investment Plan of the Agricultural Sector. It also advocated for the integration of the Communal Climate Change Adaptation Planning approach into rural development projects in the region of Sikasso. KM: Communal CCA plans and annual forest monitoring reports produced (by the national forest service monitoring department SIFOR), together with several flyers. Organization of an exchange workshop with eight ASAP projects in Francophone Africa and South-South exchange with Rwanda and Burkina Faso on biodigestors.</p>	<p><b>Moderately satisfactory</b></p> <p>CCA mainstreaming in the country strategy was well developed. The PAPAM case study illustrated the challenges that come with an ambitious national sector-wide programme involving several funding partners and operating in a fragile political context. PAPAM contributed to the promotion of a community-based and large landscape planning approach involving anti-erosive and ecosystem restorative activities. Such activities would be further improved if the interests of transhumant pastoralists and the role of wild lands were respected and systematically integrated in activities.</p> <p>The overall effectiveness, efficiency and sustainability of the project were compromised because of the delays in adding the ASAP component. These delays led to time constraints and inadequate training of beneficiaries and relevant officials.</p>

Country case study	Effectiveness of targeting & outreach - benefits reaching communities, women, youth, indigenous peoples, and other marginalized groups	Progress towards resilience outcomes of CCA response	Performance of non-lending activities	Overall assessment
<p><b>Republic of Moldova</b> IRECR (2014-2021) RRP 2017-2023)</p>	<p>Both projects deviated significantly from their design-specified direct targeting. The government preferred to promote conservation agriculture among farmers with landholdings of 200 or more hectares while IFAD design limits the holding size to 25 ha. The project experienced delays in recruiting a qualified climate specialist and also experienced delays in disbursement. The study found that target groups were not aware of the project services.</p>	<p>Limited evidence was available to assess the overall effectiveness of the project and its impacts. The monitoring system was strong and had annual outcome surveys to assess changes to resilience. However, the quality of these surveys was found to be unacceptable.</p> <p>Impact data were available in seven farm field schools. The yield data for plots under conservation agriculture (CA) and adjacent plots without CA were analysed by an external agency. Performance under climate stresses in 2019 (higher temperatures and no rainfall) showed that CA plots provided significantly (129%) more yield than the control group as long as CA was implemented correctly, while yields were marginally better (5%-10% when normal conditions prevailed). The soil health (nitrogen content, humus level) under CA showed significant improvements compared to the control groups.</p>	<p>An absence of initiating policy dialogue or promoting scaling up was noted (such efforts were left in the hands of 2RP). Partnerships were strategic and would have benefited from establishing closer links with smallholders' associations. A number of useful KM products were produced and an international conference on sustainable and resilient agriculture was organized.</p>	<p><b>Moderately satisfactory</b></p> <p>With a focus only on the climate component, IRECR (completed) achieved its targets and was successful in introducing CA, and farmer field schools as well as in sharing CA knowledge nationally and internationally. The resilience was demonstrated when the project faced severe climate stress. However, the effectiveness of targeting was very weak. Though design limited the benefits to smallholders (smallholders were not defined but can be taken as those with less than 10 ha), the project ended up benefiting those with 200 ha or more. The mechanized CA required heavy machinery, and its high cost was a clear entry barrier to smallholders. More participatory design was recommended to get the demand right and promote CA in smaller land-owning parcels (e.g., viticulture, orchards). The CCA was a standalone component without synergies with other components of the project (e.g. a rural finance component as well as infrastructure).</p>
<p><b>Nepal</b> ASHA (2014-2022)</p>	<p>As of 2019, 46% of the beneficiaries were women. More than 95% of beneficiaries belonged to the very vulnerable - moderately vulnerable (V4-V2) categories. Of the beneficiaries, 52% of women occupy key positions to implement sub-projects prioritized in respective LAPAs.</p>	<p>ASHA (derived from ICIMOD's work) used GIS to map climate disasters in watersheds, known as sub-watershed assessments. These sub-assessments became recommended practice in Nepal's national LAPA framework of 2019.</p> <p>Similarly, ASHA also introduced participatory scenario development which involved a collective reflection on possible impacts of climate change on future livelihoods.</p>	<p>Scaling up: The sub-watershed assessment and participatory scenario development of this project was mainstreamed into the national LAPA framework.</p>	<p><b>Moderately satisfactory</b></p> <p>The project is still under implementation. It faced delays that were beyond its control - ongoing decentralization in the country and the earthquake of 2015. Despite this, the project approach was being mainstreamed into national LAPA guidelines. The project effectively targeted the most vulnerable and women.</p>

Country case study	Effectiveness of targeting & outreach - benefits reaching communities, women, youth, indigenous peoples, and other marginalized groups	Progress towards resilience outcomes of CCA response	Performance of non-lending activities	Overall assessment
<p style="text-align: center;"><b>Nicaragua</b></p> <p style="text-align: center;">NICADAPTA (2013-2020)</p>	<p>The project reached 45,155 households of which 12,173 were headed by women (27% of the total, 22% more than the target). The project reached 44,914 families involved in NRM and climate risk activities (25% above the target). Altogether 113,281 members of poor households of smallholder farmers were supported with CCA (13% above the target). It was unclear to what extent the poorest and most vulnerable were reached. There was less effective targeting of indigenous peoples.</p>	<p>The project effectively addressed CCA, production issues and market access through convening key sector institutions in a comprehensive manner and was very likely to achieve outcomes.</p>	<p>The project established good partnerships with private sector (e.g., with Ritter Sport). There was a high likelihood of scaling up as government institutions were prioritizing and allocating resources for learning and applying CCA and market access approaches of NICADAPTA. KM was systematically implemented only after the MTR. By the end of the project, a series of useful CCA experiences issues related to coffee and cocoa production were documented.</p>	<p><b>Satisfactory</b></p> <p>Overall, the project was effective. It displayed sound strategic climate focus and mainstreaming. It established strategic institutional cooperation with key government bodies as well as local institutions. There is a high potential for scaling up. Close partnerships with the private sector allowed for direct market access.</p>
<p style="text-align: center;"><b>Niger</b></p> <p style="text-align: center;">ProDAF-Diffa (2018-2025) - ProDAF (2015-2024) RUWANMU (2012-2018) - PASADEM (2011-2018) PRECIS (2019-2027)</p>	<p>107 farmer field schools (FFS) were launched (with a target of 144 or 74%), benefiting 3,196 households (74% of target); 2,675 households (67% of target) were reached through the farmer-to-farmer dissemination mechanism (ACAP).</p>	<p>Agricultural production and productivity were increased by the project through mobilizing water for irrigation, promoting high-value crops, as well as crop varieties tolerant to droughts and short seasons, strengthening market access and managing upland natural resources which were essential for drought-prone areas. Effective in working with producer organizations, social engineering activities, strengthening local rural actors' capacities. Supported the formation of smallholder cooperatives for production and distribution of improved seeds. Small ruminants' distribution in revolving funds but suffered shortcomings. Nutrition activities were limited by the absence of a solid programming approach or linkages with other sectors. Conflict management with a focus on rangeland management and local conflicts, inclusion of populations displaced by Boko Haram.</p>	<p>Innovative use of projects for advocacy, reflecting its indirect engagement in the dialogue on rural development policies in Niger. Assisted natural regeneration: the government recently adopted a decree to accelerate its scaling up across the country. Room for improving KM. Collaborated with Rome-based agencies to strengthen resilience e.g. with WFP, effective implementation of cash-for-work on supporting sustainable land management.</p>	<p><b>Satisfactory</b></p> <p>Agricultural production and productivity were increased; Innovative advocacy related to rural development policies. Assisted natural regeneration was scaled up by the government. Strengthened producer organizations were useful for enhancing the adaptive capacities of smallholders. Effective focus on rangeland management and local conflicts. Record of effective collaboration with Rome-based agencies to support sustainable land management. Need for CCA's strategies to build upon country's climate resilience strategy. Room for improving KM.</p>



Country case study	Effectiveness of targeting & outreach - benefits reaching communities, women, youth, indigenous peoples, and other marginalized groups	Progress towards resilience outcomes of CCA response	Performance of non-lending activities	Overall assessment
<p><b>Rwanda</b> PASP (2013-2021) RDDP (2016-2022)</p>	<p>RDDP: By December 2018, the project had reached 75,990 households (76% of target) and delivered some activities in its strategy. Targeting mechanisms were erratic during implementation and targeting performance was only partially monitored. The project had no specific targeting strategy for youth. PASP: The project target to reach 40% women and 20% was not achieved as there was not a clear strategy to ensure enabling measures and activities reached these sectors effectively. Total outreach to beneficiaries was 238,980. No disaggregated data were available to confirm if PASP reached 40% women through its activities. Focus on youth was limited (10%) and below the design target (20%).</p>	<p>The projects demonstrated the empowerment of smallholder organizations through the creation and support for farmer organizations and Project Officers linked to HUBs in PASP; capacities were also strengthened through the creation of millennium challenge corporations and value chains linked to dairy processing. There were some indirect benefits for ecosystem services in PASP and RDDP but generally this area was given low attention; the focus was more on direct project activities. However, there was clear evidence of poverty reduction, increased incomes and positive contributions to enhanced food security and nutrition (through improved crop productivity and more effective milk processing, storage and distribution of milk to children and schools).</p>	<p>Scaling up PASP: The Ministry of Agriculture and Animal Resources (MINAGRI) intends to scale up the FFS to other crops and livestock activities. RDDP: has taken on board the 4P model developed by PASP and a new project (Kayonza Irrigation and Integrated Watershed Management Project) will adopt this approach. RDDP initiated several pilots to provide national scaling up potential. The livestock FFS concept was new in Rwanda and provided an opportunity to scale up to other districts once adopted by national livestock extension services in MINAGRI and the Rwandan Development Board (RAB).</p> <p>In the RDDP, KM and communication activities were implemented as per the design plan. These included a national event in agriculture, dissemination of activities and good practices through different communication outputs and events.</p> <p>Partnerships: The Rwanda Development Board through their UNFCCC focal point linked the single project implementation unit into IFAD and partnered with the Rwanda Development Board (RAB), the national climate forum, and other climate risk initiatives within the Ministry of Environment. PASP was expected to partner with the Rwanda Environmental Management Authority (REMA) to address climate risks, but their linkage was weak. However, PASP did establish a strong collaboration with other institutions including REMA and RAB to enhance climate and environmental activities as well as linkages with cooperatives, unions and federations, and district governments.</p>	<p><b>Moderately satisfactory</b></p> <p>The projects demonstrated empowerment of smallholder organizations and capacities were also strengthened through the creation of millennium challenge corporations and value chains linked to dairy processing. There were some indirect benefits for ecosystem services in PASPS and RDDP.</p> <p>Both projects suffered from a lack of clarity on differentiating between addressing short-term climate risks (variability) and the strategic planning needed to adapt to the longer-term time scales associated with deeper climate change. The focus was too much on addressing climate 'variability' risks, rather than climate change per se.</p> <p>Both projects demonstrated success in scaling up with the Livestock FFS showing strong likelihood of being adopted by the Ministry of Agriculture and Rwanda Agricultural Board. Evidence of innovative approaches to knowledge management (KM) and impact beyond both projects were rather limited.</p>

Country case study	Effectiveness of targeting & outreach - benefits reaching communities, women, youth, indigenous peoples, and other marginalized groups	Progress towards resilience outcomes of CCA response	Performance of non-lending activities	Overall assessment
<p><b>Sudan</b></p> <p>LMRP (2014-2022) IAMDP (2017-2024)</p>	<p>LMRP: Following the geographical targeting criteria, 351 villages were mobilized in 2018 (100% of the annual target) with a cumulative total of 700 villages (70% of the end of programme target). In those villages, around 1,100 women's supply chain governance groups were formed (1,162 in 2017) with 42,000 members (46% of target). The total number of households reached by early 2022 was 91,480 (64% of target).</p> <p>IAMDP: Too soon to get data on effectiveness of targeting and outreach.</p>	<p>LMRP: the project diversified livelihoods, and contributed to a range of income-generating activities (fattening processing, saving and lending, agriculture, forestry, range, alternative energy and water service provision). It strengthened capacities to ensure livelihood resilience as well as building adaptive capacity to climate change.</p> <p>IAMDP: No substantial evidence of progress towards results for this project. A number of specific activities, aimed at contributing to adaptation or resilience to climate change were undertaken. Adaptation measures were implemented adequately but could benefit from improvements.</p>	<p>LMRP: The knowledge management annual plan of the project was in line with the IFAD's Country Programme Knowledge Management Strategy in Sudan. Most of the activities in the plan were implemented. The programme produced six Sudan International University/LMRP documentary films and two success stories. KM strategy must be further enhanced. The LMRP contributed to updating the national climate change adaptation strategy for the livestock sector. Establishing the public-private partnerships as a core of its activities, the project did not achieve substantial results.</p> <p>IAMDP: the project considers several activities and strategies for KM, scaling up and partnerships. However, evidence on its performance is yet to become available.</p>	<p><b>Satisfactory</b></p> <p>(based on the performance of LMRP only)</p> <p>The project enhanced climate-resilience by diversifying livelihoods, promoting income-generating activities and building capacities. The project contributed to update the national climate change adaptation strategy for the livestock sector. The stock route experience that contributed to conflict minimization and peace-building was being scaled up. Public-private partnerships were not successful.</p>
<p><b>Uganda</b></p> <p>PRELNOR (2014-2022)</p>	<p>The targeting strategy was responsive to inequalities providing tailored support to the different needs of smallholder groups. The selection of parishes and communities combined social mapping with agroecological mapping. Current and planned community access roads (CAR) were used to identify potential areas where production could be increased to meet market demands. There was limited sex-disaggregated output data. No M&amp;E data available on outcomes and impact to assess the final impact of the project. There is no evidence to assess the extent to which the project reached the different sub-target groups - food insecure, food secure and market-oriented households.</p>	<p>M&amp;E data were not available on CCA outcomes and impact. The study found that an early warning system was developed, production practices were improved and asset transfer took place. Vulnerable households were empowered to improve their decision-making capabilities through household mentoring. 606 km (40 per cent) of community access roads was under construction, another 40 per cent in procurement and 20 per cent at the design stage.</p>	<p>Information not available</p>	<p>Progress towards CCA outcomes and impacts were not tracked to assess the final impact of the project. Outputs necessary for resilience improvements were achieved. An early warning system was developed and in place, as were improved production practices, household mentoring and asset transfer, and community access roads were constructed to facilitate market access. There were concerns that the project did not adequately adhere to the social and environmental procedures of IFAD and the National Environment Management Authority.</p>

Source: IOE elaboration based on case studies.

TABLE 2

## Case study examples of scaling up CCA responses

IFAD project/s	Evidence of success in scaling up adaptation activities
<b>Bangladesh</b>  Coastal Climate Resilient Infrastructure Project CCRIP (2013-2019)	<p>The project was among the first to address climate threats in the design of infrastructure. Bangladesh faced cyclones and floods with increasing frequency and intensity. According to the PPE of the project, the area experienced a cyclone and subsequent flooding in May 2020 after the project was completed and the CCRIP roads and markets suffered minimal damage and could continue functioning after the extreme weather event. The national guidelines for constructing climate-resilience infrastructure are now being developed by CReLIC and the PPE noted that it was very likely to draw from the CCRIP design approach including climate-resilience measures.</p>
<b>The Plurinational State of Bolivia</b>  Economic Inclusion Programme for Families and Rural Communities in the Territory of the Plurinational State of Bolivia ACCESOS-ASAP (2013-2019)	<p>The Plurinational State of Bolivia has enacted several regulations to address risk management in general and climate risk management as a condition of budget allocations to its municipalities. IFAD supported 15 municipalities and their constituent communities to qualify for state resources by introducing approaches and tools such as Talking Maps to integrate climate risk management, adaptation and modelling in their investments and territorial planning. ACCESOS also strengthened their capacities to use these tools.</p> <p>The approach empowered municipality and community institutions to plan and prioritize resources and investments and succeeded in leveraging additional resources from the State. Consequently, the talking maps developed by the community members resulted in wider uptake in other municipalities as a tool for the preparation of development plans with climate risk management. In addition, the inter-communal competition model introduced by the project to seek additional resources from communities was replicated in other municipalities to compensate for the municipalities' budget limitations.</p> <p>Limited ownership and the strategic orientation of the Government of Bolivia limited the potential for vertical scaling up, but overall, the programme represents a very good example of community-driven and horizontal scaling up.</p>
<b>Kyrgyzstan</b>  Livestock and Market Development Programme I LMDP (2013-2021)	<p>The project worked with Kyrgyz National Agrarian University and World Organisation for Animal Health (OIE) to update the curriculum in pasture management reflecting the project experience. The collaboration with OIE was fruitful in assessing the quality of the curriculum and introducing new courses on animal welfare, bioethics, veterinary public health, food hygiene, and epidemiology.</p>
<b>Mali</b>  Fostering Agricultural Productivity Project PAPAM (2010-2018)	<p>The design of the completed PAPAM project showed a significant scaling up potential. It was a sector-wide project covering the entire country, with its coordination unit embedded in the Ministry of Agriculture. PAPAM involved partnerships with the World Bank, GEF and the EU with the World Bank and EU supporting large-scale irrigation schemes and IFAD smaller-scale irrigation systems targeting smallholders.</p> <p>Following a political crisis at the very beginning of the project and weak coordination between government and partners, the scaling up potential was largely reduced. The ASAP component, that was added later, facilitated a successful partnership with the Agence de l'Environnement et du Développement Durable (AEDD), which directly contributed to the formulation of the National Strategy of Sustainable Development. The project also successfully advocated for the integration of the Communal Climate Change Adaptation Plan (PCA), a community-based large landscape approach, in the design and implementation of agricultural projects in the Sikasso Region.</p>
<b>Nepal</b>  Adaptation for Smallholders in Hilly Areas Project ASHA (2014-2022)	<p>IFAD piloted two innovation processes through ASHA. It adopted a whole landscape approach and prepared sub-watershed assessments for mapping risks using GIS, then used community consultations to validate the risks identified. Both practices were mainstreamed into Nepal's Local Adaptation Plans for Action Guidelines 2019. IFAD actively promoted these in stakeholders' consultations and donor fora involving DFID, WFP, and UNEP, among others. The project also engaged with different ministries through existing platforms and committees. These efforts raised the visibility of these innovations and contributed to the scaling up.</p>
<b>Nicaragua</b>  Adapting to Markets and Climate Change Project NICADAPTA (2013-2020)	<p>This project has a good potential for scaling up. Government institutions are prioritizing and allocating resources to interventions learning from NICADAPTA's approach of pursuing CCA and market access. The project vision and strategy linked CCA, production issues and market access through bringing together institutions in key sectors and facilitating a coordinated action towards a common goal (linking production to market access).</p>
<b>Niger</b>  PRODAF-DIFFA (2018-2025) PRODAF-MTR (2015-2024) RUWANMU (2012-2018) PASADEM (2011-2018) PRECIS (2019-2027)	<p>One of the scaled innovations is the 'economic development poles' approach, which combines the watershed and production basins approach and the territorial approach.</p> <p>The approach was characterized by production basins whose surpluses were marketed with links to urban centres and hence allowed economic development at the level of family farms, satellite collection centres and semi-wholesale markets which promoted demand for agricultural production. This approach was taken up in various regions of Niger for regional development planning and by also by other partners of Niger such as the French Development Agency, World Bank, and Danish Cooperation. The new project PRECIS continues to advance the economic development poles approach within international trade corridors between Niger and Nigeria.</p> <p>The visibility of IFAD and its strategic partnerships as a result of its long-term engagement in Niger were important contributing factors to this scaling up.</p>

IFAD project/s	Evidence of success in scaling up adaptation activities
<p><b>Rwanda</b></p> <p>Climate Resilient Post-Harvest and Agribusiness Support Project PASP (2014-2020) Rwanda Dairy Development Project RDDP (2016-2022)</p>	<p>The most successful national-scale initiative was the livestock farmer field schools (L-FFS). FFS were a new concept in Rwanda but proved highly successful through their roll-out in the RDDP project. The approach is now being extrapolated from the livestock sector to the crop sector and into other livestock-related activities by the Government of Rwanda. IFAD's involvement was effective at the country level but missed opportunities in driving international scaling up initiatives such as in Participatory Integrated Climate Services for Agriculture (PICSA). IFAD is not viewed as a key player for scaling up but is more perceived as providing value on the delivery of projects 'on the ground'.</p>
<p><b>Sudan</b></p> <p>Livestock Marketing and Resilience Programme LMRP (2014-2022)</p>	<p>The LMRP made important contributions to scaling up the co-management of stock routes experience. The project contributed to minimizing conflict and building peace among groups competing for water and rangeland. It worked with the groups of users of natural resources who proactively engaged and partnered with government institutions and other actors to facilitate an enabling environment. Actions included effective utilization of available studies and knowledge products to inform the policy agenda, especially in institutionalizing the improved management and natural resource governance of the stock routes.</p>

**Source:** IOE elaboration based on case studies.

## Finding a win-win solution – Achieving economic, climate and environmental resilience

**Planting climate resilience in rural communities of north-east Brazil (PCRP)**

An important recently-approved project adopted a restorative approach. PCRP is a US\$202.5 million investment led by IFAD, approved in 2020 and with strong contributions from the Government of Brazil, the GCF and beneficiaries. It addresses the entire semi-arid area of north-east Brazil which forms a distinct biome and is home to two million family farms employing 6.5 million people.

**The PCRP project is notable for its highly integrated approach over a very large scale and its aim to restore functioning in an already degraded biome which faces further degradation** through climate change and by doing so it brings significant gains to a larger number of smallholder farmers.

Drought in the region has been worsening since the 1980s. Existing smallholder agricultural practices are becoming infeasible without increased irrigation capacities. One of the attendant effects of the long-term drought has been an increase in the amount of brackish and salty groundwater, which now affects about 75% of household-use wells in the region. However, water resources are already low and improvements in water capture, storage and distribution, while offering temporary benefits to smallholders, will accelerate the depletion of the region's water resources. The PCRP project is distinguished by its philosophy that the avenue to sustainable smallholder agriculture is through protecting and increasing water reserves achieved through a landscape scale approach which emphasizes natural solutions and engages farmers in transforming their production systems to protect and grow that resource.

The project comprised of three components: Climate-resilient productive systems, providing water access and knowledge management and scaling. These components were integrated into a science-based approach to restore water resources of north-east Brazil to enable a sustainable future for smallholders. Climate-resilient productive systems lie at the core of the approach to increase availability, flow and retention of water using a range of techniques such as 100% soil cover with resilient plant varieties, enhancing water-retaining features of the landscape, extensive planting, active pruning and thinning, setting up cradles and natural fertilization. Landscape restoration takes time. Smallholder water needs in the interim were addressed by the access to water component while the knowledge management component will contribute to shifting current practices to more productive and sustainable practices, and scaling these.

A number of factors contributed to the approach to restoration exhibited by the PCRP in both project concept and design.

1. **Long-standing experience in the region.** The PCRP project is the most recent in a long series of IFAD interventions in Brazil starting in 1978 and totalling \$450 million. This long experience has established a positive relationship which focused well beyond issues such as 'getting the funding' from Brazil's perspective and 'addressing immediate problems experienced by smallholders made worse by CC' on the part of IFAD. It seems from interviews that there was a high level of confidence that there would be a project with shared interests and high enthusiasm to go beyond shorter-term approaches and reach to the systematic long-term issues to help address the worsening issue of drought as the underlying problem for ecosystems, smallholders and the economy.
2. PCRP is a scaled-up product of sustained knowledge management across partners. This is a common stance taken by the four projects achieving do-no-harm or better.
3. Cofinancing from the GCF provided the resources for a thorough project development effort employing participatory methods which incentivised the ability to address climate and sustainability issues directly.
4. Brazil is a middle-income country with a substantial intellectual infrastructure in sustainability, agronomy, agroecology/agroforestry and hydrology, as well as strong supporting technical capacities such as GIS, soil chemistry, botany.



TABLE 3

## Case study examples of do-no-harm or better

	Kenya	Nicaragua	Niger	Burundi	Sudan	Mali
<b>Project</b>	Upper Tana Catchment Natural Resource Management Project (UTANRMP) 2012-2020;	Adapting to Market and Climate Change Project (NICADAPTA) 2013-2021;	Four IFAD-funded projects: Ruwanmu (Small-scale irrigation project) implemented in Maradi, Tahoua, Zinder, and Diffa regions; PASADEM (Food security and development support project) implemented in Maradi Region; ProDAF (Family farming development programme) implemented in Maradi, Tahoua, and Zinder regions; ProDAF-Diffa in Diffa region; and PREGIS in Maradi, Tahoua, Zinder et Dosso regions.	Agricultural Intensification and Vulnerability Reduction Project; PIPARV-B (2018-2025)	Livestock Marketing and Resilience Programme (LMRP), 2015-2022	Fostering Agricultural Productivity Project (PAPAM), 2011-2018)
<b>Year approved, budget</b>	2012 US\$87.37 million	2013 US\$37.0 million	Several Projects	2018 US\$111.0 million	2014 US\$119.2 million	2010 US\$174 million
<b>Typology rating</b>	Do-no-harm +	Do-no-harm	Do-no-harm +	Do-no-harm	Do-no-harm +	Do-no-harm
<b>Scale (farm/community, local ecosystem, local and connected ecosystems, landscape)</b>	The Tana River Basin is the largest and most important basin in Kenya. Its catchment covers some 95,950 km <sup>2</sup> (approximately 17% of Kenya's land mass), and the flow of the Tana River basin is 27% of the total mean discharge along rivers in Kenya's major drainage basins.	Emphasizes farm/community and local ecosystems, in the North, central and South of Nicaragua.	Part of the Great Green Wall initiative, the projects together address the three climatic regions in southern Niger with significant portion of cropping, mixed livestock and market gardens.	Connected ecosystems to landscape.	Ecological zones and areas where environmental degradation and issues of climate change are adversely affecting the livelihoods of poor rural households.	Emphasizes smaller scale landscape/ecosystem-adapted approach referred to as territory or water basin-approach. The latter go beyond only irrigating parcels of individual or communal farmers and take the larger ecosystems functions and uses into account. Such water basin management activities sometimes relate to irrigation activities adjacent to rivers and other times irrigation as related to lower located areas capturing rainwater referred to in French as bas-fonds.

	Kenya	Nicaragua	Niger	Burundi	Sudan	Mali
<b>Main mechanisms</b>	<p>UtaNRMP - emphasis on biodiversity conservation and ecosystem services and building absorptive, adaptive, and transformative capacities. Mainstreaming ecosystem services into agricultural production enhances smallholder farmers' CCA, and addresses the conflict between agricultural production and nature conservation. Water security and nature conservation, farming and land management practices particularly contribute to ecosystems' resilience. It targets around 205,000 poor, rural households whose livelihoods revolve around the use of natural resources. Integrated participatory natural resources management with smallholders and CBOs enhances CCA while proactively contributing to: nature conservation objectives and environmental governance; water harvesting and storage; soil and water conservation activities and agroforestry. These actions address local water needs and recharge aquifers.</p>	<p>The project had a strong focus on adopting appropriate practices and technologies, caring for the ecosystem and managing natural resources as a holistic and non-separable issue. To manage natural resources, the project implemented a series of practices to conserve scarce natural resources and mitigate any negative impacts of CCA. This included wastewater treatment, organic agricultural practices, soil and water conservation measures, and agroecological practices.</p>	<p>Assisted Natural Regeneration for recovery of degraded lanes through natural solutions including re-greening and increasing tree cover. Natural solutions include: the construction of spreading sills in valleys and anti-erosion structures upstream; water table monitoring and adaptive management; drip irrigation and similar water use management approaches; zai agriculture; more suitable seeds; more natural and better managed fertilizer use, living hedges and windbreaks and mulching; large scale natural regeneration including planting and management of local woody species. Semi-pastoralism and zai agriculture bridge social capital approaches to transcend community boundaries including establishing regional organizations.</p>	<p>Shift from engineered to natural solutions, with strong attention to soil erosion and flooding, broadening scope to landscape scale including hills not solely marshlands. Some protection of forested areas and restorative actions such as creating water surpluses for aquifers, more forest cover or agroforestry for mitigation, shade, nutrient and water retention or ensuring soil cover.</p>	<p>LMRP has adopted sustainable natural resource management as a platform for change (a cross-cutting issue in COSOP). The project has adopted a clear and strong stance in support of natural resource management linking agriculture and livestock interventions to natural resource management and empowering communities to advocate for sustainable practices have been critical.</p>	<p>Efforts were made to respect and restore the ecosystem by i) using larger landscape-based community participatory-planning approach; ii) reducing soil erosion and increasing water infiltration through installation of anti-erosive measures; iii) restoring land through plant and tree planting and use of improved agricultural practices; and iv) limiting deforestation by the promotion of biogas replacing wood fuels. Climate Adaptation Plans developed for 30 communes, supported with water management developments, also anti-erosive, restorative and tree plantation activities, going beyond doing no harm on ecosystem management. However, it was reported that communities prioritized the more productive over the environmental activities, and the recent field visit reported mixed results on the maintenance of both the productive and more environmental focused activities.</p>

Kenya	Nicaragua	Niger	Burundi	Sudan	Mali
<p>Integrated participatory natural resources management to enhance smallholder farmers' CCA while proactively contributing to nature conservation objectives and environmental governance.</p>	<p>The project applies a targeting strategy with geographical criteria related to agroecological orientation for coffee and cocoa production. The project worked with farmers and their organizations to understand the recovery of the ecosystem and natural resource management as 'goods' that allow them to comply with international standards for marketing and export while also contributing to well-being and reduced vulnerability within the communities. However, the project mostly focused on farm-level activities, and did not recognize the need to address their links to landscape-level ecosystem effects.</p>	<p>Restoration of degraded land in a framework of integrated watershed management and connecting communities through assisted natural regenerative approaches as a pathway to climate-resilient food security for vulnerable rural communities. Government decree to accelerate assisted natural regeneration county-wide.</p>	<p>Conserve and rehabilitate the environment and natural resources (through integrated watershed management, anti-erosive measures and ecosystem restoration). Promoted livelihood diversification (including non-farming activities); supported climate-resilient crop technologies and livestock management; offered value chain support and promoted climate-resilient rural infrastructure, strengthened individual and institutional capacities, and built knowledge management and policy dialogue.</p>	<p>The Programme supports farmer-managed natural regeneration which involves favouring the regeneration of trees and their sustainable management to turn crop fields into holistic tree/crop/livestock systems.</p>	<p>Activities have focused on the development and rehabilitation of lowlands (bas-fonds), micro-dams, village irrigation schemes, and small market gardening schemes. ASAP funding allowed the formulation of Communal Climate Change Adaptation Plans, which facilitated the development of some of the above-mentioned sub-projects. There were 99 supporting Communal Climate Change Adaptation Plans. The Communal Climate Change Adaptation Plan synthesizes adaptation measures following a participatory diagnostic exercise involving several sectors.</p>

Source: IOE Elaboration of Learning Theme Study – Nexus.

TABLE 4

## Assessment of Nexus Performance of case studies

Country	Typology rating	Project(s)	Date project initiated	Comments (from aggregation reports)	Relative importance of environment to overall project concept
Bangladesh	Aware		2013-2020	IFAD project addressed climate-resilient rural infrastructure and strengthened individual and institutional capacities, knowledge management, policy dialogue and contributed to ecosystem restoration. CCRIP infrastructure consisted in many cases of some upgrades to existing structures, with no major negative environmental impact expected from programme activities (e.g. road/culvert drainage congestion, excess soil erosion). Market infrastructure causes higher level of waste creation. The PPE of CCRIP which was undertaken in parallel with the case study, did not find evidence of any sustainable solid waste management system in the sampled markets. Market solid waste and wastewater is instead dumped or disposed of into nearby lowlands or water bodies which harms the ecosystems in the target areas.	Minor
Belize	Aware	Resilient Rural Belize	2018	Project on existing farmed land will not expand its footprint to forested or other areas, and avoids extensive protected and reserved areas. The focus is on adapting farm and PO capacity in production using CSA and selling a limited number of vegetable crops and pineapples for local markets. It includes drainage and irrigation using existing largely unassessed aquifers, and there were plans for water management groups to be established.	Considered
Bolivia	Aware	Economic Inclusion Programme for Families and Rural Communities in the Territory of Plurinational State of Bolivia (the ACCESOS Programme to which was added an ASAP component – becoming the ACCESOS-ASAP Programme)	2013	While there has been a strong focus on resilience elements in the programme, this has to some extent been at the cost of the key biological elements for adaptation (soils, crops, seeds, water and reforestation). These elements have not been fully considered and – mainly for budgetary reasons – have only to a limited extent been taken into account in the community competitions and investments. Focus group discussions also revealed that human-induced impacts on ecosystems were not understood in their cause-effect relations, so for example there was little awareness that an increase in climate-related risks could be associated with bad land management practices.	Minor
Burundi	DNH	PRODEFI-II (2015-2021) Value Chain Development Programme Phase II nearing completion, and PIPARV-B (2018-2025) - Agricultural Intensification and Vulnerability Reduction Project in Burundi-recently started.	2015 & 2018	Ecosystem, landscape scale and focused actions are adopted in the second project with a shift from engineered to natural solutions. There is strong attention to reducing soil erosion and flooding, broadening scope to a landscape scale including hills (not solely marshlands), and providing some protection of forested areas. However, there were limited restorative actions such as creating water surpluses for aquifers, increasing forest cover or agroforestry for mitigation, shade, nutrient and water retention or ensuring soil cover. These actions might start to appear given the progress from the prior project, likely to need some knowledge management capacity gains. Both projects involve explicit activities to restore ecosystems that have advanced satisfactorily, but their effectiveness is not being monitored. Overall, the landscape approach designed under PIPARV-B would benefit from a spatial assessment of the various ecosystem services and functions to different types of users, including the role of the wildlands.	Central

Country	Typology rating	Project(s)	Date project initiated	Comments (from aggregation reports)	Relative importance of environment to overall project concept
<b>Cabo Verde</b>	Aware	Rural Socio-economic Opportunities Programme (POSER, 2013-2022), with emphasis on the time from mid-2017 onwards when POSER-Climate, a complementary ASAP funding initiative was added.	2017 when enhanced	The project implemented agricultural practices that reduce water requirements and have a positive impact on water management. Natural resources are mobilized and managed in a sustainable and climate-resilient manner. In 2016, the following integrating climate-smart and watershed management approaches were introduced in regional poverty reduction plans: i) establishing geographic information systems (GIS) and digital watershed mapping; ii) supporting investments to enhance the capture, access and efficient use of agricultural water while promoting renewable energy use within watersheds; iii) supporting investments to improving water infiltration (water and soil conservation) and afforestation in watersheds; iv) strengthening institutional and farmer monitoring and use of agro-meteorological information; and v) engaging in policy dialogue on agricultural water management policy and pricing. The new course taken by POSER after the MTR entailed a focus toward larger 'structural' investments which would subsequently drive the development of additional relevant micro-projects of either collective or individual interests. The nature of such structural investment mostly addressed water scarcity for agricultural use accelerated by climate change trends enhanced water availability. The design of POSER as complemented with POSER-C could potentially have some positive impact on ecosystem restoration, through is watershed management-related intervention against erosive risk and with improvement of water infiltration, soil conservation and reforestation, as well as the promotion of renewable energy. However, these activities have experienced delays attributed to procurement problems and/or underestimation of allocated budgets.	Minor – CCA is relatively central to the plan but lacking in implementation.
<b>Chad</b>	Aware	Project to Improve the Resilience of Agricultural Systems in Chad (PARSAT)	2014	The project design aligns more precisely with the strategic objectives of the COSOP 2010-2015 being: i) to improve access to and sustainable management of water resources and ii) to improve access to input and produce markets in value chains where rural poor people have a comparative advantage. Some project activities seek better agricultural management and involve the planting of trees, such as along roads and buildings, as well as planting related to nutrition and environmental education and the development of five community forests. Overall, the project seems to move, albeit slowly, in the right direction on environmental concerns.	Minor
<b>Egypt</b>	Aware	Sustainable Agriculture Investments and Livelihoods Project (SAIL)	2014	The project works in a highly water-scarce context, characterized by high temperatures. In that context, the project encourages agricultural and non-agricultural livelihoods on new land. It envisages improving livelihoods by farming in lands which suffer water scarcity, using Nile water and groundwater. To mitigate this, the project also planned drip irrigation schemes on farms. However, neither the drip irrigation systems nor solar pumps were installed due to slow disbursement rates (7% as of 2019). Little backstopping from the Egypt subregional hub (now a multi-country office) on thematic issues of NRM and climate change. The subregional hub has only recently (June 2019) added an environment and climate officer and the project was deprived of critical thematic assistance from the critical initial phases to the middle of the project life cycle.	Minor



Country	Typology rating	Project(s)	Date project initiated	Comments (from aggregation reports)	Relative importance of environment to overall project concept
Ethiopia	Aware	5 IFAD-funded projects: Community-Based Integrated Natural Resources Management Project (CBINReMP) (2013-2019); Participatory Small-scale Irrigation Development Programme Phase II (PASIDP-II) (2017-2024); Rural Financial Intermediation Programme II (RUFIP II) (2012-2019); Pastoral Community Development Project III (PCDP III) (2015-2019); and Lowlands Livelihood Resilience Project (LLRP) (2019-2025).	2013	The strongest contributions to the nexus were the CBINReMP which entailed community-driven participatory planning and implementation of 650 micro-watershed plans, 227,500 ha land were treated and 17,600 ha of tree plantations on degraded communal lands, gullies, farmland. PASIDP-III provides sustainable irrigation schemes and the development of 85 watershed management plans but these did not follow the landscape ridge to valley approach, and while small scale, showed improved protection and ecosystem services for land and water. LLRP projects are just starting and its design has an explicit model which treats climate resilience as a continuum in which absorptive, adaptive, and transformative capacities build.	CBINReMP important PASIDP-II important, RUFIP II minor, PCDP III minor, LLRP important
Honduras	Aware	The Competitiveness and Sustainable Rural Development Project in the south-western border corridor (PRO-LENCA)	2016 - 2022	While the project has received a significant degree of technical support both from IFAD HQ and the Regional Office, this has been insufficient to compensate for a critical shortage of climate change knowledge and expertise in the project team. The expected results related to natural resource and ecosystem management have not yet materialized. This is mainly due to the delay in the planned environmental investments for improvement of the natural resource management and the resilience of agroecological and forest systems, which are fundamentally in micro-watershed management and protection/regeneration of forested areas in the project.	Minor
Kenya	DNH	Rural Outreach of Financial Innovations and Technologies Programme (PROFIT) 2010-2019; Upper Tana Catchment Natural Resource Management Project (UTaNRMP) 2012-2020; Cereal Enhancement Programme – Climate Resilient Agricultural Livelihoods Programme (KCEP-CRAL) 2014-2022; Aquaculture Business Development Programme (ABDP) 2018-2026.		As far as building climate-resilience capacity is concerned, one of the initiatives – UTaNRMP - has a strong emphasis on biodiversity conservation, supporting ecosystem services and building absorptive, adaptive, and transformative capacities. Its objectives address the nexus between rural poverty and ecosystem health in a densely populated and environmentally fragile water catchment area of critical national and global significance. It has used participatory natural resource management and biodiversity conservation strategies in an outstanding way. UTaNRMP has remarkably supported the mainstreaming of ecosystem services in farming and land management practices, in particular for ensuring water security (i.e. water availability's quantity, quality and accessibility) and nature conservation. The recognition of this nexus is singular in the country programme in its wide embrace and support for integrated participatory natural resources management to enhance smallholder farmers' CCA while proactively contributing to nature conservation objectives focused on environmental governance that facilitates dialogue and agreement among stakeholders. Thus, it was effective in achieving environmental outcomes and producing ecosystem services in addition to smallholder farmers' CCA outcomes. To mainstream ecosystem services, the project design included mobilizing a wide range of technologies and land management practices ensuring that farming and land management practices contributed to ecosystem resilience. The aim is to address local communities' water needs through water harvesting and storage of 'blue' water, crop production requirements ('green' water) through soil and water conservation activities and agroforestry, and to recharge the aquifers. However, UTaNRMP was effective in enhancing the capacity of CBOs to integrate CCA options and ecosystem services in human-dominated areas and the conservation landscapes of the River Tana Basin.	Central

Country	Typology rating	Project(s)	Date project initiated	Comments (from aggregation reports)	Relative importance of environment to overall project concept
Kyrgyzstan	Aware	Livestock and Market Development Programme II, (LMDP-II)	2014	<p>There was a strong focus on pasture infrastructure improvement. IFAD's pasture infrastructure rehabilitation activities have definitely improved the accessibility of remote mountain pastures, which in some cases had not been used since the Soviet era. As a result, more livestock is being sent to high pasture areas these days, which should reduce the grazing pressure on pastures closer to the villages. However, what has been observed instead is that livestock owners are not actually reducing their flock size – but rather enlarging it, and sending additional livestock to the high pastures. So, without effective measures to control livestock numbers, such interventions may develop into perverse incentives.</p> <p>Since the introduction of the livestock head-related pasture user tax, livestock numbers appear to be heavily under-reported. Therefore, IFAD (and others) have invested in livestock health improvement programmes, encouraging livestock owners to report true livestock figures in order to receive treatments such as vaccines.</p> <p>In the context of climate change, access to water is becoming an increasing issue. In some places, IFAD was involved in the development of groundwater pumping. However, in many places the aquifer is known to have lowered considerably, and no controls have been put in place to ensure the sustainable use of groundwater. While in the short term this may work because of the partial replenishment from glacier-fed mountain rivers, in the longer-term water access is expected to become a major challenge since the heavily melting glaciers lose their role as regulating element in the hydrological cycle e.g. by shifting run off into the dry summer and autumn season.</p> <p>In general, IFAD's engagement in Kyrgyzstan is perceived very well by donors, mostly based on IFAD's role in the success story of the new Law on Pastures enacted in 2009, which is devolving fundamental resource governance power from the central government to the local communities. This success story is probably part of the reason why IFAD keeps developing interventions in this direction – although there were some recent backlashes, where the national government attempted to take back at least the financial control and stripped financial autonomy from the communities (income from pasture use taxes routed back to the central budget, and only 70% is being returned to the communities for pasture improvement activities).</p>	Minor

Country	Typology rating	Project(s)	Date project initiated	Comments (from aggregation reports)	Relative importance of environment to overall project concept
Madagascar	Aware	Menabe and Melaky Development Support Project, Phase II (AD2M-II)	2015 - 2022	<p>COSOP 2015-2019 addressed climate adaptation and elevated climate resilience to a central focus in the formulation of its strategic objectives. The overall objective of the country programme is to sustainably improve the incomes and food security of rural poor people, particularly young people and women. The two strategic objectives are formulated as follows: (i) effective and climate change-resilient production systems are widely adopted by farms and rural enterprises; and (ii) access by rural smallholders and rural enterprises to remunerative markets and economic opportunities in priority value chains is improved. While the project has an adequate focus on CCA, it does not envisage using ecosystem-based adaptation as the approach to implement climate-resilience interventions. While the project addressed the issue of optimal use of floodable areas, it would have been useful to consider distinguishing between normal flooding with which smallholder farmers are already familiar and are using traditional cropping practices, and abnormal flood events that can damage crops and the productive capital. This distinction is important as it would lead to designing truly climate-proof measures through integrated wider ecosystem management allowing further mitigation of abnormal climate risks. The design and implementation of AD2M-II do not explicitly focus on actions to reduce threats to ecosystems, the diversification of nature-based livelihoods and ecosystem services, and the improvement of disaster risk management capacities needed to enhance the resilience of the populations in the target regions. From the interviews conducted, the evaluation deduced that the project was not effective in bringing together the necessary stakeholders and interests to work together in order to address unsustainable practices in the wider landscapes as key step toward systemic change. The implicit underlying theory of change does not recognize that there is differential vulnerability to climate change, towards ecosystems functioning in the watersheds, and having agency across space and time. Agricultural production in the plains not only maximizes production but also minimizes ecoclimatic risks. However, as the effects of climate change are likely to worsen in the future, the question is whether it is possible to maintain the sustainable balance between production and the 'anti-risk' function of the areas concerned without taking landscape-level measures to ensure sustainable management of the watersheds.</p>	Minor

Country	Typology rating	Project(s)	Date project initiated	Comments (from aggregation reports)	Relative importance of environment to overall project concept
Mali	DNH	Fostering Agricultural Productivity Project (PAPAM)	2011	<p>From the start, the PAPAM project funds included a more specific environment funding mechanism through GEF funding (WF managed), which would focus on support to “sustainable land and water management” in particular of crop parcels. IFAD-funded interventions focused on small-scale irrigation aimed at increasing agricultural production by expanding the area under irrigation in the targeted production basins. The ASAP financing was specifically directed to small-scale irrigation systems enabling the development of climate change adaptation activities and providing related capacity-building. The activities have focused on the development and rehabilitation of lowlands (bas-fonds), micro-dams, village irrigation schemes, and small market gardening schemes. The support given went through the development of sub-projects which was reported to have advanced after the additional ASAP funding allowed the formulation of Communal Climate Change Adaptation Plans and which facilitated the development of some of the sub-projects outlined. The Communal Climate Change Adaptation Plan is a plan of adaptation measures resulting from a participatory diagnostic exercise involving several sectors. Typical activities would be: repair of roads and establishment of bridges to allow year-round access; distribution of improved crop seeds; promoting the use of meteorological information; improving water management in support of existing or developing hydroagricultural infrastructure; establishing anti-erosion measures; planting trees; stabilizing river banks and supporting apiculture and build storage buildings. In contrast, on a project level, IFAD’s PCR reports that no Environmental and Social Management Plan (PGES) were produced to guide the mitigation and compensation measures to be implemented for each of the project’s interventions. At a project level, efforts were made to restore the ecosystem by: i) using a larger landscape-based community participatory planning approach; ii) reducing soil erosion and increasing water infiltration through installing anti-erosive measures; iii) restoring land through plant and tree planting and using improved agricultural practices; and iv) limiting deforestation by the using biodigestors to replace wood fuels. However, in the absence of monitoring or mechanisms to secure ongoing sustainability at the project closure, the overall impact on the ecosystem of all activities is hard to judge. However, an effort has certainly been made to improve ecosystem management beyond no harm. The design document (IFAD-ASAP) does emphasize its intended smaller-scale landscape or ecosystem-adapted approach referred to as “territory” or sometimes “water basin-approach”. The latter would go beyond just the irrigated parcels of individual or communal farmers and take the larger ecosystem’s functions and uses into account. Such water basin management activities in the project sometimes relate to irrigation activities adjacent to rivers and at other times irrigation related to lower areas capturing rain water, or bas-fonds. The effectiveness of this approach on social and environmental levels is discussed in other sections below (effectiveness, environment, and sustainability).</p>	Important
Republic of Moldova	Aware	Inclusive Rural Economic and Climate Resilience Programme (IRECRP) Rural Resilience Project (RRP)	2013 - 2016	<p>The two IFAD projects promoted an uptake of conservation agriculture (CA) for field crops. This approach was appropriate for the climate risks identified in project areas, such as soil erosion and increasing frequency of droughts. In general, CA can reduce soil erosion, decrease water evaporation and increase soil moisture retention, improve soil health, and sequester greenhouse gases. Reliable evidence to verify whether these benefits were realized across the IFAD projects was not available. Limited evidence from farm field schools shows that CA could improve soil health and build climate resilience of farmers if administered according to specifications. While climate resilience could be improved in the short term, the approach does not appear to have taken a broader conservation or ecosystem-protective perspective. The design envisaged promoting organic fertilizers, yet use of chemical fertilizers and herbicides continues. The projects have not taken integrated approaches to water management or agricultural production nor have they prioritized ecosystem protection or improvement. For example, water investments prioritized irrigation and rainwater capture infrastructure for farming, without addressing identified problems of nitrates and salinity and the forecast serious decline in water resources by 2050.</p>	Minor

Country	Typology rating	Project(s)	Date project initiated	Comments (from aggregation reports)	Relative importance of environment to overall project concept
Nepal	Aware	The Adaptation for Smallholders in Hilly Areas (ASHA) Programme	2015	High level of emphasis on goats and cattle. Stall feeding was proposed as a mitigating measure to protect hill vegetation from overgrazing. Stall feeding was however not practised uniformly. The project also took a sub-watershed level view of planning for LAPAs (Local Adaptation Plan for Action) which is an innovation in the Nepali context.	Considered
Nicaragua	DNH+	Adapting to Market and Climate Change Project (NICADAPTA) 2013-2021	2013	<p>The project focused on appropriate CCA practices and technologies that integrated ecosystem (environmental) and natural resources management considerations as part of a holistic approach. It implemented a series of offsets and measures to conserve the CCA response. This included wastewater treatment, organic agricultural production, soil and water conservation, and climate-friendly agriculture. These measures build further on the already widely applied agroecological practices in the country, in which ecological and social concepts and principles were integrated at the farm level.</p> <p>One achievement of the project was to raise and reinforce the awareness among beneficiary organizations that to achieve sustainable economic benefits, it is necessary to treat ecosystem recovery and natural resource management as 'goods' that not only allow compliance with international standards for marketing and exports but also contribute to the well-being and reduced vulnerability of beneficiary communities. In total, the project managed to reinforce the awareness of 44,914 poor farm-households in ecosystem recovery, climate risk and natural resource management (125% more than the design target).</p> <p>However, as noted in table 3 of this annex, the project mostly focused on farm-level activities, and did not recognize the need to address their links to landscape-level ecosystem effects.</p>	Important
Niger	DNH	1. Ruwanmu (Small-scale irrigation project) which was implemented in Maradi, Tahoua, Zinder, and Diffa regions; PASADEM (Food security and development support project) implemented in Maradi region; ProDAF (Family farming development programme) implemented in Maradi, Tahoua, and Zinder regions; ProDAF-Diffa in Diffa region; and PRECIS in Maradi, Tahoua, Zinder et Dosso Regions.		Treatments include a combination of natural and engineered actions to promote: water capture, drip and more efficient irrigation, anti-erosion, ground cover, hedges and windbreaks, mulching, actions against strong winds, drought, flooding, as well as sequestration and efficient irrigation and the introduction of small ruminants suited to landscape. The fourth recommendation is to implement an ecosystem-based and integrated watershed management approach. In each targeted region, a watershed will be selected as a regional learning site for CCA, to be managed with an integrated package of rehabilitation tools (master watershed management plan, ecosystem-based approach, economic development pole approach, social adaptation engineering).	Important
Rwanda	Aware	IFAD-funded programme addressing climate resilient post-harvest and agribusiness support (PASP) between 2014 and 2020, and (ii) Rwanda Dairy Development Project (RDDP) which commenced in 2016 and will complete in 2022	2014 & 2016	Some CSA technologies recommended were not feasible to implement due to local conditions. There was also a lack of appropriate energy sources available in some areas to support implementation. Positive environmental impacts were reported in PASP linked to waste and waste-water management, milk processing and crop production. RDDP also recommended promoting water efficiency and importing best management practices for all levels in the dairy value chain. A climate-smart livestock approach was proposed to acknowledge the environmental impacts of the livestock sector and encourage adaptation and mitigation. For example, applying manure in the root zone below the ground surface reduced evaporation, thus allowing a steady release of during crop growth.	Considered



Country	Typology rating	Project(s)	Date project initiated	Comments (from aggregation reports)	Relative importance of environment to overall project concept
Sudan	DNH	Livestock Marketing and Resilience Programme (LMRP)	2014 - 2022	<p>One of three components addressed natural resources. The community-led natural resource management and enhanced adaptive capacities that IFAD supported included efforts for conserving and rehabilitating the environment and natural resources and increasing the availability of water and efficiency of water use. The LMRP is concentrated on the heartland of the semi-arid livestock-producing areas in five states within Sudan. By focusing on traditional rainfed production systems, the LMRP is targeting poor rural communities largely dependent on natural resources, and natural resource teams have been deployed to the project localities. This has led to improved climate mainstreaming in the project and in this process, 12 networks around natural resources involving 85 communities have been established. The project has adopted a clear and strong stance in support of natural resource management within ecological zones and areas where environmental degradation and issues of climate change are adversely affecting the livelihoods of poor rural households. Linking agriculture and livestock interventions to natural resource management and empowering communities to advocate for sustainable practices have been critical steps in this context. However, in terms of implementation, this still remains a significant challenge until there is more clarity and direction on natural resource management at the policy level. The community action plans (will also support the eradication of invasive species. Within the last twenty years, invasive plant species have started to encroach on the natural rangelands of Sudan. The programme will support farmer-managed natural regeneration which involves favouring the regeneration of trees and their sustainable management to turn crop fields into tree/crop/livestock systems. Woody perennial plants and shrubs interact with the soils and crops to create an agroecological system that reinforces multiple ecosystem services to increase overall crop productivity, and they also retain significant soil moisture in the crop root zone and mulch cover that can suppress weed growth. However, within a given ecosystem, other actors who are using or influencing the use of natural resources, such as the authorities, larger farmers or commercial enterprises, will also be included in institutions and networks for improved governance and conflict management.</p>	Central
Uganda	Aware	Restoration of Livelihoods in the northern region (PRELNOR)	2015 - 2022	<p>As mentioned under effectiveness, PRELNOR is supporting various activities through technical and financial support to empower communities to sustainably manage their natural resources. These activities include the community-based natural resource management plans, the distribution of renewable energy technology, testing sustainable land management practices, the promotion of pit latrines and community access roads with reforestation and water harvesting incorporated into their designs. The preparation of the community-based natural resource management plans has enabled over 400 communities to gain skills in village-level appraisals for better natural resource and sustainable land management practices and to understand environment-related issues that affect farming. A total of 217 plans had been funded by the MTR and a data monitoring system has been set up to record the outcomes and assess their sustainability – although training is still required for extension staff on data collection methodologies. Beneficiaries receiving the renewable energy technology reported that they have led to a reduction of fuelwood use by 50 to 60 per cent, thus reducing pressure on woodlots and communal tree cover. Interventions affecting the environment include more resilient crop selection, agroforestry, soil and water conservation and community access roads. The comprehensive approach to the project - tackling poverty and vulnerability (of farmer groups and vulnerable households), empowering target groups in agricultural production and marketing and communities in sustainable natural resources management, and promoting climate change adaptation – is noteworthy. However, no restoration efforts were noted.</p>	Minor

Source: IOE elaboration of the learning thematic study of the nexus between humans and ecosystems.

TABLE 5

## Effectiveness of targeting – case studies

Type of targeting	Examples of effective targeting	Observations
Community targeting	The Plurinational State of Bolivia (ACCESOS) Ethiopia (PCDP III) Uganda (PRELNOR)	The programme was highly participatory and had a community-based design and implementation process. Project effectively targeted the underserved and deprived pastoral and agro-pastoral communities.
Geographic targeting	Uganda (PRELNOR)	Generally, projects identify the most economically vulnerable areas from the 'deprivation' maps produced by the government. PRELNOR selected the poorest districts and sub-counties that had production and market potential. The number of project villages in each district was determined on the basis of each district's share of the total rural poor.
Direct targeting	Madagascar (AD2M) Uganda (PRELNOR)	85% of beneficiary farm holdings were 0.50 - 1.00 ha. Vulnerable households, mainly headed by women and predominantly in subsistence production and poorly integrated in social groups, were identified through participatory wealth ranking.
Climate vulnerability	Belize (Be-Resilience)	As a small island located in the Caribbean hurricane belt, Belize is highly vulnerable to the impacts of climate change and climate extremes. A vulnerability index map was used to target.
Targeting women	Cabo Verde (POSER-C) Chad (PARSAT) Ethiopia (RUFFIP) Honduras (PRO-LENCA) Kenya (ABDP) Mali (PAPAM) Nepal (ASHA) Nicaragua (NICADAPTA) Sudan (LRMP)	50% women (but only 27% in management bodies). 47% women. 46% women; all projects in the country targeted women well. Nearly half the beneficiaries were women. 44% women. 57% women. 46% women. 27% of the households supported were women-headed. 1,100 women's Savings and Credit Groups were formed
Youth targeting	The Plurinational State of Bolivia (ACCESOS-ASAP) Chad (PARSAT) Kenya (ABDP) Mali (PAPAM) Uganda (PRELNOR)	Youth-related outcomes were observed in relation to entrepreneurship and natural resources management. 30% youth. 21% youth. 76% youth. 15% youth (design target 15%).
Direct targeting	Republic of Moldova (IRECR)	Design was based on farm size less than 5 ha; actual sizes were well over 100 ha. Mechanized conservation agriculture required economies of scale and larger land size; the larger land size also reflected the government preferences.
Climate vulnerability	Ethiopia (CBIReMP)	No poverty-mapping exercise nor vulnerability assessment was carried out.
Targeting women	Bangladesh (CCRIP) Rwanda (PASP)	Allotted 30% of market slots to women but far fewer actually used them. The project had no analysis of barriers to women's participation nor strategy in place to address the barriers. Less than 20% beneficiaries were women (target 40%). No clear strategy to ensure enabling measures and activities reached women or youth.
Youth targeting	Rwanda (RDDP) Rwanda (PASP) Kenya (UTaCRNMP)	No targeting strategy for youth. Less than 10% of beneficiaries were youth (design target 20%). No significant youth activities were implemented.

Source: IOE elaboration based on case studies.

TABLE 6

## Summary – Learning note on CCA knowledge management in IFAD

Issue	Examples	Exceptions
<p>KM is happening mainly at the local project level and no strong links are established to the national level.</p>	<p>The Plurinational State of Bolivia: The project took the needs of poor and climate-vulnerable smallholder communities seriously and applied well-conceptualized tools, instruments and approaches for stimulating learning and knowledge management at local level. However, no strong links were established to facilitate wider national-level learning.</p> <p>Burundi: Developed CCA-related knowledge products for better information sharing.</p> <p>Chad: The project started KM activities towards the end of its cycle. Produced and disseminated best practices and lessons learned. The development of products such as lessons learned, training and handbook to accompany and promote the many project activities were delayed. This reduced the effectiveness, replicability and sustainability of project achievements.</p> <p>Honduras: PRO-LENCA project did not develop a KM strategy or plan for systematizing and recording KM activities. The project management unit did not have KM-specific skills and competencies. In addition, the M&amp;E system did not support an effective and efficient KM (no KM module included) thus KM was not a visible element in the project design.</p> <p>Ethiopia: There was no framework at the country programme level to guide pathways and processes to inform policy processes at regional and national government levels.</p> <p>Kenya: Weak knowledge-to-action and action-to-knowledge process. PROFIT lacked knowledge-sharing mechanisms. The PCR noted that this absence directly impacted the effectiveness and efficiency of the results achieved. UTaNRMP made efforts to work with county and sub-county teams to collect success stories, document them, disseminate and transfer the knowledge captured.</p> <p>Mali: A structured documenting, archiving and dissemination of the project was missing.</p> <p>Niger: Rich experience at the project level was dispersed. Hence, building useful KM products to build future climate-resilience oriented programmes and projects was challenging. The project lacked effective KM systems to capture and share experiences with decision-makers for scaling up and informing policy processes.</p> <p>Kyrgyzstan: Case study noted strong reluctance among development actors to share knowledge and information. The agricultural projects implementation unit (APIU) under the government was mostly interested in reporting success stories, not failures from which the organization could learn much more. Implementing partners on the ground were functioning in silos and not positioned to respond to requests from IFAD KM experts to share information and best practices or learnings.</p> <p>Madagascar: The AD2M-II project effectively implemented knowledge-to-action activities through farmer field schools to train smallholder farmers. However, the project lacked a framework for making this knowledge accessible to potential users at local, regional, and national levels.</p> <p>Sudan: Few bilateral, ad hoc or informal exchanges between different project staff did take place. However, structured knowledge-sharing and learning from this shared knowledge were deemed insufficient.</p>	<p>Republic of Moldova: farmer field schools were organized in project areas. This was a useful knowledge platform to exchange experiences related to conservation agriculture. There were international conferences organized, and television programmes conducted to promote CCA at the national and global level.</p> <p>Nepal: DFID-funded projects held exchanges with ASHA and replicated practices in ASHA to enhance individual livelihoods. There was a high level of informal exchange with donors such as DFID and WFP.</p>

Issue	Examples	Exceptions
<p>Some of the best KM cases relate to those projects where strategic partnerships have been developed with universities or regional institutions and/or there has been spill-over to academia and an effort to embed information in science.</p>	<p>LAC (Region): Offers good examples of partnership with regional institutions (e.g. International Cooperative Alliance) as well as collaboration among countries (e.g. Brazil, Mexico). The SSTC/ KM centre in Brazil actively promotes a broader KM agenda within LAC. As a result, interesting South-South partnerships were identified (e.g. among countries in Amazonia, and the use of Brazilian experts in an IFAD project in Rwanda through ABC financing).</p> <p>Belize: The recently-launched project envisages sustained dissemination and promotion of best practices and lessons learned to beneficiaries and to the wider community. To do so, it has established a partnership with the Faculty of Agriculture of the University of Belize. KM products such as videos and literature will be supplied to the university library so that information continues to be available for students and other interested parties to use as resources for their training as well as to improve their farming practices.</p> <p>Burundi: The case study found that effective partnerships with academic institutions would entail considerable time investment and continuity to allow knowledge products to be developed.</p> <p>Cabo Verde: An ongoing contract with the University of Cabo Verde is expected to improve monitoring, facilitate an impact evaluation and enable the development of improved knowledge products.</p> <p>Honduras: PRO-LENCA entered into several strategic partnerships and alliances, including with the Inter-American Institute for Cooperation on Agriculture and Dirección de Ciencia y Tecnología Agropecuaria (DICTA) that resulted in useful and important knowledge management platforms for sustaining and further scaling up interventions.</p> <p>Kyrgyzstan: IFAD worked with National Agrarian University to develop a pasture manual and curriculum for teaching future pasture managers. The LMDP II project also worked with the Mountain Societies Research Institute at the University of Central Asia (UCA) for curriculum development. The curriculum offered the potential for educating future resource managers with the findings of project experience.</p> <p>Nepal: IFAD used the knowledge generated by scientific partners such as ICIMOD and operationalized the knowledge in a project context and, after establishing its viability, transmitted and mainstreamed it into national guidelines.</p> <p>Nicaragua: Partnership with CATIE was established to strengthen dissemination and further uptake of practices.</p>	<p>Bangladesh: IFAD has a long-standing partnership with its implementing partner, LGED. IFAD collaborated with ADB and KfW to finance the Coastal Climate Resilience Infrastructure Project (CCRIP) with LGED as an implementing partner. In addition to bringing in financial resources and long-standing partnership with LGED as well as experience in working in rural areas, IFAD facilitated the consolidation of knowledge related to designing infrastructure to withstand cyclones and floods. LGED used these inputs, among others, to mainstream knowledge of climate-resilient infrastructure design across Bangladesh.</p>
<p>KM activities were mostly pursued in an ad hoc manner and lacked a clear and operational strategy. Activities often took place only after recommendations from MTR and Supervision Missions, instead of pursuing a deliberate strategy from the very early stages of implementation.</p>	<p>Country case study examples: the Plurinational State of Bolivia, Burundi, Cabo Verde, Chad, Ethiopia, Honduras, Kenya, Kyrgyzstan, Mali, Republic of Moldova, Nicaragua, Niger, Sudan.</p> <p>Annual Report on Results and Impact of IFAD Operations (ARRI) 2020 observed declining KM performance ratings observed in IOE evaluations post-2015</p>	<p>Exceptions: Nepal, Rwanda.</p> <p>In addition: The launch of IFAD's Knowledge Management Strategy (2019-2025) resulted in increased attention to KM in recent projects (e.g. Belize and, in particular, Brazil) where KM aimed to serve more strategically as an input for scaling up strategies and enhanced policy engagement and included closer collaboration or partnerships with universities or research institutes.</p>

Source: IOE elaboration based on learning theme study on Knowledge Management.

## **Annex VI.**

# Evaluability assessment of GIS/RS data for CCA



TABLE 1

## Effectiveness of monitoring using GIS and remote sensing (geospatial technology)

Countries	GT data collected and analysed by this TE	TE findings (related to GT use)	Recommended uses for GT	Overall Assessment of GT use and awareness
Bangladesh	TE benefited from the analysis of the Climate Action Report 2019 and the PPE 2020 - both made good use of GIS data.	<p>Good example of various uses of GIS – for identifying target communities, effective intervention locations, and project management and monitoring.</p> <p>The project identified densely populated areas and investigated the distance of households to markets to locate the marketplaces to construct. It mapped beneficiaries and used GT to support M&amp;E.</p>	Very important tool for planning and modelling coastal risks associated with climate change (e.g. sea level rise, coastal erosion features, tidal surge modelling). Potential use for flood modelling.	<p><b>Overall rating – Satisfactory.</b></p> <p>Project should consider additional use of GT for planning, managing and modelling climate risks and improving the resilience of coastal communities and areas.</p>
Belize	Project provided spatial data in a simple spreadsheet. TE analysed the compliance of IFAD's intervention locations with national regulations using data from an online spatial database.	<p>The project seems mostly unaware of the potential GT may hold to support the project in terms of planning, implementation and particularly monitoring and assessment of activities. The GT use involved simple project intervention mapping of target communities.</p> <p>None of IFAD's interventions in Belize seems to be violating the boundaries of protected areas.</p>	Satellite-derived information can be used to develop risk maps (monitoring storm tracks, mapping land cover features, assessing infrastructure vulnerabilities), indicating potential storm tracks and landfalls, as well as projected impacts in terms of infrastructure hit by storms. Partnership opportunities exist with conservation agencies to generate national references of spatial information relevant for scenario modelling and development planning via an open national spatial data infrastructure.	<p><b>Overall Rating – Unsatisfactory.</b></p> <p>GIS not used much by the project, although the potential for uses of GIS is very high, for instance, in developing an integrated climate risk management approach which is a high priority for Belize.</p>
Burundi	Sparse information received on use of GIS tools in the project intervention.	<p>Project was launched recently, hence no information is yet available on how the project may be using GT. However, GT was not included in the project design.</p> <p>Outsourcing a GIS component may remediate the weak capacity in GT, and address the issue at least temporarily.</p>	There is considerable potential to support integrated watershed management through modelling processes such as surface water runoff, landslides or soil and debris flows. Monitoring the slope stability of lands used for agriculture or livestock production is of high importance. For example, satellite-based (RADAR) sensors allow for monitoring slope stability at fine scales of slow-onset behaviour (e.g. water infiltration phase).	<p><b>Overall Rating – Unsatisfactory.</b></p> <p>Considerable potential exists for GT's use to support integrated water management but there is a low level of awareness about the power and potential use of spatial data such as land cover and use maps, modelled surface flow paths and runoff trajectories.</p>
Cabo Verde	Received spatial data to localize and analyse the interventions. Received metadata was insufficient to verify data quality. TE assessed protected areas boundaries.	<p>Project developed a website displaying GIS data.</p> <p>POSER-C developed reservoirs collecting surface runoff, but it remained unclear whether GT was used (quality and accuracy of available data seemed hardly enough).</p> <p>Despite this, some of POSER-C interventions were implemented inside the limits of protected areas.</p>	When water is scarce, integrated watershed management is of high importance: using digital terrain models, the potential surface runoff can be properly assessed and the optimal location of reservoirs can be defined. Locations of dams and reservoirs close to the sea could be identified and pumping intensity reduced in order to reduce the danger of seawater infiltration into the groundwater body.	<p><b>Overall Rating - Moderately Satisfactory.</b></p> <p>Level of expertise and knowledge in the project related to GT is encouraging.</p> <p>Considerable efforts were made to develop a spatial database.</p> <p>GT is highly relevant to the project in the context of water scarcity.</p>

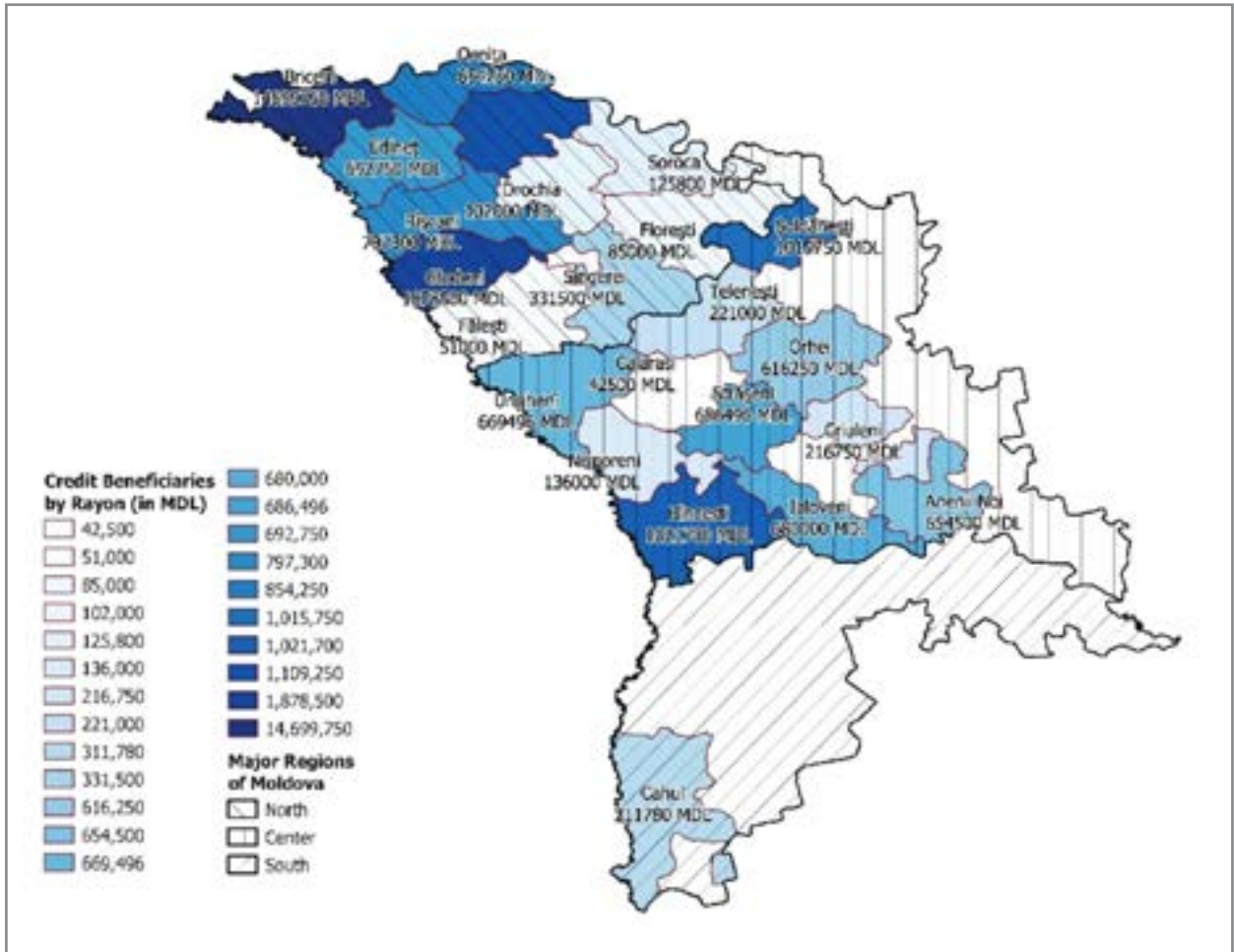
Countries	GT data collected and analysed by this TE	TE findings (related to GT use)	Recommended uses for GT	Overall Assessment of GT use and awareness
<p>Chad</p> <p>PARSAT (2015 - 2022)</p>	<p>Data shared by the project covered intervention sites as well as road construction locations. TE assessment of protected areas boundaries, of location of storages in flood-prone areas.</p>	<p>ICRAF was commissioned to develop an online geoportol for data-sharing featuring several thematic data layers.</p> <p>Results from the analysis showed:</p> <ol style="list-style-type: none"> <li>1) road construction or rehabilitation interventions were completed in sensitive areas (protected areas under the International Union for Conservation of Nature) in the south of the project area;</li> <li>2) very few storage locations (4 %) were prone to flooding. However, site visits to confirm are needed; moreover, only the location was determined, and not the structural integrity of the facilities (based on Sentinel RADAR images),</li> <li>3) undetectable low-tech structures for sustainable land management.</li> </ol>	<p>Sustainable land management measures to reduce the speed of surface water runoff and increase the infiltration into the soils are being assessed using high-resolution satellite imagery, by detecting structural surface measures (demi-lunes) or soil trenches before and after heavy rain events.</p>	<p><b>Overall Rating: Moderately Satisfactory.</b></p> <p>IFAD collaborated with ICRAF for the geoportol development and agroecological monitoring. ICRAFs approach aims to develop a network of African observatories which features a strong spatial component – an expertise from which IFAD activities may benefit.</p>
<p>Ethiopia</p> <p>RUFIP II (2012-2019)</p> <p>CBINR&amp;M(2013-2019)</p> <p>PASIDP-II (2017-2024)</p> <p>PCDP III (2015-2019)</p> <p>LLRF (2019-2025)</p>	<p>Received basic spatial data on location and type of the interventions.</p> <p>Projects provided capacity-building and hard/software of GT.</p>	<p>Data used for M&amp;E purposes. A management information system (MIS) supporting the project M&amp;E was setup with a GIS component.</p> <p>Unclear if and to what extent GT was used for designing for surface drainage and flood risk models.</p>	<ol style="list-style-type: none"> <li>1. GIS technology used to support the facilitation of integrated watershed management planning, by providing training to federal, regional, district, and community level experts (training trainers).</li> <li>2. Soil erosion can be estimated with models, predicting average erosion rates on field slopes based on rainfall, soil type, topography, crop system and management practices.</li> <li>3. Organic carbon in soils can be assessed using infrared spectroscopy, using a spectral library consisting of spectral signatures of soil samples representing the soils in the target area.</li> </ol>	<p><b>Overall Rating – Moderately Satisfactory.</b></p> <p>Projects realize the potential of GT.</p>

Countries	GT data collected and analysed by this TE	TE findings (related to GT use)	Recommended uses for GT	Overall Assessment of GT use and awareness
Kyrgyzstan LMDF II (2014 - 2021)	Spatial database shared with the evaluation team was of poor quality and lacking metadata.	Project developed a web-based map of interventions.  However, well-defined intervention areas (treated pasture sites) are required to apply time series analysis of vegetation indices (Normalized difference vegetation index and enhanced vegetation index) of the rehabilitated pastures. Therefore, GT did not produce any conclusive results.	<ol style="list-style-type: none"> <li>1. Predictions of irrigation requirement for specific crops can be approximated once calibrated (area, crop types);</li> <li>2. detection of crop growth anomalies hint at a potential crop underperformance (giving an early warning) through crop monitoring, based on spectral reflectance patterns of phenological crop stages;</li> <li>3. yield prediction models are still speculative and complex to implement;</li> <li>4. pasture vegetation composition or productivity can be efficiently monitored using remote sensing measurements (using vegetation indices, vegetation time series and spectral signatures);</li> <li>5. tracking of animal movements with GPS collars to better understand the roaming and grazing behaviour and pressure;</li> <li>6. possible monitoring and mapping of subsurface water bodies.</li> </ol>	<p><b>Overall Rating - Moderately Unsatisfactory.</b></p> <p>Project staff aware of the potential of spatial information and applications. Data collected was not useful to arrive at reliable conclusions.</p>
Mali PAPAM (2011 - 2019)	No spatial data was provided.	None of the GT applications were considered and used in the projects assessed in the Sahel zone.  No spatial data was provided to analyse locations of project interventions (e.g., respect of site boundaries, dominant land cover types, compliance of IFAD's interventions on protected areas).	<ol style="list-style-type: none"> <li>1. High potential of early warning systems for floods: monitoring the extension of areas affected by floods using RADAR sensors to assess the extent of flooded areas at a sufficiently precise level.</li> <li>2. Prevention of conflicts between pastoralists and sedentary farmers, GT combined with climate projections may indicate variability and scarcity of water or vegetation, powerful tools to analyse and support decision-making processes in the transhumance corridors.</li> </ol>	<p><b>Overall Rating – Unsatisfactory.</b></p> <p>Overall capacity and awareness of the project staff was encouraging. GIS and remote sensing analysis would have significant interest for flooding early warning systems and prevention of land use-related conflicts.</p>
Republic of Moldova IFRCR (2014 - 2021) RRP (2017 - 2023)	Relevant and up-to-date data of location of beneficiaries shared by the project (but the quality of metadata was unsatisfactory).	Project developed a web-based GIS platform showing evidence of technical capacities.  Needed reliable ground truth documentation before testing GT technologies (timely and precise tracking of locations, crops planted, soils samples, and library of spectral signatures).  Available data was helpful in tracking the beneficiaries and assessing geographic targeting.	<ol style="list-style-type: none"> <li>1. Crop monitoring is relevant for conservation agriculture (rotation, fertilization, pest and weed controls) based on the spectral signatures of different crops.</li> <li>2. For agroforestry systems (e.g., shelterbelts, linear hedgerows) monitoring is feasible with high-resolution imagery.</li> <li>3. Detection of soil dilatation and evapotranspiration is possible on larger scales and based on existing models.</li> <li>4. Monitoring of soil content in organic carbon using near-infrared spectroscopy (with representative soil samples).</li> </ol>	<p><b>Overall Rating - Moderately Unsatisfactory.</b></p> <p>The project showed technical capacities in deploying GT which was useful for this TE in assessing the effectiveness of geographic targeting.</p> <p>However, it did not use GT to track resilience changes resulting from conservation agriculture and thus it missed the opportunity to support a results-oriented M&amp;E system and plan ecosystem restoration interventions.</p>

Source: IOE elaboration based on case studies

FIGURE 1

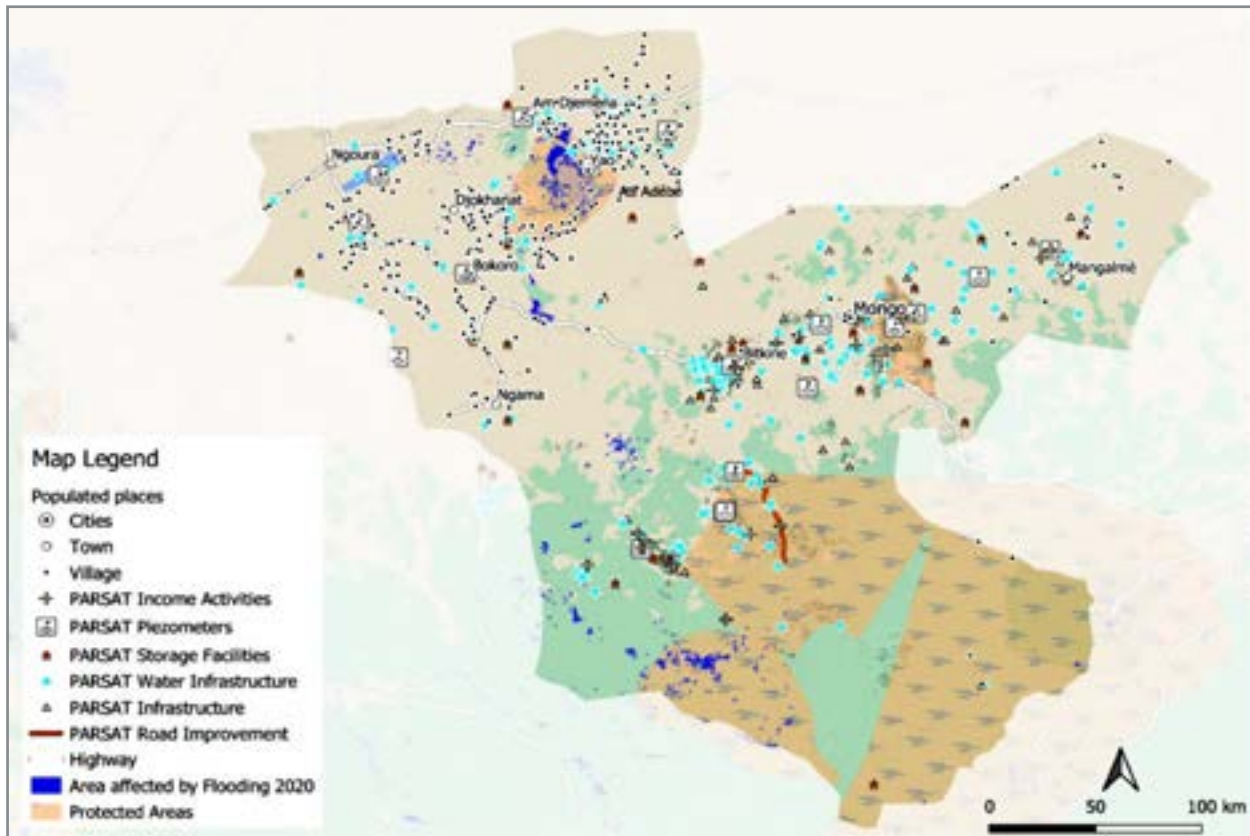
Locating project beneficiaries through GIS information – Republic of Moldova (Rural Resilience Project)



Source: IOE elaboration of GIS Information from 2RP project management unit.

FIGURE 2

GIS information on PARSAT road improvement activity in protected areas in Chad



Sources: IOE elaboration of GIS information obtained from PARSAT, IUCN/WDPa, Google Earth Engine.



# Annex VII.

## Electronic survey results

The survey's objective was to obtain quantitative and qualitative information from IFAD and project management staff regarding aspects of CCA responses in IFAD-supported interventions (projects and country strategies).

The survey population was:

- IFAD professional staff based in Rome and out-posted, and
- Directors, coordinators, managers, climate specialists, M&E, communication and knowledge management officers of IFAD-funded projects.

The electronic survey was conducted in English, Spanish, French, Russian, Portuguese and Arabic.

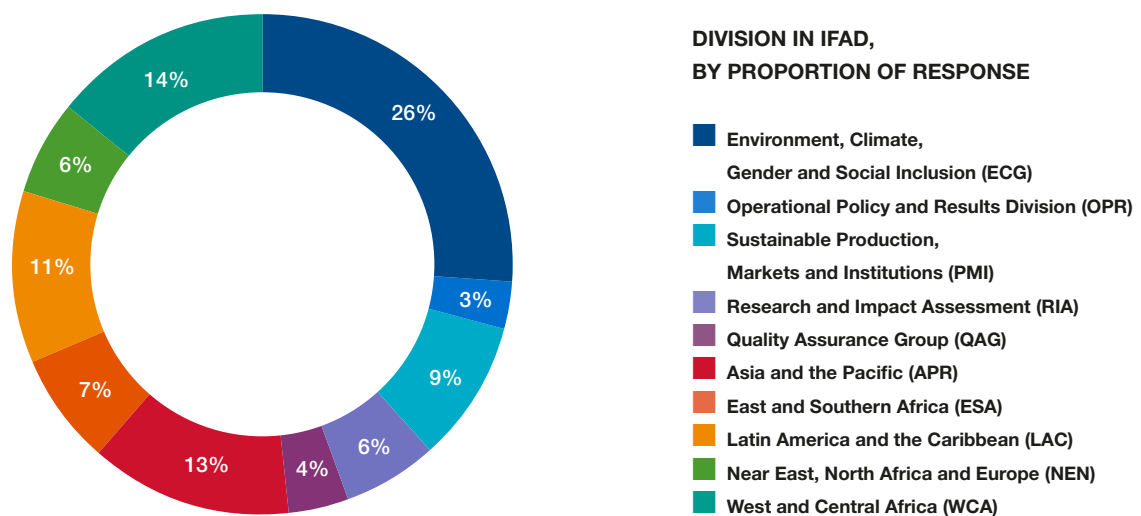
The total sample size was 238 of whom 102 were IFAD professional staff (34 per cent response rate) and 136 were project management unit staff (response rate of 30.1 per cent). The average response rate was 31 per cent. The surveys were analysed separately to better understand the perspectives related to climate mainstreaming.

### A. IFAD staff survey results

#### Descriptive information

FIGURE A1

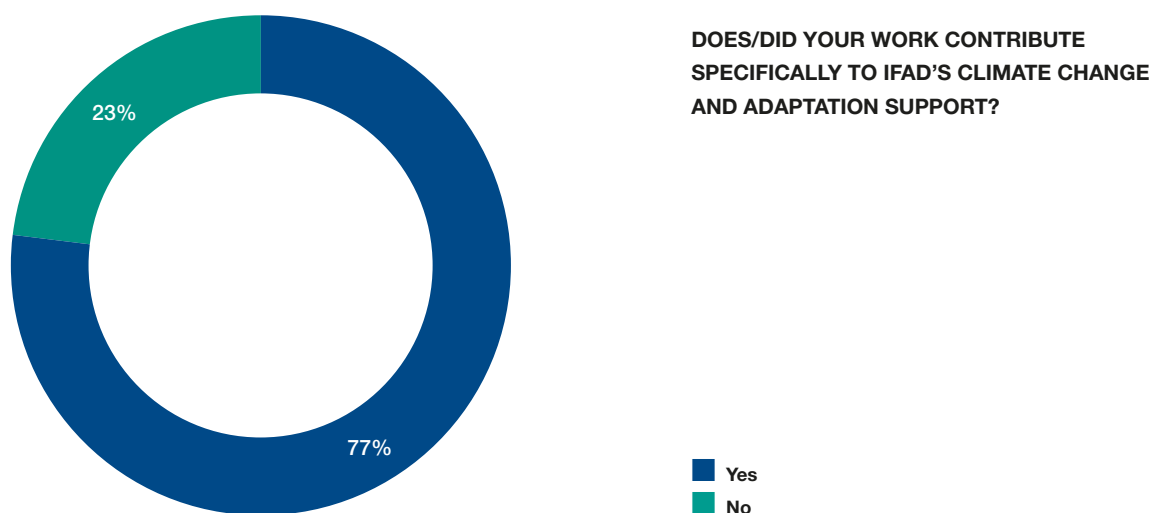
The graph below shows the divisions of staff who participated in the TE survey on CCA



Source: IOE elaboration of results: 99 responses received.

FIGURE A2

The graph below shows the involvement of participants' work in CCA activities



Source: Thematic self-evaluation results: 96 responses received.

TABLE A1

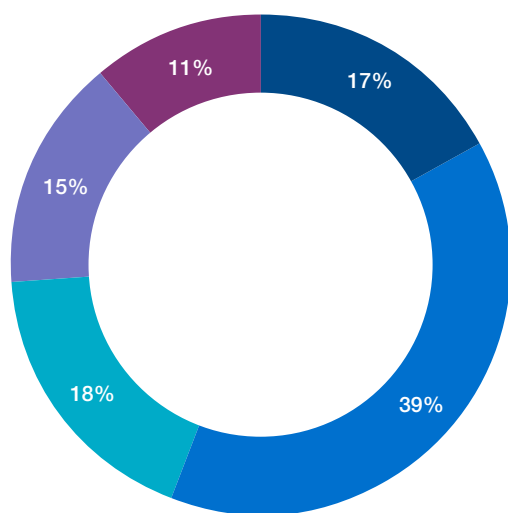
Do you agree with the following statements?

Statements	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
I have received enough guidance from IFAD on CCA and how to integrate it into my work	16%	34%	26%	19%	6%
The focus on CCA has a strong influence on my own work	43%	38%	15%	2%	2%
IFAD is well positioned to contribute to the global CCA agenda	44%	40%	9%	3%	3%
IFAD needs to make fundamental internal changes in order to effectively address CCA	17%	38%	28%	14%	3%
CCA is an area to which IFAD contributes significantly	28%	49%	18%	4%	1%
While CCA may be an important issue, this is not of concern for IFAD's mandate	4%	3%	10%	17%	65%

Source: IOE elaboration of survey results: 90 responses received.

FIGURE A3

Do you agree with the following statements?



**CCA IS THE CURRENT FLAVOUR OF THE MONTH OF IFAD AND WILL FADE IN TIME AS WITH MANY OTHER PREVIOUS PRIORITIES**

- Strongly agree
- Somewhat
- Neither agree
- Somewhat disagree
- Strongly disagree

Source: IOE elaboration of survey results: 88 responses received.

TABLE A2

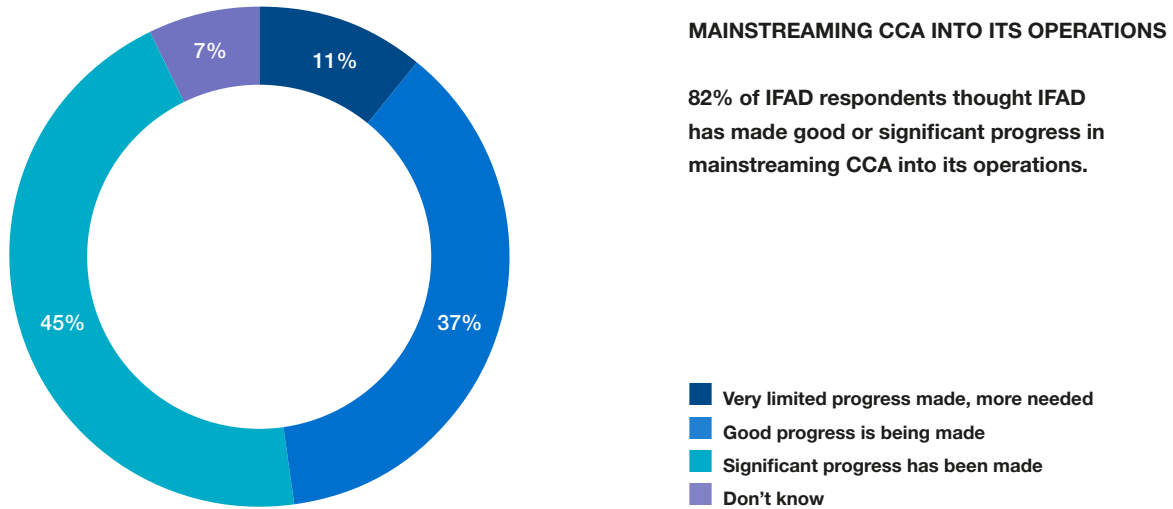
To what extent has IFAD made progress (since 2016 – IFAD10) in applying the following in support of climate change and adaptation?

Statements	Very limited progress made, more needed	Good progress is being made	Significant progress has been made	Don't know
Paying attention to ecosystem management and environmental sustainability	14%	48%	23%	15%
Focusing on climate vulnerability and targeting	9%	41%	37%	13%
Knowledge management practices	28%	39%	17%	16%
Scaling up operations or results	27%	36%	19%	17%
Promoting innovation and transformative change	25%	44%	18%	13%
Mobilizing support and resources for CCA	13%	33%	45%	9%

Source: IOE elaboration of survey results: 88 responses received.

FIGURE A4

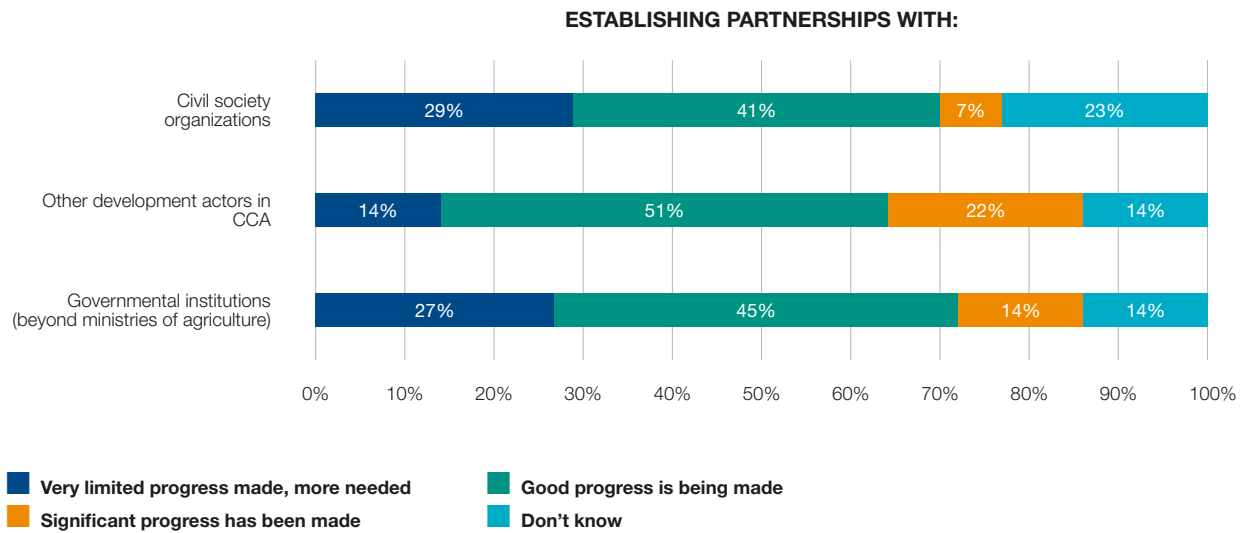
To what extent has IFAD made progress (since 2016 – IFAD10) in applying the following in support of climate change and adaptation?



Source: IOE elaboration of survey results: 88 responses received.

FIGURE A5

To what extent has IFAD made progress (since 2016 – IFAD10) in applying the following in support of climate change and adaptation?



Source: IOE elaboration of survey results: 87 responses received.

TABLE A3

To what extent are the following factors adequate for enhancing IFAD's capacity to support countries towards climate change adaptation?

Statement	Significantly weak / inadequate	Moderately weak / inadequate	No influence	Moderately Strong	Significantly Strong	Don't know
Coherence between IFAD's Strategic Framework and COSOPs on CCA needs of smallholders	6%	12%	5%	37%	33%	8%
IFAD's organizational structure and institutional mechanisms	8%	14%	18%	38%	20%	2%
IFAD's human resources	8%	22%	9%	37%	21%	3%
Collaboration between different teams and units of IFAD	5%	14%	9%	33%	34%	5%
Collaboration with other UN agencies	3%	18%	10%	38%	22%	8%
Readiness to engage with the current UN reform process	6%	17%	20%	30%	15%	12%
IFAD's technical capacities in CCA	5%	11%	6%	38%	36%	5%
IFAD's knowledge management capacities (e.g. learning and dissemination)	6%	22%	11%	31%	26%	3%
IFAD's relational capacities (e.g. in resource mobilization, partnerships, communication)	8%	9%	11%	33%	34%	3%

Source: IOE elaboration of survey results: 87 responses received.

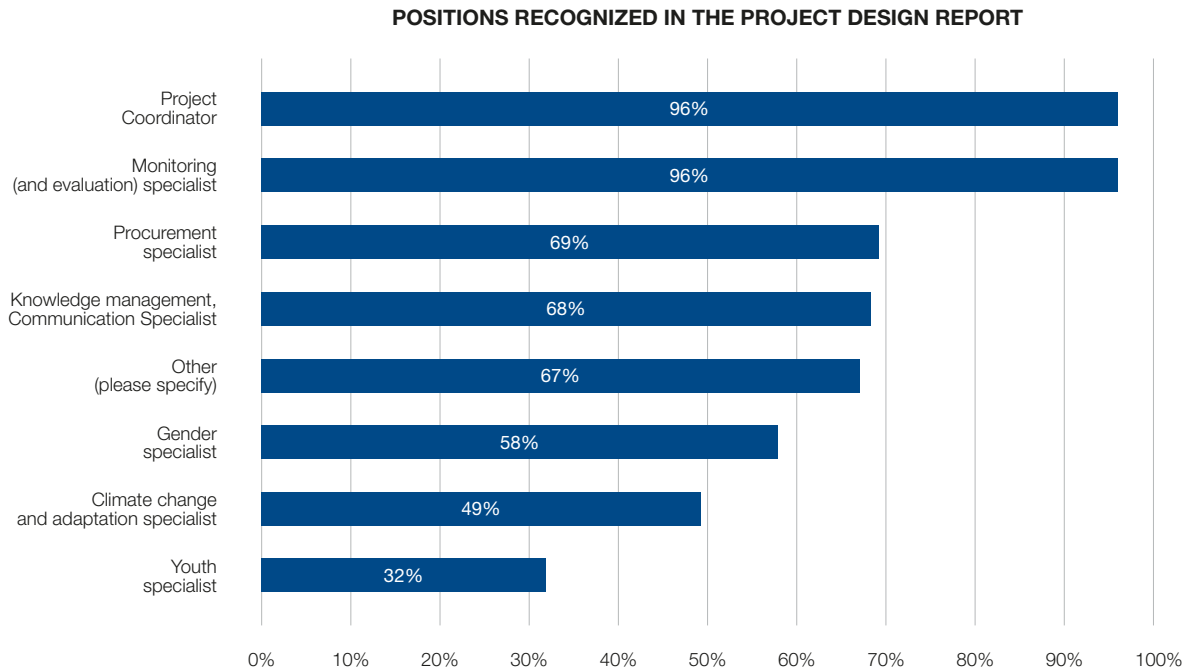


## B. IFAD-funded project staff survey results

### Descriptive information

FIGURE B1

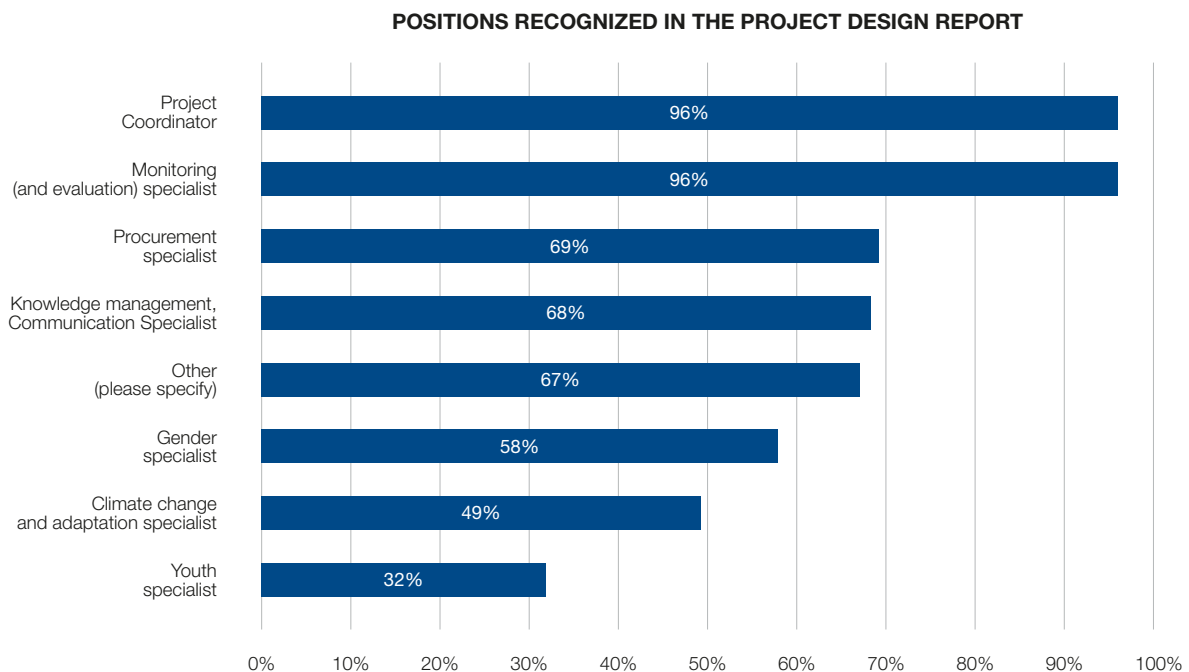
The graph below shows the main job roles of respondents from PMU



Source: IOE elaboration of survey results: 124 responses received.

FIGURE B2

The graph below shows the positions recognized in the Project Design Report



Source: IOE Elaboration of survey results: 120 responses received.

TABLE B1

**Views on CCA****To what extent do you agree with the following statements?**

Statements	Strongly disagree (%)	Somewhat disagree (%)	Somewhat agree (%)	Strongly agree (%)	Do not know/ too early to tell (%)
I have received enough guidance from IFAD on CCA and how to integrate it into my work	11%	14%	36%	35%	4%
The CCA focus of the project has a strong influence on my own work	9%	12%	34%	42%	4%
CCA is an area where IFAD has worked significantly in the country	5%	10%	29%	45%	11%
Local knowledge and locally faced climate threats are adequately reflected in the project design	6%	6%	38%	45%	4%
Significant modifications have to be made to the design of CCA activities to implement them properly	8%	21%	27%	34%	10%
Project targets for CCA are being reached during implementation	4%	4%	35%	37%	21%
The project monitoring system is adequate to track results related to the CCA interventions	4%	12%	42%	34%	9%
The project monitoring system is adequate to track that benefits are reaching the intended target groups	16%	20%	33%	24%	7%

**Source:** IOE elaboration of survey results: 112 responses received.

TABLE B2

**Views on performance on CCA****How well is your project performing in the following areas to support climate change adaptation?**

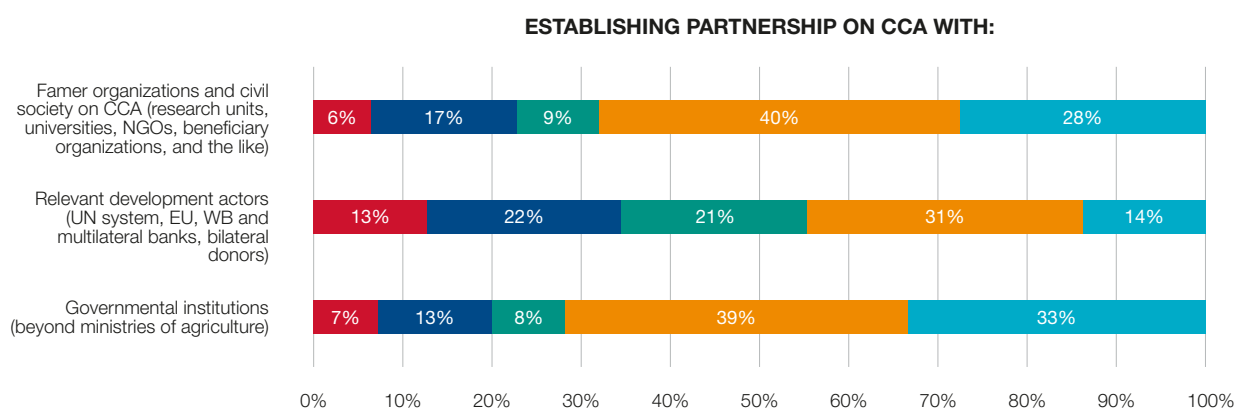
Statements	Unsatisfactory (%)	Moderately unsatisfactory (%)	No opinion (%)	Moderately satisfactory (%)	Satisfactory (%)
Ecosystem management and environmental sustainability	5%	7%	12%	50%	26%
Focusing on most climate-vulnerable	7%	9%	9%	48%	27%
Knowledge management practices	1%	10%	11%	55%	22%
Scaling up operations or results	6%	7%	17%	48%	22%
Introducing innovative practices	3%	7%	11%	47%	31%
Multiple project components reflect CCA considerations	5%	9%	12%	38%	37%

**Source:** IOE elaboration of survey results: 109 responses received.

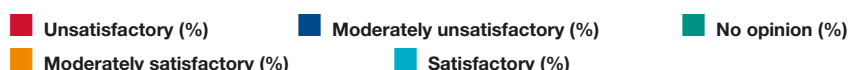
FIGURE B3

**Views on IFAD's progress on CCA**

To what extent has IFAD made progress (since 2016 – IFAD10) in applying the following in support of climate change and adaptation?



\* Contrary to the results coming from IFAD staff survey, the PMU survey shows that IFAD should strengthen partnerships with development actors



Source: IOE elaboration of survey results: 109 responses received.

TABLE B3

**Views on administrative factors**

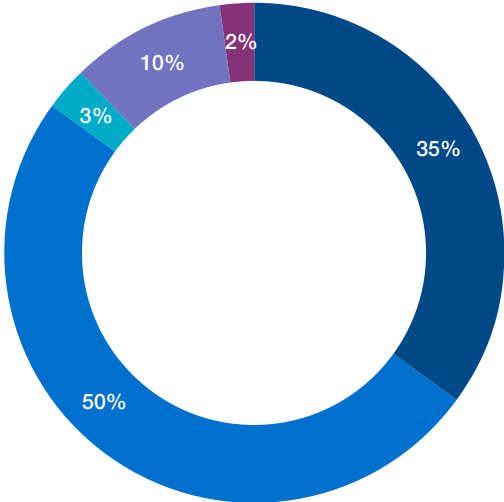
To what extent were the following administrative factors prevalent in your project management unit?

Statements	Not an issue (%)	Minimal prevalence (%)	Moderate prevalence (%)	Significant prevalence (%)	Don't know (%)
Vacancies for project staff (vacancy rate and duration of vacancy, high staff turnover)	30%	26%	22%	19%	3%
Procurement delays in the early phases of implementation	5%	15%	35%	40%	5%
Insufficient technical capacities in the project team to implement CCA activities in line with the design	26%	26%	29%	11%	7%
Difficulties in making necessary modifications to the design of CCA activities during implementation, particularly, before MTR [use of the newly introduced restructuring policy (2019)]	28%	23%	22%	15%	12%
Insufficient coordination among PMU specialists to address the different mainstreaming needs (gender, youth, CCA and nutrition)	39%	29%	19%	7%	5%

Source: IOE elaboration of survey results: 109 responses received.

FIGURE B4

Views on centrality of CCA at project level



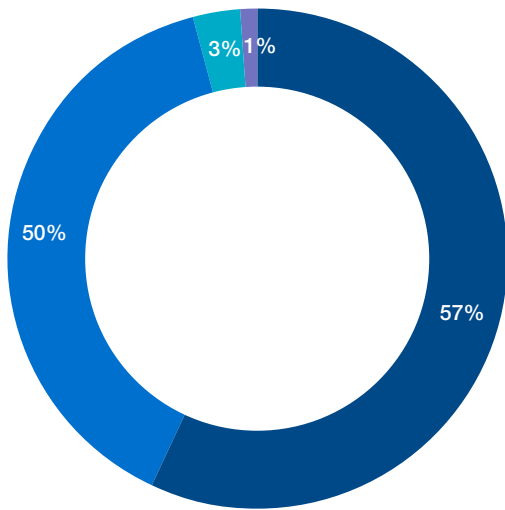
CENTRALITY OF CCA CONSIDERATIONS IN THE PROJECT:

- Climate response was a central consideration in most project components and activities - CCA was central to the project
- Climate response was an important project priority, had some links to other components
- Climate response was a standalone component with no links to other components of the project
- CCA was not a consideration
- I don't know

Source: IOE elaboration of survey results: 108 responses received.

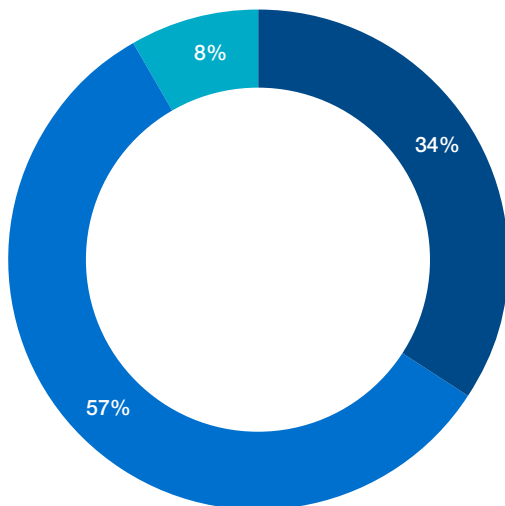
FIGURE B5

Views on capacity related to gender needs and issues



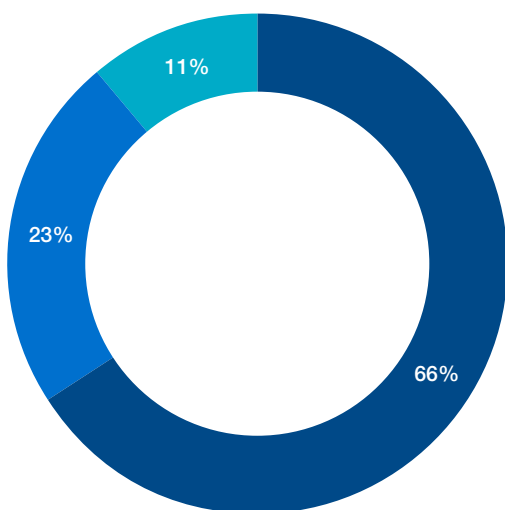
**PROGRAMME MANAGEMENT UNIT  
HAD THE CAPACITY TO ADDRESS  
GENDER NEEDS/ISSUES:**

- From the beginning
- Capacity became available after delays
- No capacity was available
- I don't know



**THE GENDER STRATEGY WAS AVAILABLE:**

- From the beginning
- Was developed during implementation
- No strategy available till date



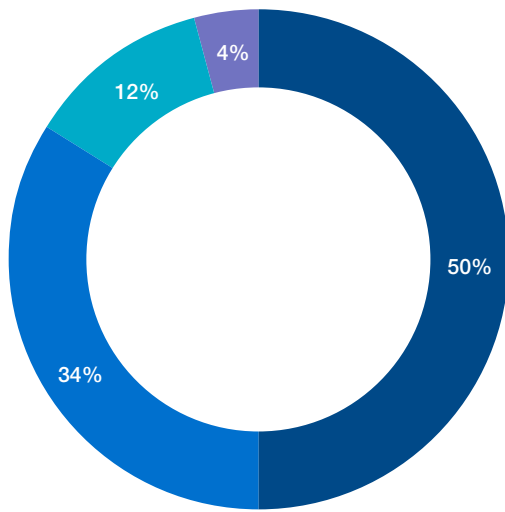
**CCA IN GENDER STRATEGY**

- It did cover CCA activities
- It did not cover CCA activities
- I don't know

Source: IOE elaboration of survey results: 107 responses received.

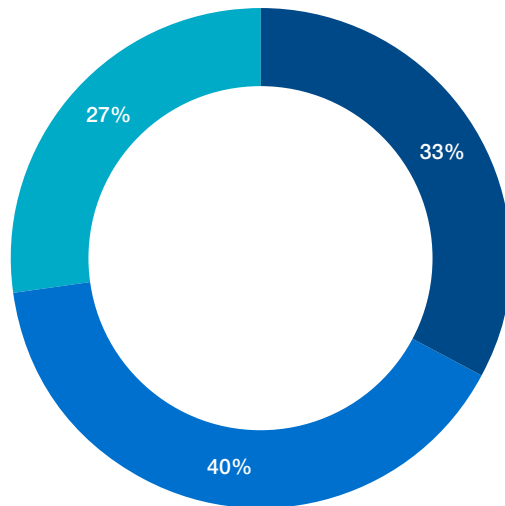
FIGURE B6

Views on capacity related to youth needs and issues



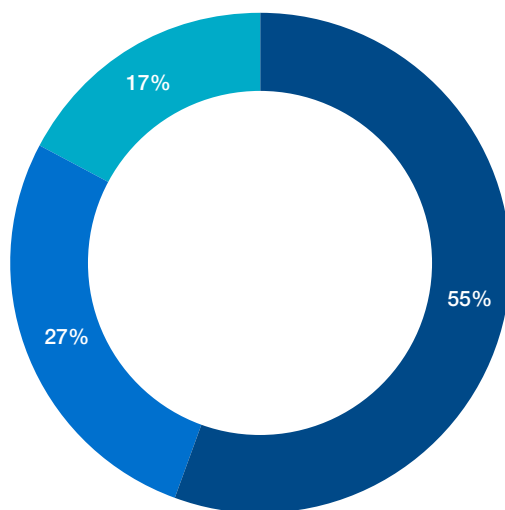
**PROGRAMME MANAGEMENT UNIT  
HAD THE CAPACITY TO ADDRESS YOUTH  
NEEDS/ISSUES:**

- From the beginning
- Capacity became available after delays
- No capacity was available
- I don't know



**YOUTH STRATEGY WAS AVAILABLE:**

- From the beginning
- Was developed during implementation
- No strategy available till date



**CCA IN YOUTH STRATEGY**

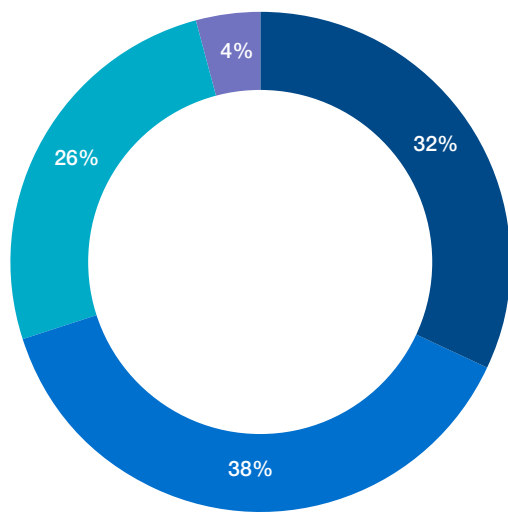
- It did cover CCA activities
- It did not cover CCA activities
- I don't know

Source: IOE elaboration of survey results: 106 responses received.



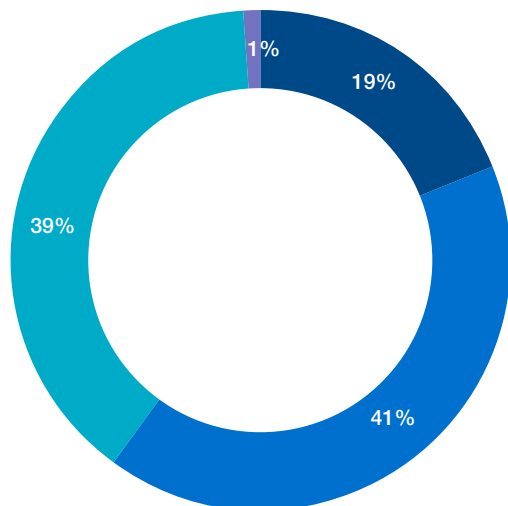
FIGURE B7

Views on capacity related to nutrition needs and issues



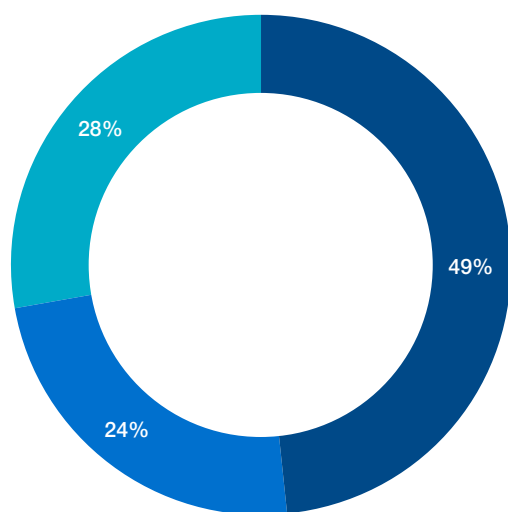
**PROGRAMME MANAGEMENT UNIT  
HAD THE CAPACITY TO ADDRESS NUTRITION  
NEEDS/ISSUES:**

- From the beginning
- Capacity became available after delays
- No capacity was available
- I don't know



**NUTRITION STRATEGY**

- From the beginning
- Was developed during implementation
- No strategy available till date
- I don't know



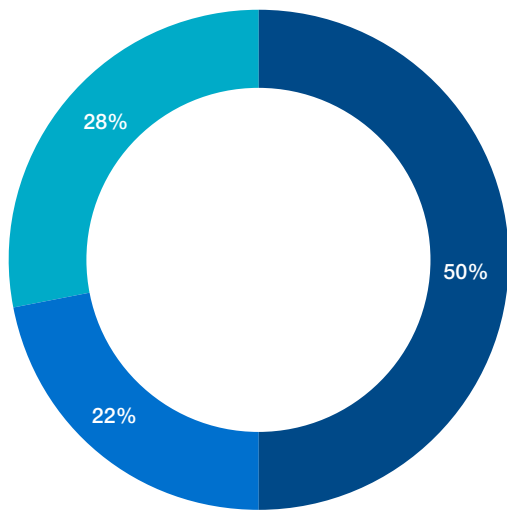
**CCA IN NUTRITION STRATEGY**

- It did cover CCA activities
- It did not cover CCA activities
- I don't know

Source: IOE elaboration of survey results: 108 responses received.

FIGURE B8

Views on adoption of CCA approaches



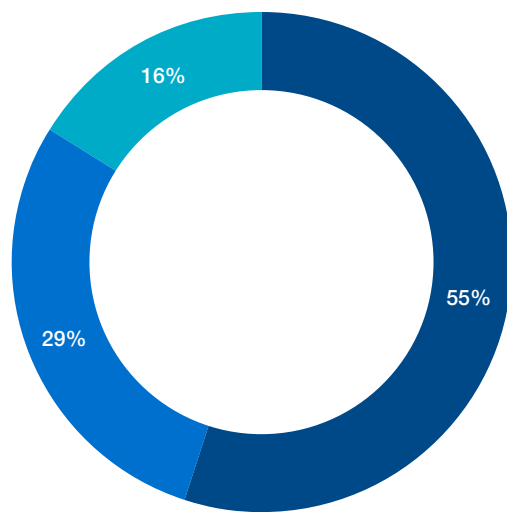
**DID CCA ACTIVITIES IN YOUR PROJECT CONTRIBUTE TO OTHER ACTORS ADOPTING OR SCALING UP ITS CCA APPROACHES?**

- Yes
- No
- I don't know

Source: IOE elaboration of survey results: 105 responses received.

FIGURE B9

Views on external knowledge management potential



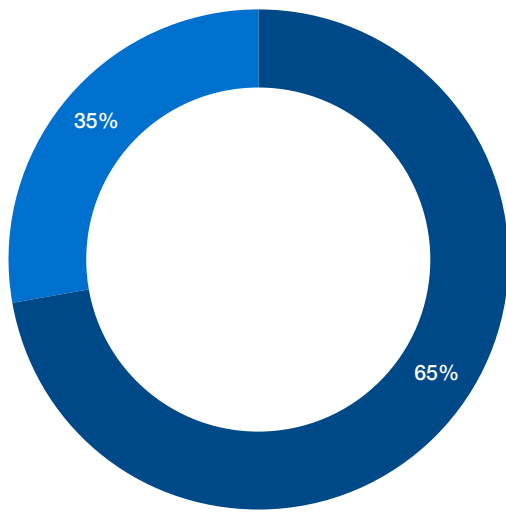
**DID ACTIVITIES IN YOUR PROJECT SHARE SUCCESSFUL CCA SOLUTIONS WITH LOCAL OR NATIONAL GOVERNMENT UNITS, OTHER PARTNERS, FARMER ORGANIZATIONS OUTSIDE PROJECT AREAS?**

- Yes
- No
- I don't know

Source: IOE Elaboration of survey results: 105 responses received.

FIGURE B10

Views on knowledge management examples



**CAN YOU IDENTIFY ANY GOOD EXAMPLES IN YOUR PROJECT DOCUMENTING AND DISCUSSING CCA PRACTICES AND APPROACHES OF YOUR PROJECT AS WELL AS EXPERIENCE OF OTHERS?**

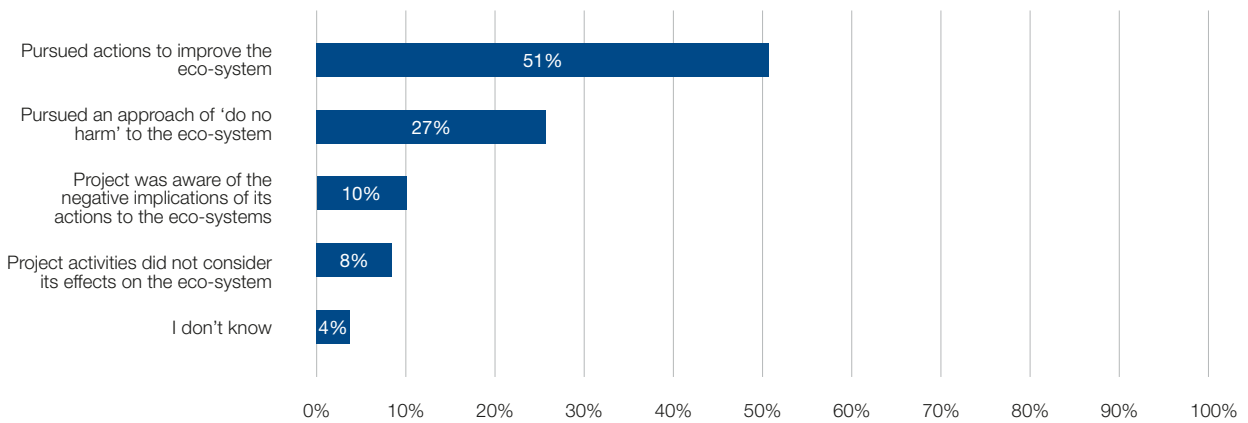
■ Yes  
■ No

Source: IOE elaboration of survey results: 105 responses received.

FIGURE B11

Views on ecosystem effects

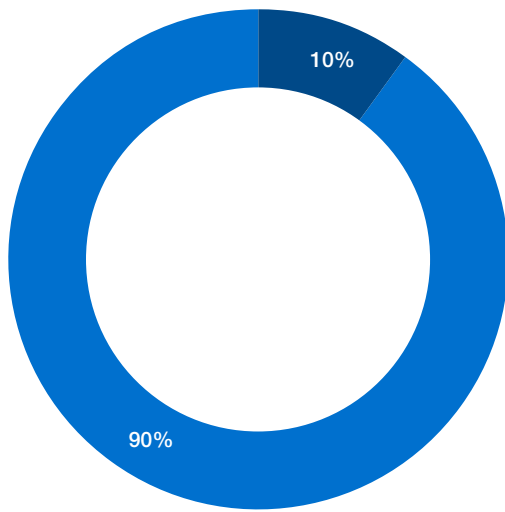
**HOW WOULD YOU CHARACTERIZE YOUR PROJECT?**



Source: IOE elaboration of survey results: 105 responses received.

FIGURE B12

Views on obsolescence of CCA approaches



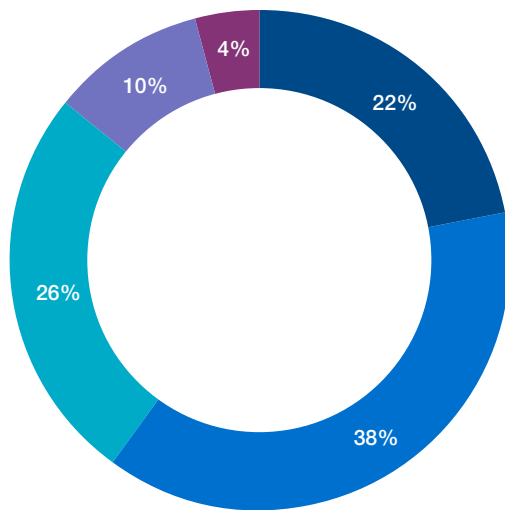
IN YOUR OPINION, ARE THERE ANY OF THE CLIMATE CHANGE ADAPTATION (CCA) ACTIVITIES OR APPROACHES PURSUED BY THE PROJECT THAT ARE NOW OBSOLETE, NEED A RETHINK OR SHOULD BE NO LONGER PURSUED?

- Yes
- No

Source: IOE elaboration of survey results: 105 responses received.

FIGURE B13

Views on CCA improving the well-being of beneficiaries



OVERALL, TO WHAT EXTENT DID YOUR CLIMATE CHANGE ADAPTATION PROJECT ACTIVITY CONTRIBUTE TO IMPROVING THE WELL-BEING OF RURAL SMALLHOLDER FARMERS IN THE PROJECT AREA?

- Not significant
- Somewhat significant
- Significant
- Very significant
- Not sure

Source: IOE elaboration of survey results: 105 responses received.

# Annex VIII.

## Executive summaries of learning theme studies

### A. Executive summary: building adaptive capacity of smallholders to climate variability and change: key findings from a rapid evidence assessment

1. This rapid evidence assessment (REA) was undertaken within the context of a Thematic Evaluation of IFAD's Support for Smallholder Farmers' Adaptation to Climate Change, led by the Independent Office of Evaluation. It sought to provide additional and complementary learnings to inform the evaluation, by assessing which interventions have been successful in building smallholders' adaptive capacity and responses to climate change, and how these have been most effectively transferred as learning outcomes in relation to the three key dimensions of scaling up, knowledge management and ecosystem-human interactions.

2. There is extensive empirical literature that investigates the underlying conditions and the enabling factors that determine the adoption of autonomous adaptation measures. This REA considers these determinants, alongside the conditions and the features of 'transformational' or more persistent adaptation pathways, usually framed in broader planned adaptation policies or interventions. Planned adaptation should rely on complementarity and integration of strategies so that underlying determinants of adoption, such as access to knowledge and information, exist alongside enabling factors, such as endowment with productive assets, human capital (education and skills) and institutional support (e.g. groups and collective action). Profiling the existing socio-economic conditions is essential to adjust planning according to different adaptive capacities and to avoid inequalities stemming from wealth or gender as well as dynamics of power and decision-making that compromise equitable distribution of adaptation outcomes.

3. While it is not possible to list standard solutions that are applicable across all contexts, scaling up processes are characterized by some recurrent features; in particular, interventions follow integrated, multisectoral and participatory approaches in planning, implementation and dissemination, fostering knowledge exchange and co-creation of knowledge. Access to knowledge is one of the most important determinants of smallholders' decisions to respond to risk as well as a critical element in building adaptive capacity. The way knowledge about climate change and variability is produced, transferred and exchanged is thus extremely relevant to securing scaling up pathways.

4. The review of the literature on knowledge management focused on the respective importance of local or indigenous knowledge and external, scientific knowledge in smallholders' adaptation and how potential tensions stemming from inequitable 'politics of knowledge' can be solved. Social learning (deep understanding and assimilation of concepts through social interaction) is an effective way to link science, policy and practice to tackle the multiple and related challenges of agricultural development, food security and CCA. Learning platforms based on participatory action research (PAR), farmer field schools (FFS) and similar experiences have proven to be especially important. Local knowledge is fundamentally important for understanding and dealing with climate change empirically; however, autonomous adaptations may be limited in scope and may not be effective in the long run (potentially leading to maladaptation). Also, knowledge based on local practices may be insufficient to prompt more transformative action. Bridging local and external knowledge is thus critical because it widens smallholders' knowledge base and encourages 'proactive' adaptation alongside more typical 'reactive' strategies. When knowledge and information are transferred along more 'structured', one-way channels (such as extension services or weather broadcasts), communication solutions need to be both easily available (i.e. supplied) and accessible (i.e. farmers should be able to receive, understand and use them effectively).
5. While the evidence on scaling up and knowledge management calls for a multisectoral approach to adaptation in agriculture, and stresses the importance of including environmental considerations to secure equitable and sustainable adaptation patterns, literature that focuses on the interactions between the human and the ecological systems or that uses an environmental lens to discuss adaptation in smallholder agriculture, is scarce. Few studies explicitly investigate the links between smallholder agriculture and the ecosystem within the context of CCA. This limited evidence reflects the fact that policies in agriculture, environment and climate change still work in silos with limited genuine cross-over and exchange between disciplines and practices.
6. A transdisciplinarity approach across the economic, social and environmental domains, which represents a step forward for interdisciplinarity, with full integration of complementary disciplines and interventions at multiple levels, is much needed. Ecosystem-based adaptation (EBA) approaches are proposed as an elective tool to achieve such an integrated vision. Other authors advocate for community-based adaptation (CBA) and EBA to be combined and mainstreamed into large-scale planning to pursue adaptation pathways that assimilate the multiple nexus between human and ecological systems; in this regard, social capital in the form of social networks and collective action is extremely relevant.
7. In order to be transformative, actions undertaken at individual and community levels should find space and consistency in a higher-level framework that ultimately resolves trade-offs and barriers for longer-term, sustainable results. Beyond providing the enabling policy and legal environment (e.g. land tenure, rights to access natural resources), external institutions such as government and development actors should act across three intervention scales – household, community and landscape levels – and also, importantly, provide the right economic incentives to compensate smallholders for investments that do not have immediate returns (such as in agroforestry).
8. However, the review identified a number of pitfalls for policymaking in systematically transferring these lessons into practice to support transformational adaptation in agriculture. Some barriers are financial, technical and/or of an organizational nature, but others are more fundamental and require a marked shift in how decision-making processes are framed and implemented. For adaptation pathways to be transformative and inclusive, the current policymaking process must undergo a number of changes, including taking on a more holistic approach to address vulnerability as stemming from a complex web of causes, among which climate change is but one.



9. High-level policies should also build upon local experiential knowledge and priorities. However, a general disconnection compounded by insufficient coordination exists between policy, research and practice whereby smallholders' needs and preferences are shaped by external actors. The concluding section discusses the implications of these findings for policymakers and development practitioners. Mainstreaming successful local adaptation into large-scale planning requires participation, active stakeholder engagement, and an actual devolution of rights and responsibilities. Methodological improvements are needed to assess and evaluate adaptation outcomes as M&E is at the core of understanding and scaling up what works. Stakeholder platforms provide a powerful tool (alongside other analytical methods) to encourage mutual learning, communication and governance. Participatory research and experimentation are also needed to better understand and manage trade-offs among competing objectives, and to better evaluate social costs and benefits in the calculation of payments for environmental services and other economic incentives for farmers. The discussion correctly highlights the relevance of stakeholder participation and engagement for scaling up transformational adaptation pathways. However, to make these approaches work in practice, a more fundamental shift is required in governance and policy fora, to redesign the decision-making processes and the politics of knowledge that shape preferences and ultimately define whose priorities are addressed.

## **B. Executive summary: learning thematic study - scaling up climate change and smallholder adaptation responses**

10. IFAD states that scaling up the results of successful development is at the heart of what it does and defines it as “expanding, adapting and supporting successful policies, programmes and knowledge so that they can leverage resources and partners to deliver larger results for a greater number of rural poor in a sustainable way” (IFAD, 2021). IFAD also recognizes that its operational practices need to shift from a project-centric approach to one that triggers change within the institutional, policy and economic environments in which rural poverty exists. IFAD interventions should therefore not only enable rural communities to work their way out of poverty within the limited time and resource constraints of a given project, but also to use the positive outcomes from its operations to inspire others and leverage policies, knowledge, social and political capital, and financial resources (from private, public and communities themselves) to scale up those results in a sustainable manner (IFAD, 2015).
11. IFAD also explicitly recognizes that scaling up does not simply mean replicating or transforming small projects into larger projects, but rather how its interventions should focus on how successful local initiatives could leverage changes in policy, and secure additional resources to bring results to scale. Scaling up can also involve moving a project forward into a more developed, complex phase, possibly involving new components, configurations and stakeholders, or mainstreaming a certain approach into policy. A key element in successful scaling up is therefore helping to build the capacity of local stakeholders, including those who represent the most vulnerable communities so they can access relevant resources, develop partnerships, and engage in a constructive and inclusive way in policy dialogue.

12. Within the terms of reference for the Independent Office of Evaluation's thematic evaluation of IFAD Support for Smallholder Farmers' Adaptation to Climate Change, this study focused specifically on scaling up as one of three learning outcomes or domains. The aim was to critically assess to what extent IFAD has been able to leverage its operations to strengthen smallholder farmers' climate adaptation capacity at the local, subnational and national levels through partnerships and by scaling up successful interventions, promoting enabling policies, strengthening institutional capacities and improving the financial architecture for adaptation. The study also set out to scrutinize what has worked and why, and what opportunities might have been missed.
13. The approach was based on a detailed review and assessment of relevant IFAD evidence, including project design and supervision reports, IOE evaluation reports, the operational framework on scaling up (IFAD, 2015), the latest Annual Report on Results and Impact of IFAD Operations (ARRI 2020), and key insights and findings that have emerged from 20 country case studies. The assessment has also drawn on wider scientific and grey literature synthesized as part of a rapid evidence assessment (REA) to provide an external critique and comparison of IFAD scaling up activities against international comparators.
15. In operationalizing scaling up, IFAD also adopted a conceptual framework developed by the Brookings Institution, complemented with elements from other approaches. This involved evaluating the lessons learned from past interventions to answer the question 'what works and what is to be scaled up?' and then defining the pathways and drivers that allow results to be brought to scale beyond the project boundary. This involves keeping in mind: what's the vision, what's the strategy, what's the process?
16. The key elements for success usually consider scaling up as part of a continuous cycle of innovation → learning → scaling up. These have been highlighted in the IFAD operational framework together with some of the key attributes which have been previously identified as markers for success. These are briefly summarized in table 1 and provide a reference against which the scaling up activities reported in each of the countries can then be compared. The attributes are broadly ordered to correspond to the timing of their relevance in typical design and implementation phases of an IFAD project.

#### Linking the analytical framework to country studies evidence

#### IFAD's operational framework for scaling up

14. In 2015, IFAD recognized as part of its broader mandate the pressing need to expand, adapt and support its most successful policies, programmes and knowledge to leverage additional resources, and in response published its first operational framework for scaling up (IFAD, 2015). This was designed to provide structured guidance to IFAD country teams on how to systematically mainstream scaling up into their operations and how country staff should consider scaling up for their context. Since innovation is a key constituent of scaling up, the framework provided guidance on a range of operational approaches that could be considered, rather than being prescriptive on what should be done. It was designed to complement IFAD's existing operational policies and provide IFAD partners with information on how they might collectively increase development impact.
17. Table 1 summarized the essential attributes or 'markers for success' required to achieve effective scaling up, recognizing that it is part of a continuous cycle of innovation and learning. Table 2 identified the extent to which various scaling up activities had been implemented in each case study country, including occasional exemplars but also observing where scaling up was deemed a low priority. Table 3 below combines the evidence from both these sources to try to identify which attributes were most prevalent in the IFAD projects and conversely uncover those which were absent. This should help to inform future IFAD scaling up initiatives.

TABLE 1

Summary of attributes to successful scaling up (adapted from IFAD 2015) and evidence identified in the country case studies

Key attribute for success	Country case study evidence
<b>Clear government commitment and ownership</b>	<p><i>Government can be the main driver of scaling up by creating the space for scaling up to happen, particularly in the fiscal, political, policy, organizational and learning areas.</i></p> <p>Evidence: Only a minority of countries (Bangladesh, the Plurinational State of Bolivia, Burundi, Nepal) demonstrating proactive government engagement on the issue.</p>
<b>Space for scaling up</b>	<p><i>Scaling up takes place within a broader environment that can either enable or thwart it. Unless there is space in this environment for ideas and pilots to grow, scaling up may not occur. Space can be institutional, social, political, environmental, policy, cultural or learning.</i></p> <p>No clear evidence that IFAD is actively promoting or supporting the broader environment to enable scaling up to be effectively implemented. Evidenced by only a handful of countries showing clear government commitment and ownership for scaling up agenda.</p>
<b>Building capacity of local stakeholders</b>	<p><i>Notably in organizations of poor rural women and men to attain scale, enabling them to 'crowd in' additional partners and resources, and engage in policy dialogue. IFAD's role is largely its ability to scout for promising innovations and initiatives, identify target group institutions that can drive change around such innovations, strengthen their capacity and then help them go to scale.</i></p> <p>Evidence: Reasonably strong support for building capacity across a number of projects and countries including Bangladesh, Cabo Verde, Kyrgyzstan, Mali, Nepal, Rwanda and Sudan.</p>
<b>Partnerships for scaling up</b>	<p><i>A key challenge is identifying institutions that have the potential to pursue and sustain scaling up efforts, are socially cohesive and well-integrated into the national context, and can therefore operate at scale. Partnerships with bilateral and other multilateral development agencies can catalyse complementarities of interventions and provide additional cofinancing.</i></p> <p>Evidence: Partnerships and building capacity seen as complementary activities to support scaling up with good evidence from Bangladesh, Honduras, Kyrgyzstan, Nepal, Niger and Sudan.</p>
<b>Community-driven scaling up</b>	<p><i>Effectiveness of community-driven approaches in promoting community-led planning and management of development activities and the 'how to' of inclusive and sustainable development. A critical dimension in scaling up has been the role of empowered and federated community institutions that reach sufficient scale to access loans and services from government, as well as to crowd in private-sector investments for enhanced sustainability.</i></p> <p>Evidence: Limited evidence on the role of empowered community institutions receiving financial and political support to attain scale and capacity to 'crowd in' external investments to enhance sustainability. Good examples in the Plurinational State of Bolivia, Nepal and Niger.</p>
<b>Public-private-producer partnerships (4Ps)</b>	<p><i>Long agricultural value chains are a powerful tool to attract private-sector investments to the smallholder sector, as well as to market segments that would not be profitable to private companies without public support and/or donor financing. IFAD's role in the 4Ps is to use a combination of its financial and non-financial instruments for different clients, leveraging innovative finance and 'pull' mechanisms to scale up results</i></p> <p>No clear evidence from the projects or countries where extended agricultural value chains have been used to leverage private-sector investments into smallholder agriculture. IFAD has been successful in leveraging additional finance to support CCA but scaling up priorities has been low priority, with emphasis more on project impacts.</p>
<b>Pathways for scaling up</b>	<p><i>Needs to be defined with intermediate goals to assess whether activities moving in right direction. IFAD experience indicates pathways are long, stepwise and require multi-stakeholder engagement. Pathways need to consider the 'why, what, who, when and how' that links each element to the larger intervention. Pathways also need to clarify a country's context and priorities, what long-term changes are being sought, who benefits, and the sequence of actions that are required for changes to occur.</i></p> <p>Evidence: Good evidence on how pathways to scale up were developed in Honduras and Mali.</p>

Key attribute for success	Country case study evidence
<p><b>Clear evidence of phases of scaling up</b></p>	<p><b>Innovation</b> (new idea, pilot project, testing) → <b>learning and programming</b> (M&amp;E, learning, KM, country programme) → <b>leveraging</b> (government, development partners, private sector, community groups) → <b>scaling up</b> (sustainability, multiple impact, feedback to the innovation).</p> <p>No clear examples of how specific CCA innovations have led to improved learning and leveraging of further government support or support from development partners, private sector or community groups to achieve international scaling up impact.</p>
<p><b>Dimensions are important</b></p>	<p><i>Pathways may concentrate on expanding services to more clients in a given area or horizontal replication, from one geographical area to another. Other dimensions include functional expansion, by adding additional areas of engagement or roles for a project organization; and vertical scaling up, by moving from local or provincial engagement to nationwide engagement. Policy engagement may be necessary to achieve the policy and institutional conditions needed for successful national-level scaling up or to attract investment from the private sector or other partners.</i></p> <p>Recognition of the different modes and dimensions of scaling up evident in projects in the Plurinational State of Bolivia, Madagascar and Niger.</p>
<p><b>Sustainability and scaling up</b></p>	<p><i>Principles of scaling up and sustainability are inextricably linked. Assessment of the key spaces and institutional actors are needed that will give a local initiative continuity in the absence of ongoing donor funding.</i></p> <p>No clear evidence from the country projects on how scaling up has been explicitly linked to the key sustainability agenda.</p>

18. There were also several countries where there was a clear lack of tangible evidence on scaling up activity. For example, in Belize the focus has been on monitoring project outputs, rather than developing a scaling up strategy; in Cabo Verde there has been little indication of scaling up activity; in Chad no explicit approach exists; in Egypt there appear to be no plans for scaling up and IFAD's project is working in isolation; in Ethiopia national scale initiatives exist, but there is an absence of an institutional framework for implementation; in Kenya the COSOP emphasizes scaling up, but there is no model for effectively achieving it, and in Madagascar and the Republic of Moldova evidence of scaling up activity was marginal. These insights seem to reinforce many points and criticisms raised by the Brookings study in 2013.

### Summary of key findings on scaling up

- The country case studies highlighted the different types, dimensions and scales of scaling up activities that have been implemented, and as expected, there was no one approach that fitted all geographical and project contexts. Most were horizontal activities with less emphasis on vertical or diagonal scaling up.
- The degree of success in scaling from the individual project level to deliver a tangible international impact was generally low. While there are exemplars of success from the case studies on how scaling up can be effectively incorporated into design and implementation (for example, in Bangladesh, Kenya, Nepal and Niger) for the majority of cases, the ambition or potential for scaling up has not been realized. So why is this and what have been the barriers to successful implementation?
- Success in scaling up from the country level depends to a large extent on coordination and engagement from the outset, designed with the different 'layers' of national government. However, while some governments have been committed and keen to support scaling up, others have mixed views on its relevance to projects, and some are simply not interested or willing to engage. IFAD has limited scope to change the mindsets of national governments where scaling up is not politically or operationally viewed as a priority, even if their country COSOPS demonstrate that commitment.

- In some cases, IFAD is also not engaging with the right government partners when designing projects from a scaling up perspective; there is a mismatch between what IFAD aspires to do and what governments are generally willing to support. IFAD needs to critically review its design approach to ensure the right partners are involved in co-designing appropriate scaling up activities and that sufficient resources are then committed to achieve the COSOP ambition. For example, the target audiences for most projects at regional and country levels are simply linked to the stakeholders who work alongside the ministries of agriculture, but in many instances these are not the same target audiences that IFAD has in mind to meet its international scaling up agenda.
- However, not all projects or programmes need to be scaled up to international levels; it depends on government incentives and interest. In some cases, horizontal expansion is most relevant, taking innovations or new technologies or even management approaches to other parts of the country or sub-sectors within smallholder agriculture (e.g. farmer field schools in Rwanda). IFAD is therefore more focused and driven by supply-side activities linked to its projects rather than the demand side, where new partnerships are needed to support effective scaling up activities elsewhere. This implies IFAD is missing opportunities to seek out partnerships for knowledge transfer (what has IFAD done to map its knowledge gaps?) and there appear to be real gaps in IFAD developing international partnerships to support knowledge exchange and transfer on topics such as building smallholder resilience to climate change. The situation is exacerbated by IFAD giving insufficient attention in general to mainstreaming both knowledge management (KM) and scaling up within its project conceptualization, design and implementation phases. Labelling these activities as non-lending also implies their importance or relevance is not mission-critical to project success.
- Sharing knowledge is contingent on choosing the right mode of delivery, but what is missing in IFAD is the framework to effectively do this. For example, one option would be to better utilize the Communities of Practice (CoPs) that have been set up in IFAD to share the knowledge being generated at country level, so that project outputs can be coupled to IFAD's strategic activities on scaling up. It is also apparent that staff within country projects do not fully understand the concept of scaling up and the different modes or dimensions it can take. But, importantly, they also lack the resources and support to ensure scaling up becomes an essential output from their projects. Many projects still tend to focus too much on project management and delivery outcomes, and it is difficult to see where innovation, KM and scaling up are being given sufficient attention. As noted by Brooking (2013) it is critical that IFAD provides clear guidance and incentives for institution-building in support of a long-term scaling up pathway. A lack of effective institutional M&E is a result of a lack of incentives for staff, which then creates a lack of accountability, since no one ever asks whether sustainable scaling up institutions are being created by IFAD interventions.
- Despite the high level of institutional commitment to the concept of scaling up, it is not clear to what extent it is part of IFAD's vision at the outset of a project intervention. As Brooking identified (2013) it is therefore not surprising how project managers perceive the institutional aspects, generally considering only those aspects that determine the successful completion of the project itself, rather than the institutional dimensions which would provide a foundation for scaling up and sustainability on a larger scale.
- In some countries, project designs lacked any explanation on how the expected results would be scaled up. While high potential was found to exist in many projects, what was lacking was IFAD's engagement in policy dialogue to inform policy processes. Rather than scaling up experiences and outcomes via policy measures (vertical and diagonal scaling up), follow-on projects largely tend to be formulated and implemented in other regions or agricultural sub-sectors (horizontally) thus limiting the wider opportunity to scale up.



- Unfortunately, many scaling up issues highlighted in this TE seem to be recurring from those previously identified by the Brooking assessment in 2013. That two-phased study assessed the extent to which IFAD had identified relevant scaling up pathways as the drivers in eight countries, and well how the Fund had developed an operational approach to assure the integration of scaling up into its project implementation processes. From our assessment, for some countries, there is still an issue on how scaling up approaches have been explicitly incorporated into their COSOP strategies and hence no surprise that there has not been a systematic application of the principles and practice of scaling up. However, where IFAD has supported scaling up via engagement with national and local stakeholders and external partners (e.g. Bangladesh, Nepal) and proactively engaged in policy dialogue, then there has been good progress. Most countries are focused on scaling up in the horizontal (and to a much lesser extent, vertical) dimension. IFAD, therefore, needs to continue to provide strong incentives and support to its country teams to maintain a focus and priority developing on scaling up pathways and the importance of institutional links to enable effective scaling up in the long-term, especially post project.
- Finally, institutional capacity (and space) constraints appear to have been the main barrier to scaling up with its longer-term sustainability not assured due to lack of institutional support. The Brooking (2013) study also identified that institutional analysis and the consideration of institutional options to support scaling up were not principal attributes of IFAD in its project design phase or in the monitoring and evaluation of IFAD programmes during project implementation and after completion. These factors still seem to be prevalent in the latest set of case study analyses.

## C. Executive summary: learning thematic study – knowledge management

19. **Definition:** The assessment of KM in interventions in this learning study takes IFAD’s definition of KM as presented in the most recent KM strategy (2019-2025): KM is defined as a set of processes, tools and behaviours that connect and motivate people to generate, use and share good practice, learning and expertise to improve IFAD’s efficiency, credibility and development effectiveness.
20. **Rationale:** KM is critical to achieve lasting impact in CCA resilience. Vulnerable smallholders are often well aware of the climatic and environmental threats they are facing. However, CCA solutions to the threats they face are meagre and continue to evolve. KM is an important element to address this gap. Successful context-specific CCA solutions integrating scientific and local knowledge need to be identified, factors contributing to their success analysed and retained in a knowledge base that should be accessed and used more broadly.
21. **KM in IFAD.** The importance of knowledge management (KM) and learning was highlighted in IFAD’s Strategic Framework 2016-2025 which stated that IFAD’s ability to learn, to generate knowledge, to provide evidence of what works, and to leverage the knowledge of others are fundamental to its development impact and its ability to provide value for money.
22. IFAD’s analysis showed the following three areas of challenges: i) knowledge generation - building the knowledge base; ii) use of knowledge - access to, use and re-use of existing knowledge; and iii) the enabling environment – a culture of learning and knowledge-sharing which depends on inputs such as an incentive framework, awareness, KM architecture, to name a few supporting factors. Its analysis highlighted the need for IFAD to have a more focused, prioritized approach to knowledge development and mobilization, aligned with investment opportunities. Moreover, limited capacities, incentives and resources at country programme and project levels were found to be major obstacles to building KM and learning.



## Country case studies: lessons, exemplars of best practice, barriers and enablers to success

23. Drawing on evidence from the 20 country case studies, this study assesses how well KM was embedded in project design, the lessons learned, and the types of successful KM activities at international, regional, national, and local levels. It also illustrates examples of IFAD's work to foster partnerships to support KM. This section presents the key lessons, while a summary of KM findings from case study countries is provided in the table below.

### Key lessons - CCA knowledge management

24. **Knowledge generation:** From the case studies, it is evident that while a lot of CCA knowledge was generated at the level of projects, in most cases it was unclear how this knowledge was being used to improve practices. In particular, bridging local/indigenous and scientific/external knowledge was critical for more sustainable and forward-looking approaches that move away from short-term solutions. The rapid evidence assessment (2021) noted that learning platforms based on social inclusion and participatory action research bringing together local and external actors were effective in supporting adaptation strategies. The farmer field schools (e.g. in the Republic of Moldova) are examples for such a learning platform. They also integrate adaptation at different levels and scales. Their effectiveness depends on the degree of farmer participation, particularly in the needs assessment and design of training modules.

25. The best examples of knowledge generation in the case studies were found at local level, often with a strong focus on community-based approaches (e.g. in the Plurinational State of Bolivia). Only a few good examples were identified at national level (e.g. in Bangladesh) and international levels (mainly in LAC, often due to project coordinators/consultants being involved in projects in more than one country). In some case study countries (e.g. Kyrgyzstan) there was reluctance to share knowledge and information within and between institutions. Lack of common language also posed an additional challenge. Ad-hoc KM activities at the project level have reduced the strategic relevance of knowledge generation to country-level interventions and to IFAD's corporate-level decision-making. KM products primarily target front-line beneficiaries and working-level counterparts and, in most cases, do not feed into non-lending activities at a strategic level.

26. **Knowledge use:** Some of the best examples of knowledge use relate to those projects where partnerships or strong links were developed with universities or academia. This resulted in embedding lessons from operations in curricula (e.g. in Burundi) and fruitful partnerships for developing of knowledge products (mainly in LAC). Other good examples (also mainly from LAC) relate to KM partnerships with regional institutions and inter-country collaborations (e.g. Brazil and Mexico). The SSTC/KM centre in Brazil promoted a broader KM agenda within LAC where inter-country opportunities were identified (e.g. among Amazonian countries), including with countries in other continents (e.g. experts from Brazil supported an IFAD project in Rwanda through ABC financing). These examples show that KM has a value as a geo-political tool and sharing and using knowledge could be demand-driven when the right frameworks and incentive structures are provided. In short, a combination of knowledge generated at country level with thematic knowledge developed across countries (through thematic groups and networks) provide a powerful knowledge base for IFAD and its development partners.

27. **Enabling framework:** IFAD's Knowledge Management Strategy (2019-2025) increased the attention given to KM in recent projects (e.g. Belize and Brazil) where KM serves more strategically as an input for scaling up strategies and policy engagement featuring closer collaboration with universities and research institutes. However, the supporting structure and functions offered by IFAD headquarters for KM and scaling up were deemed insufficient. Incentives, guidance and support to country teams fell short of ensuring a real focus on prioritizing KM in COSOPs as well as in the design and implementation of projects. Thus, KM is still considered mainly as a compliance measure, and often only activated after requests from MTRs and supervision missions. This finding was supported by the analysis of IOE's ARRI 2020, which observed a declining KM performance rating post-2015. The linkages between lending and non-lending activities need to be further strengthened if KM is to play the important role envisaged in its 2019-2025 KM Strategic Framework.

28. Even though recent COSOPs make more explicit reference to KM and STDC, focus continues to be mainly on the investment portfolio with less strategic attention given to the role of non-lending activities. The items included under KM mainly relate to activities envisaged in the investment projects.

## Summary of evidence from case studies

TABLE 2

Summary of identified evidence on knowledge management, by case study country

Country	Knowledge management evidence
<b>Bangladesh</b>	<p>LGED-managed projects have historically tended to work in silos, especially at the start of CCRIP. But there are instances of KM and transfer of practices between different projects. For example, the Promoting Resilience of the Vulnerable Through Access to Infrastructure project improved skills and information IFAD-financed project, implemented in northern Bangladesh, incorporates practices such as vetiver grass and also building codes which are taken from the CCRIP project's experience. CCRIP donors held separate supervision and support missions to support the exchange. Issues that at times occurred, for instance ineffective communication, were also reflected on the part of national LGED and ministries counterparts operating the activities. The focus however was more on embedding good practice into the implementing partner's activities, rather than national scaling up. There has been a generation of IFAD projects in this country; three donors working together over many years with emerging lessons becoming embedded into government policy and guidance.</p>
<b>Belize</b>	<p>KM aims to provide stakeholders with knowledge generated from programme implementation that can serve as inputs for scaling up strategies and for policy discussion and development. It will be led by the M&amp;E specialist and will start with the development of a knowledge management plan (KMP) during the first year of implementation. The plan will encompass ways to consolidate knowledge and information and disseminate it to programme participants and interested stakeholders. Dissemination will use a range of methods and platforms, such as capacity-building sessions, learning and knowledge-sharing events and workshops, as well as multiple media outlets (e.g. print publications such as an agriculture report, newspapers, media broadcasts and social media). In addition, through the MOUs with the University of Belize's Faculty of Agriculture to support establishing relationships with indigenous peoples, the programme will be able to establish continuity in the dissemination and promotion of best practices and lessons learned to beneficiaries and to the wider community. KM products such as videos and literature will be supplied to the University library so that information continues to be available for students and other interested parties to use as resources in their training and the development of their farming practices.</p>
<b>Plurinational State of Bolivia</b>	<p>KM has been a very important conceptual element in the programme and has allowed the target group to gain new experiences, learn about technologies and develop alternative visions for resilience-building and climate risk management within their communities. Learning processes have been focussed on community dynamics and building opportunities at local levels, rather than on strategic national-level learning efforts. A very useful systematization exercise was conducted for the integration of ACCESOS-ASAP with HELVETAS disaster risk programme (the planned dissemination of this was unfortunately affected by the COVID-19 pandemic). Concepts and specific experiences from the Plurinational State of Bolivia are being used in the work in other countries in the region.</p>
<b>Burundi</b>	<p>Since around 2014, IFAD-Burundi is working towards a country-wide programmatic approach. The two most recent COSOPs (2009-2015, 2016-2021) contain explicit sections on KM. In 2015, a KM strategy was formulated, while a KM expert was recruited late in 2016. Since then communications have significantly advanced through different media (e.g. <a href="https://programmefidaburundi.org">https://programmefidaburundi.org</a>, a Facebook page, Twitter, radio, print media, television, meetings and promotional material). However, no specific CCA information was found on the website, not even within the presented information concerning the evaluated projects. A need for CCA-related knowledge products and for better information sharing and archiving remains.</p> <p>The project's staff and the PDT were not sure how far spatial mapping and a GIS system covering IFAD's interventions were in place. Such information was thought to be available albeit fragmented.</p> <p>Even though both evaluated projects support the establishment of community groups for diverse functions, such as the maintenance of anti-erosive and ecosystem restorative measures, no training materials or monitoring systems are either in place or available. According to a project partner (ISABU), the limited contract duration (about 7 months a year), does not allow for a scientific analysis which would require contracts of at least two years.</p>
<b>Cabo Verde</b>	<p>Of the two available COSOPs (2016-2018; 2019-2024), the most recent one contains a section on KM. Knowledge management strategy was intended to capitalize on the achievements of POSER and POSER-C.</p> <p>Since 2019, the project has employed a communication and a GIS specialist. It has a website which presents: i) a GIS portal showing the geographic distribution of the project activities; ii) videos with stories by beneficiaries; and iii) technical documents related to project activities. The communication specialist's role is to step up understanding of the project experiences and several additional activities are planned such as increasing activities on social media; organizing farmer exchange visits, producing flyers and organizing markets with local products.</p> <p>A technical paper, 'Microproject horticulture' on improved water management as a CCA, supported by POSER-Climate has been published.</p> <p>Furthermore, an ongoing contract with the University of Cabo Verde means to improve the project's monitoring and impact evaluation, which would facilitate the further development of knowledge products.</p>

Country	Knowledge management evidence
<b>Chad</b>	<p>For Chad, of the last three COSOPs (2010-2015; 2017-2019; 2020-2025), only the first one contains a KM section. So far, no national-scale KM plan exists.</p> <p>The project evaluated, PARSAT, does perform satisfactorily on communication, but only just started to work on knowledge management in terms of producing and disseminating best practices and lessons learned. Roles in the project team were created for a GIS expert and a communication and knowledge management expert.</p> <p>The project developed, among other products: a website <a href="https://parsat.org/">https://parsat.org/</a>, a journal “Le Resilient”, regular radio broadcasts, Facebook, Twitter, Instagram, short films. The website contains explicit information related to CCA.</p> <p>More recently in collaboration with ICRAF, a publicly-accessible geo-portal has been developed. It contains somewhat inaccurate information on the location of project activities, and is being used to analyse impact of the improved water management and agricultural practices promoted through FFSSs. The latter would more likely become available under the more recent follow-up REPER project.</p> <p>The project is presently working on putting together material regarding two best practices: one on the use of improved fire stoves for smoking fish, and the other on the added value when project activities are being synergized within one location, as applied in Abourda, on the border of Fitri and Dabada.</p>
<b>Egypt</b>	N/A
<b>Ethiopia</b>	<p>Included in the project design were two of the defined components or sub-components and activities for KM and policy engagement and their results can support CCA scaling up and mainstreaming in national practices and policies. However, there is a lack of an overall framework at the country programme level to guide on pathways and processes for informing policy processes at regional and national government levels.</p>
<b>Honduras</b>	<p>No specific KM strategy or plan for systematizing and recording KM activities was developed for the PRO-LENCA project. The project team did not include specific skills and competencies on KM in their planning. In addition, the M&amp;E system did not support effective and efficient KM as no KM module was included. Thus, KM was not a visible or central element in the project design. At a late stage in project implementation, based on requests from the MTR and supervision reports, the project is making further attempts to establish partnerships for further dissemination and uptake of knowledge and technologies.</p>
<b>Kenya</b>	<p>There were weak knowledge-to-action and action-to-knowledge processes. The COSOP 2013 did not provide indications on what was to be achieved in knowledge management. KCSAS 2017-2026 acknowledges that there is inadequate information, knowledge generation, and management of these areas and limited understanding of the CSA concept. The four initiatives have not sufficiently contributed to filling this gap of CSA knowledge generation by strengthening specific climate change adaptation-related knowledge. PROFIT lacked knowledge-sharing mechanisms. The PCR noted that this absence directly impacted the effectiveness and efficiency of the results achieved to meet development objectives. UTaNRMP made efforts to work with county and sub-county teams to collect success stories, document them, disseminate and transfer the knowledge captured to all stakeholders. KCEP-CRAL does not yet have a KM strategy.</p>
<b>Kyrgyzstan</b>	<p>IFAD’s KM strategy in the assessed LMD project was facing important challenges. While at the level of the country director (and above), there was strong support and awareness for the importance of KM, at the local level, the KM strategy was mostly non-existent and seen as a compliance and monitoring issue. In fact, M&amp;E has been neglected, and a M&amp;E officer was hired only a year into the project. Monitoring project indicators were affected by a reportedly faulty software-based tracking system.</p> <p>The ‘blind spot’ or negligence of KM does not come as a surprise. There is a pronounced reluctance to share knowledge and information in Kyrgyzstan, even within organizations, but particularly between institutions, and if partners are unwilling to share knowledge, it also cannot be managed. IFAD’s hierarchical intervention mode without any in-country residence may have contributed to the challenges. The APIU under the government is mostly interested in reporting success stories, not failures from which the organization could probably learn more. The implementing partners on the ground are detached and shielded from the KM experts who make requests for information, best practices or learnings. Trust is a major precondition for sharing knowledge and information and it is not strongly developed in Kyrgyzstan’s business culture (and IFAD’s activities are often viewed as ‘business opportunities’). IFAD’s non-residential intervention mode seems to impede the flow of information and knowledge not only within IFAD’s projects (vertically), but also among international partners (such as WFP, FAO, World Bank, UNDP, GIZ). However, at least in one KM-related aspect, the LMD project seemed successful, when it was collaborating with a local university in Bishkek for the development of pasture management curricula as well as pasture user manuals.</p>

Country	Knowledge management evidence
<b>Mali</b>	<p>None of Mali's last three "COSOPs" (CSO2007, CSN2016-2019, COSOP2020-2024) contains a KM section. The closed project was initiated by the World Bank (including GEF) and as well as IFAD was also co-funded by the EU. After initial implementation issues and changes, partly related to the start of an enduring political crisis early on during implementation, ASAP funds were added and a IFAD-supported KM specialist was recruited. According to a flyer published in 2016, the communications produced would include: i) a technical note on "good practices of adaptation to climate change and information needs of farmers' organizations on climate change"; a note on how the climate change adaption plan approach works; a documentary film for information and promotion of PAPAM's achievements; several technical information sheets on the biodigester technology. In addition, the project produced 30 communal Climate Change Adaption Plans and 90 annual forest monitoring reports, supported by a GIS system, and produced by the national forest service monitoring department "SIFOR", a department within the Ministry of Environment and Sanitation. Unfortunately, none of the reports seems to have been used for follow up. There has also been mention, in a gender-related IFAD publication, of a report published by a national research agency (IER) which evaluated the PAPAM/ASAP investment in terms of enhancing access to climate information but this has not been found.</p> <p>A structured process for archiving and dissemination of these products has been missing. The supervision in 2018 however, commended the search for constant improvements on biodigestors through South-South exchanges (Rwanda and Burkina Faso). The organization of an exchange workshop with eight ASAP projects in Francophone Africa in October 2017 would also have allowed for the dissemination of good management practices adopted by ASAP and generated interest among participants in the climate change adaptation plan approach and biodigestors.</p> <p>At both the project level, but and IFAD level, the archiving of supervision mission reports for this project fell somewhat short. The missing supervision reports of the early years were obtained through the World Bank. The communication and coordination between the funding partners has been poor.</p>
<b>Republic of Moldova</b>	<p>A number of useful knowledge products were produced and disseminated on topics such as shelter belts and grasslands. An international conference on "sustainable and resilient agriculture" was convened in collaboration with the State University in Balti to share experiences in climate-smart agriculture. However, weak capitalization of knowledge acquired by the projects limited the dissemination of best practices and any innovative experiences in CA and other domains of IFAD's climate interventions. There remains a need within the IFAD portfolio to raise efforts of KM in the following: i) improving the exchange of experiences and lessons learned within the Republic of Moldova and contributing to the knowledge base of IFAD in the Republic of Moldova and globally; and ii) coordinating and planning KM milestones, products and events. A clear outcome-focused strategy and approach to KM was missing.</p>
<b>Nepal</b>	<p>DFID-funded projects have held exchanges with ASHA and replicated the practices on enhancing individual livelihoods as practised in ASHA. There is a high level of informal exchange with donors, especially those such as DFID and WFP.</p>
<b>Niger</b>	<p>The rural development experiences of the case study projects are rich but their CCA potential, which is evidently there, is dispersed, and therefore difficult to grasp and build on for future more explicitly climate-resilience-oriented programmes and projects. It is clear the projects lack effective KM systems that can capture and share those experiences with decision-makers for their scaling up and to inform policy processes.</p>
<b>Rwanda</b>	<p>KM and communication activities were implemented as per design plan. The national exhibition in agriculture was successfully conducted with more than 25 farmer organizations supported to exhibit and more than 200 participants. In 2018-2019 various KM activities were delivered including: (i) weekly newflashes with 12 stories shared through different platforms; (ii) success stories shared in four booklets on livestock FFS produced and distributed; (iii) three videos produced and shared and four TV videos on milk consumption and quality broadcast; (iv) establishment of a district value chain platform, which if successful could be extrapolated to other value chains; and (v) promotion of the livestock FFS approach.</p>
<b>Sudan</b>	<p>The revised design of the LMRP (after the MTR) includes a more explicit attention to KM. The programme has developed a KM strategy which is planned to serve as a roadmap for taking the project in the right direction. In addition, while the responsibility for KM was prior to the MTR given to the two M&amp;E officers, all staff have now been allocated basic tasks in KM. IFAD's capacity for KM support decreased with the departure of the staff member in late 2018 who regularly provided substantive inputs in this area. Since then, systematic and coordinated KM undertakings have been reduced. There has been an intention to strengthen the central coordination unit's role in supporting KM, but capacity has been insufficient. While some bilateral, ad hoc or informal exchanges between different project staff do take place, structured knowledge-sharing and follow-up to apply learning are insufficient.</p>

## D. Executive summary: learning thematic study – climate adaptation responses: the human-ecosystems nexus

29. Agriculture is a human action undertaken for human benefit and essential for human survival. Agriculture is one of the main mechanisms through which humans adversely affect the sustainability of natural systems and climate. The connection or coupling of human and natural systems is both strong and direct, making agriculture and the landscapes on which agriculture is practised and on which it relies intimately, directly and strongly coupled. This nexus describes settings where both human and natural systems are present, where the systems couple, each affecting the other and the totality affecting the sustainability of the natural system and of agriculture itself. And because agriculture is essential to human existence the character of the agriculture natural system nexus also strongly affects the sustainability of human life. In this way nexus goes to the heart of the SECAP guidance and the SDGs. This learning case study considers smallholder climate adaptation from a nexus perspective, that is, adaption to improve the resilience of both human and natural systems.
30. IFAD guidance on climate and environment provided by the 2015 SECAP and its updated version in 2017 called for looking beyond doing no harm towards doing good. This is here interpreted to mean that environmental conditions should be no worse following IFAD interventions and should seek to leave the environment better by providing restorative contributions as much as is feasible. The clear implication is that IFAD is directed to achieve development goals using approaches that do not leave the environment in a worse condition. This evaluation confirms proof of concept: an important subset of IFAD climate adaptation projects were performing at or beyond doing no harm and through their restorative actions at landscape scales were doing significant good for both smallholders and ecosystems.<sup>1</sup> At the same time, a significant share of IFAD projects reviewed as part of this evaluation were falling short on the do-no-harm standard and posed net harm to the environment. Thus while achieving the ambition of the SECAP guidance is attainable, many IFAD projects reviewed fall short of the standard. The projects reaching or exceeding SECAP direction generally had the following features: important contributions from climate funds or the GEF, including concessional loans or grants; involved significant engagement of key stakeholders in design; and focused on landscape scale integrated interventions targeting natural solutions to the underlying climate threats such as drought.
31. An important distinguishing characteristic of projects reaching or exceeding the IFAD do-no-harm stance is that the project addresses the adaptive needs of smallholder farmers via natural system interventions using natural solutions, for example, providing community water needs while also restoring aquifers. Sustainable natural resource management is a critical element in all four projects and each employs participatory approaches. These projects reflect important elements of good practice, using holistic approaches treating agriculture as an integrated system alongside natural resource management and climate, operating at ecosystem and landscape scales and using social networks and collective actions to address smallholder and environmental outcomes. It also appears that the SECAP is better at safeguarding humans than it is the environment.
32. This evaluation confirms proof of concept: a strong subset of IFAD climate projects are performing at or beyond doing no harm and through their restorative actions at landscape scales were doing significant good. This shows that IFAD already has capacities and vision needed to develop and implement interventions that win on both fronts, development and environment. At the same time, a significant share of IFAD projects reviewed as part of this evaluation fell short on the do-no-harm standard contributing net harm to the environment. Clearly, other IFAD projects show that this need not be the case and that reaching and exceeding the SECAP guidance is within reach.

<sup>1</sup> Case studies in Burundi, Kenya, Mali, Niger and Sudan point to projects at or going beyond do-no-harm to natural systems and move towards restoring them.



## E. Executive summary – evaluability study: climate change adaptation performance using geospatial and earth observation technologies for IFAD interventions

### Introduction

33. Given that this assessment report was developed in the context of a Thematic Evaluation of IFAD's Climate Change Adaptation programme portfolio 2020-2021, its potential is highly relevant. The challenges created by the COVID-19 epidemic to conduct physical monitoring missions and evaluation activities in the field, and the cost effectiveness of remote monitoring schemes contributed to this assessment. The rationale and introduction are presented first, followed by country case study assessments, and concluded with findings and recommendations. Illustrative figures and maps are provided in the annex.
34. Earth observation and geospatial technologies (EO & GT) developed rapidly in recent years, allowing better study of Earth's surface phenomena. These provided images in greater detail than ever before with a dramatic increase in the availability, accessibility and quality of satellite imagery. The EO and GT instruments also offer several benefits for monitoring and tracking key aspects of resilience, and for planning interventions to strengthen climate adaptation responses. The most important benefits are listed below.
35. Passive EO satellite systems are designed to scan almost every location on the Earth's surface during daytime while orbiting the Earth - which is especially useful for monitoring remote areas far from ground-based surveillance infrastructure, contributing to the increasing cost-effectiveness of EO systems. EO satellites are usually designed to orbit the earth in polar mode, allowing the sensors to cover large parts of the Earth's surface in one swathe at stable conditions. The resulting synoptic perspective and geometric stability are crucial for analytical applications relying on consistent atmospheric properties affecting solar radiation, e.g. for comparing earth surface features in certain time intervals in order to monitor features such as land cover change.
36. The underlying hypothesis to evaluate the use of EO & GT for assessing the climate change adaptation (CCA) impact of IFAD projects is threefold: (a) GT have an important potential for substituting field visits through remotely assessing selected IFAD project interventions (their potential); (b) CCA measures and impacts of these project interventions can be assessed and evaluated through approximation with GT (their evaluability); (c) IFAD's monitoring and evaluation (M&E) system can be strengthened through the mainstreamed use of GT in order to improve efficiency, replicability and accountability (their spatial empowerment and enablement).
37. The potential role of GT in tracking and monitoring processes and features resulting from CCA interventions were highlighted and is being discussed intensely in many fora recently. CCA interventions such as conservation agriculture (CA) or sustainable land management, improved pasture, livestock management and infrastructure resilience, are highly context-specific but provide potential areas for the use of GT technologies. In particular, the technical advancement, availability and usability of products from satellites hold considerable potential where GT can contribute critically to track adaptation processes through direct monitoring or modelling of proxy processes.
38. Through observation and analysis of remotely sensed imagery covering spatial and temporal dimensions (often referred to as a 'data cube'), characteristic time-space patterns can be associated with certain biophysical or socio-economic drivers of land use or land cover change. For instance, certain types of vegetation or crops can be inferred from observed phenological cycles; or drought conditions can be inferred from typical reflectance or the spectral signatures of vegetation suffering from water stress but importantly, this involves supporting contextual information, which traditionally is collected on the ground, is dependent on local expert knowledge or is captured in spectral libraries still under development.



## Analysis

39. Case study selection. Of the 20 case study countries, only cases featuring spatial information, georeferenced intervention sites or interventions with an important potential for the use of GT were selected for this assessment, resulting in a sample of nine cases (see table 1 below).
40. Criteria and ratings. All cases featured a component to build climate resilience. The column 'spatial Awareness' rates the awareness within the project (assessed mostly from available project documentation) or the project staff (assessed from interviews) for the potential of using GT for design, planning, management, implementation or monitoring and documentation purposes, by scoring the level of awareness observed between 1 (lowest) and 5 (highest). The basic assumption for the assessment here was that GT could play an important role as a spatially referenced information system (e.g. linked maps and attributes tables), storing project management information spatially and serve as a project information repository (with a connection to knowledge management).
41. The column Availability and use of spatial data assesses the capacity of the project/programme to share relevant spatial information and data (e.g. intervention sites, additional spatial information), as well as the quality of the data shared (its format, precision, relevance). If no data or information were shared, either with the Rome-based central spatial data repository nor the evaluation team, the project intervention was scored 1 (lowest score). If data were shared, but with low quality, then the project was scored 2. None of the cases was scored 5 (highest score) which would require that data were provided in reliable quality and following international standards.
42. The column 'relevance of GT' assesses the value of GT being used meaningfully for the assessed intervention. The latter also includes 'evaluability', which refers to the capacity of GT to adequately measure relevant aspects (or proxy indicators) of adaptive capacity or climate resiliency of an intervention context. Most of the projects show a high relevance score for the use of GT – which is the case when GT serves several roles during the project cycle – from design to implementation and monitoring. If the project intervention was mostly focusing on community development aspects, then the score in this column cannot reach the maximum score (which for example was the case for Kyrgyzstan, featuring a strong component on community-based pasture management and veterinarian training).

## General findings

TABLE 3

Assessment of evaluability [scoring from 1 (lowest) to 6 (highest)].

	Country	Intervention type	Spatial awareness	Availability and use of spatial data	Relevance of GT
1	Bangladesh	Rural development	5	5	6
2	Belize	Rural and economic development	2	2	5
3	Burundi	Integrated watershed management	2	1	5
4	Cabo Verde	Integrated watershed management	4	3	5
5	Chad	Rural development and sustainable land management	4	4	4
6	Ethiopia	Integrated watershed management and sustainable land management	5	4	5
7	Kyrgyzstan	Community-based natural resource management	3	3	5
8	Mali	Rural and economic development	1	1	4
9	Republic of Moldova	Sustainable land management	4	4	4

43. The success of EO & GT for M & E (and further impact assessments) typically depends on the context and the level of integration. GT tools need to be incorporated from the design stage, and all project stakeholders and partners need to buy into it and provide sufficient financial, technical and human resources to carry it out, e.g. including the means for a thorough baseline survey for benchmarking.
44. Monitoring the impacts of conservation agriculture and sustainable land management measures e.g. efficient irrigation techniques, mulching or soil structural measures usually requires more or less complex ground-based measurements; substituting these measures with geospatial technologies (remote sensing) implies the use of models e.g. for modelling evapotranspiration, or spatial and spectral pattern detection. This usually involves computational costs since such datasets are not readily available for IFAD's target areas (countries). In some cases, Social, Environment and Climate Change Assessment Procedures, were developing models e.g. for crop monitoring or drought detection, but recalibration would be required for most applications in new environments and existing IFAD countries.
45. Feedback from in-country staff – but also at headquarters – often reveals a lack of understanding of the potential of GT to support their work and it was often perceived as an add-on resulting in additional work, without an immediate benefit for the project. Access to data is also often limited for local project staff and there are no provisions from the project at design stage to allow for thorough baseline setups and regular data collection and monitoring.
46. Discussion with partners such as WFP highlighted their willingness to develop thematic countrywide spatial databases for IFAD; such databases apparently already exist for selected countries.
47. IFAD seems to face similar challenges as other organizations, i.e. the management requests maps and charts to show macro-level impact, while the field staff needs handy and efficient protocols in order to cope with limited time resources, yet useful for activity tracking and reporting at the plot level. M & E and quality assurance departments wish to efficiently collect as many relevant indicators as possible. This requires a well-designed methodology integrated into the project from the design stage to ensure that data and instruments are developed and functional.
48. During the design phase and early discussions with the host country efforts have to be made to include many national and regional partners who can support GT in-country and have much easier access to national data. There is a potential to foster such collaboration with local partners (e.g. universities, think tanks).
49. Currently, access to and use of IFAD's GeoNode spatial online application remains very limited due to prohibitively tight security restrictions, which may also explain the minimal data hosted on the platform. This setup diverts from the intended principles of the GeoNode application.

### Key takeaways

50. The use of GT should be streamlined and integrated into the full project cycle and process – from project design to monitoring and final impact assessment.
51. Data collection and processing protocols should be developed, helping project managers to identify appropriate resources and solutions.
52. Staff capacity related to GT should be developed or upgraded– not only the technical capacity, but also to understand and apply the concepts.
53. Satellite image processing and classification workflows should be developed and optimized or parametrized for specific data sources (satellite imagery providers) and application needs (adapted to the scale of structures or processes of project work).
54. The use of open-source technology for developing required processing chains (eg QGIS, ORFEO Toolbox), should be favoured ensuring a high degree of flexibility and limited lock-in effects and reduced dependency on commercial software providers.

## Annex IX.

# Portfolio analysis - descriptive statistics of IFAD's projects and country strategies supporting smallholder adaptation to climate change

1. The portfolio review provides a descriptive analysis of IFAD's climate response under IFAD operations, Country Strategic Opportunities Programme (COSOP) and Country Strategy Notes (CSNs). For the purpose of this evaluation, all projects approved between 2010 and 2019 will be considered to align with IFAD's declaration for the first time in 2010 that climate adaptation was a corporate priority.

### 1. Portfolio analysis of projects

2. The projects selected for desk review represent operations in 101 countries in the five regional divisions of IFAD (table 1).

TABLE 1

## Distribution of projects by region

APR (23 countries)		ESA (18 countries)		LAC (18 countries)		NEN (19 countries)		WCA (23 countries)	
Country	Number of projects	Country	Number of projects	Country	Number of projects	Country	Number of projects	Country	Number of projects
Afghanistan	2	Angola	4	Argentina	3	Armenia	2	Benin	3
Bangladesh	8	Botswana	1	Belize	1	Azerbaijan	1	Burkina Faso	3
Bhutan	2	Burundi	5	Plurinational State of Bolivia	2	Bosnia and Herzegovina	3	Cabo Verde	1
Cambodia	4	Comoros	1	Brazil	5	Djibouti	2	Cameroon	2
China	8	Eritrea	3	Colombia	1	Egypt	4	Central African Republic	2
East Timor	1	Eswatini	2	Cuba	3	Georgia	2	Chad	3
Fiji	1	Ethiopia	5	Dominican Republic	2	Iraq	1	Congo	2
India	6	Kenya	4	Ecuador	3	Jordan	2	Côte d'Ivoire	3
Indonesia	7	Lesotho	3	El Salvador	2	Kyrgyzstan	3	Democratic Republic of Congo	3
Kiribati	1	Madagascar	3	Grenada	2	Lebanon	1	Gabon	1
Lao People's Democratic Republic	4	Malawi	4	Guyana	1	Republic of Moldova	3	The Gambia	2
Maldives	1	Mozambique	5	Haiti	2	Montenegro	1	Ghana	3
Mongolia	1	Rwanda	5	Honduras	4	Morocco	5	Guinea	3
Myanmar	3	Seychelles	1	Mexico	3	Sudan	6	Guinea-Bissau	2
Nepal	4	United Republic of Tanzania	1	Nicaragua	3	Syrian Arab Republic	1	Liberia	5
Pakistan	5	Uganda	6	Paraguay	3	Tajikistan	3	Mali	4
Papua New Guinea	2	Zambia	3	Peru	3	Tunisia	4	Mauritania	2
Philippines	4	Zimbabwe	1	Uruguay	1	Türkiye	3	Niger	6
Samoa	1					Uzbekistan	3	Nigeria	3
Solomon Islands	2							São Tomé	1
Sri Lanka	4							Senegal	4
Tonga	2							Sierra Leone	3
Viet Nam	6							Togo	3
<b>Subtotal</b>	<b>79</b>	<b>Subtotal</b>	<b>57</b>	<b>Subtotal</b>	<b>44</b>	<b>Subtotal</b>	<b>50</b>	<b>Subtotal</b>	<b>64</b>

Source: IOE elaboration based on portfolio analysis.

3. **Climate risk assessments in projects:** The database presents information on the status of projects (pipeline, ongoing, complete or closed) and SECAP ratings of climate as well as environmental and social risks. The desk review identified if the design provides a climate risk rating (qualitative or

quantitative). Table 2 summarizes the information on the projects with climate risk assessed. As can be seen, 256 of the 294 projects identified climate risks. Projects with no risks identified or those without risk ratings were excluded from the portfolio.

TABLE 2

**Portfolio general distribution**

Description (SECAP risk assessment)	Number of projects
Projects with identified risk assessment	256
Projects with no risk assessment	38
<b>Total</b>	<b>294</b>

**Source:** IOE elaboration based on portfolio analysis.

4. The projects that identified climate risks were analysed for their activities to address the stated risk(s). Project Completion Reports (PCRs) (if the project was completed) or Project Supervision Reports (PSRs) (if the projects were ongoing) were reviewed to check whether these design activities were implemented. Ratings for all evaluation criteria specified in the IOE evaluation manual were provided for projects that have PCRs or IOE evaluations. These ratings include climate change as well as environment and natural resources.
5. **Level of climate risks (as assessed by the projects):** The following tables show the distribution for the level of environment and social risk assessed in PDRs (1= A (Low), 2= B (Moderate), 3= C (High)) and the level of climate risk assessed in PDRs (1= High, 2= Moderate, 3= Low, with a TE addition 4=No mention of risk and 5= Risk identified without rating) is shown on the tables below.

TABLE 3

**Distribution of risk ratings for environment and social standards as assessed in PDRs**

Rating	Number of projects	Per cent
A	9	4%
B	244	95%
C	3	1%
<b>Total</b>	<b>256</b>	<b>100%</b>

**Source:** IOE elaboration based on portfolio analysis.

TABLE 4

**Distribution of climate risk assessed in PDRs**

Rating	Number of projects	Per cent
High	45	18%
Moderate	127	50%
Low	12	4%
No mention of risk	6	2%
Risk identified without rating	66	27%
<b>Total</b>	<b>256</b>	<b>100%</b>

**Source:** IOE elaboration based on portfolio analysis.

5. Table 4 presents the description of the method to identify the project-level climate risk and table 6

the distribution of projects among the ratings.

TABLE 5

#### Key - Methods to identify project-level climate risk

Key	Description
1	Quantitative assessment of risk at the correct level
2	Qualitative assessment of the risk at the correct level
3	Non-rigorous/neither qualitative nor quantitative

Source: IOE elaboration based on portfolio analysis.

TABLE 6

#### Methods to identify project-level climate risk

Key	Number of projects	Per cent
1	94	37%
2	93	36%
3	69	27%
<b>Total</b>	<b>256</b>	<b>100%</b>

Source: IOE elaboration based on portfolio analysis.

6. The analysis shows that 95 per cent of the projects in the portfolio (243 of the 256) declared intent to address climate risk (table 7). It should be noted

that 10 of the 13 projects that did not declare an intent to address the climate risk were those that did not have rigorous risk analysis (table 7).

TABLE 7

#### Intent to address climate risk

Rating of the method to identify project-level climate risk	Intent to address climate risk		Total
	No	Yes	
1	2	92	94
2	1	92	93
3	10	59	69
<b>Total</b>	<b>13</b>	<b>243</b>	<b>256</b>

Source: IOE elaboration based on portfolio analysis.



8. **Rio markers:** The evaluation team classified the intensity of project engagement with climate adaptation in line with the Rio markers of OECD

DAC. The table below provides the key to the classification of this marker.

TABLE 8

Key - Description of prioritization of climate risk (OECD DAC Rio markers)

Category	Description
0	If climate risk is identified in the project but not addressed
1	A project can be marked as significant (1) when the objective (climate adaptation) is explicitly stated but is not the fundamental driver or motivation for undertaking it. Instead, the activity has other prime objectives but it has been formulated or adjusted to help meet the relevant climate concerns.
2	A project can be marked as principal (2) when the objective (climate adaptation) of the project is explicitly stated as fundamental in the design of, or the motivation for, the activity. Promoting the objective will thus be stated in the activity documentation as one of the principal reasons for undertaking it.
3	Climate risk not identified or addressed

Source: OECD DAC<sup>1</sup>

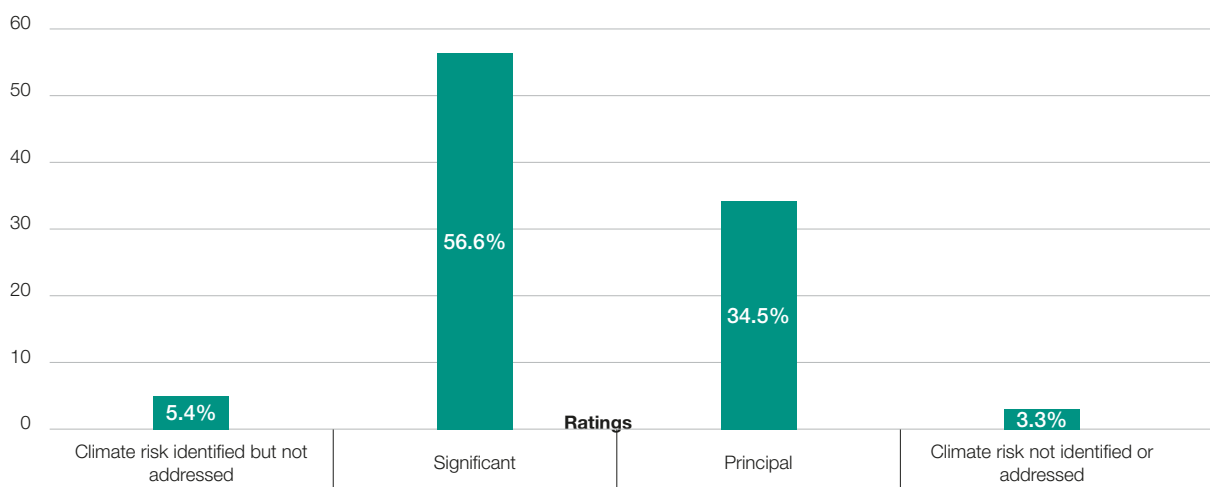
<sup>1</sup> Rio Markers for Climate: Handbook ([https://www.oecd.org/dac/environment-development/Revised%20climate%20marker%20handbook\\_FINAL.pdf](https://www.oecd.org/dac/environment-development/Revised%20climate%20marker%20handbook_FINAL.pdf)).

9. Of the 256 projects in the portfolio, 147 (57 per cent) stated that climate adaptation is a significant objective, 90 (35 per cent) stated that climate

adaptation was the principal objective while 19 (8 per cent) did not state any intent to address climate adaptation (figure 1).

FIGURE 1

Prioritization of climate risks (OECD DAC Rio markers)



Source: IOE elaboration based on portfolio analysis.

## 1.1. Categories of climate adaptation interventions

intent to address this climate risk) identified the following categories and sub-categories of activities (table 9).

10. An analysis of the 256 climate-related interventions (those that assessed climate risk and declared an

TABLE 9

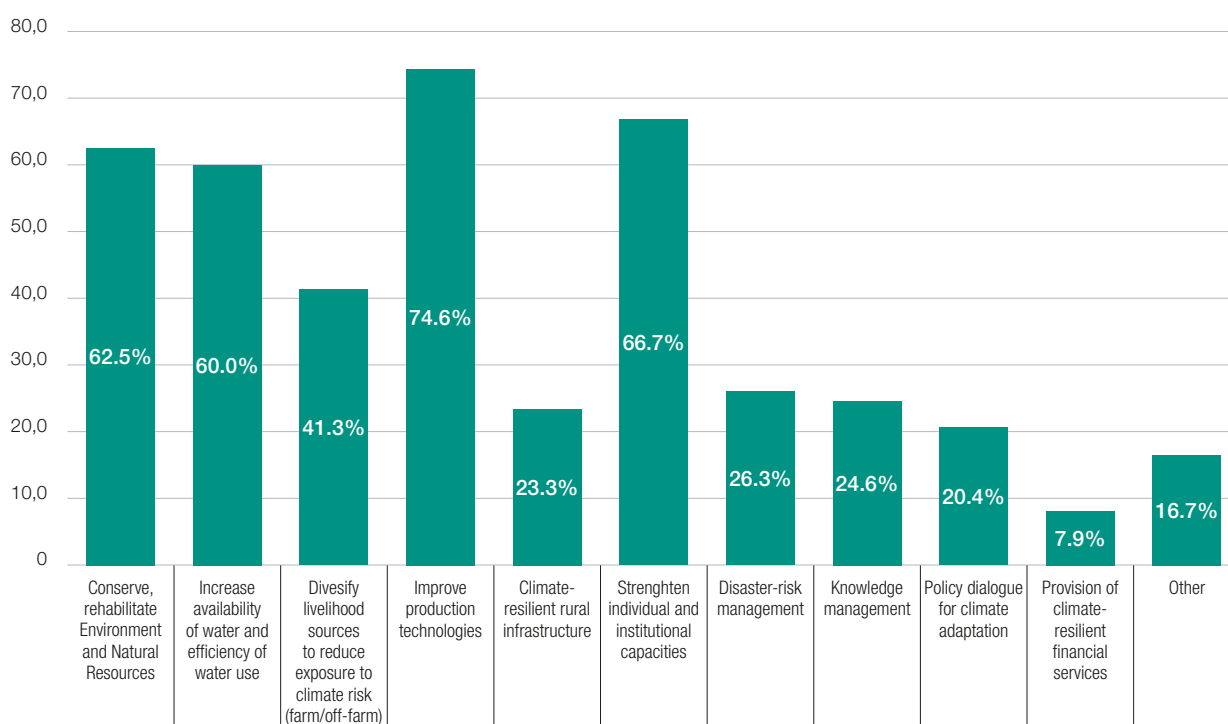
Climate adaptation interventions - categories and subcategories

Category	Subcategory
1. Conserve, rehabilitate environment and natural resources.	Improve management of environment and natural resources.
	Integrated watershed management.
2. Increase availability of water and efficiency of water use.	Water management.
	Irrigation infrastructures/technologies.
3. Diversify livelihood sources to reduce exposure to climate risk (consider farm and off-farm).	
	Integrated production systems.
4. Improve production technologies.	Climate-resilient seeds/breeds/practices.
	Pest and disease management.
	Improved livestock productivity.
	Fisheries.
5. Climate-resilient rural infrastructures.	
6. Strengthen individual and institutional capacities.	
7. Disaster-risk management.	Capacity-building on disaster risk management.
	Early warning systems.
8. Knowledge management.	South-South and Triangular Cooperation.
9. Policy dialogue for climate adaptation.	
10. Provision of climate-resilient financial services.	Financial services for climate-risk management.
	Weather-index insurance.
11. Other	

Source: IOE elaboration based on portfolio analysis.

FIGURE 2

Distribution of activities: main categories



Source: IOE elaboration based on portfolio analysis.

11. According to figure 2, improving production technologies was cited most frequently - 77 per cent of the projects had activities in this area. Strengthening individual and institutional capacities (70 per cent of the projects), conserving, rehabilitating environment and natural resources (63 per cent) and increasing availability of water and efficiency of water use (62 per cent) appear more frequently as IFAD CCA interventions. The least common category was provision of climate-resilient financial services (10 per cent).

## 1.2 Analysis of climate adaptation interventions and markers by countries with fragile situations

12. This section presents the distribution of climate adaptation activities in countries with fragile situations. Of the 101 countries in the portfolio, 41 (40 per cent) were classified as fragile states during the period 2013-2019. Of the 256 projects in this portfolio, 65 (25 per cent) were implemented in states with conditions of fragility.

13. The table below presents the share of categories of climate adaptation activities in these 65 projects. The second column presents the percentages of the activities in countries with fragile situations; while the third column presents the share of the activities in the full portfolio for comparison purposes. The most common activity in countries with fragile situations was addressing climatic risks by improving production technologies with 75 per cent of the projects, followed by strengthening individual and institutional capacities (72 per cent). Consistent with the wider population, the activity with the lowest percent of the projects in countries with fragile situations is the provision of climate-resilient financial services with 12 per cent of the projects.

TABLE 10

## Categories of climate adaptation activities in countries with fragile situations

Climate adaptation categories of intervention	Distribution of activities within fragile states	Distribution of activities in the full portfolio
Conserve, rehabilitate environment and natural resources	58%	63%
Increase availability of water and efficiency of water use	61%	62%
Diversify livelihood sources to reduce exposure to climate risk (farm/off-farm)	40%	46%
Improve production technologies	75%	77%
Climate-resilient rural infrastructures	43%	25%
Strengthen individual and institutional capacities	72%	70%
Disaster-risk management	35%	30%
Knowledge management	31%	25%
Policy dialogue for climate adaptation	22%	21%
Provision of climate-resilient financial services	12%	10%
Other	25%	21%

Source: IOE elaboration based on portfolio analysis.

### 1.3 Analysis of ASAP projects

14. The 41 ASAP projects constitute 17 per cent of the overall TE portfolio. The table below shows the countries with ASAP projects in every region.

15. The majority of ASAP projects (53.7 per cent) identified a moderate level of climate risk and 12 per cent rated the climate risk as high. Nearly 30 per cent of the projects observed the existence of climate risk without rating it.

TABLE 11

## Countries with ASAP-funded CCA components in projects

APR	ESA	LAC	NEN	WCA
Bangladesh	Burundi	Plurinational State of Bolivia	Djibouti	Benin
Bhutan	Comoros	Ecuador	Egypt	Cabo Verde
Cambodia	Ethiopia	El Salvador	Iraq	Chad
Lao People's Democratic Republic	Kenya	Nicaragua	Kyrgyzstan	Côte d'Ivoire
Nepal	Lesotho	Paraguay	Republic of Moldova	The Gambia
Viet Nam	Madagascar		Montenegro	Ghana
	Malawi		Morocco	Liberia
	Mozambique		Sudan	Mali
	Rwanda		Tajikistan	Mauritania
	Uganda			Niger
				Nigeria

Source: IOE elaboration based on portfolio analysis.

TABLE 12

## Distribution of climate risk in ASAP projects

Level of climate risk assessed in PDRs	Number of projects	Per cent
High	5	12.2%
Moderate	22	53.7%
Low	1	2.4%
No mention of risk	1	2.4%
Risk identified without rating	12	29.3%
<b>Total</b>	<b>41</b>	<b>100%</b>

Source: IOE elaboration based on portfolio analysis.

16. The table below shows that 90 per cent of ASAP projects are implemented in low-income and lower-middle-income countries (43.9 per cent and 46.3 per cent, respectively).

TABLE 13

## ASAP projects by income status

Income status	Number of projects	Per cent
Low-income	18	43.9%
Lower-middle-income	19	46.3%
Upper-middle-income	4	9.7%
<b>Total</b>	<b>41</b>	<b>100%</b>

Source: IOE elaboration based on portfolio analysis.

TABLE 14

## Climate adaptation activities in ASAP projects

Climate adaptation categories and sub-categories	Number of interventions by project
<b>1. Conserve, rehabilitate environment and natural resources</b>	<b>30</b>
Improve management of environment and natural resources	29
Integrated watershed management	6
<b>2. Increase availability of water and efficiency of water use</b>	<b>30</b>
Water management	24
Irrigation infrastructures/technologies	25
<b>3. Diversify livelihood sources to reduce exposure to climate risk (farm/off-farm)</b>	<b>19</b>
<b>4. Improve production technologies</b>	<b>34</b>
Integrated production systems	10
Climate resilient seeds/breeds/practices	34
Pest and disease management	11
Improved livestock productivity	15
Fisheries	4
<b>5. Climate-resilient rural infrastructures</b>	<b>18</b>
<b>6. Strengthen individual and institutional capacities</b>	<b>30</b>
<b>7. Disaster-risk management</b>	<b>17</b>
Capacity-building on disaster risk management	11
Early warning systems	12
<b>8. Knowledge management</b>	<b>19</b>
South-South triangular cooperation	2
<b>9. Policy dialogue for climate adaptation</b>	<b>19</b>
<b>10. Provision of climate-resilient financial services</b>	<b>2</b>
Financial services for climate-risk management	0
Weather-index insurance	1
<b>11. Other</b>	<b>9</b>

Source: IOE elaboration based on portfolio analysis.

17. Using the Rio markers of OECD DAC to categorize the extent to which CCA was prioritized, 66 per cent of the ASAP projects identified climate adaptation as the principal objective, while 27 per cent identified CCA as a significant objective (table 15).
18. Table 16 shows that 63 per cent of projects stated the intent to be scaled up at the design stage.



TABLE 15

## Prioritization of climate risks (OECD DAC Rio markers) in ASAP projects

Prioritization of climate adaptation (OECD DAC Rio markers)	Number of projects	Percentage
Climate risk identified but not addressed	2	4.9%
Significant	11	26.8%
Principal	27	65.9%
Climate risk not identified or addressed	1	2.4%
<b>Total</b>	<b>41</b>	<b>100%</b>

Source: IOE elaboration based on portfolio analysis.

TABLE 16

## Scaling up strategies in PDR for ASAP projects

Intervention strategies for scaling up spelled out in PDR	Number of projects	Percentage
None	14	34.1%
Yes	26	63.4%
NA	1	2.4%
<b>Total</b>	<b>41</b>	<b>100%</b>

Source: IOE elaboration based on portfolio analysis.

## 1.4 Climate adaptation response and country income status

19. The analysis presented in this section is based on the World Bank income classification available for the years 2010-2019. The analysis considers the

project approval year as the reference point for the classification of the four income groups: high, upper-middle, lower-middle, and low income. Lower-middle-income countries represent the highest percentage (45 per cent) of projects implemented.

TABLE 17

### Project distribution by income status

Income status	Number of projects	Percentage
Low income	85	33%
Lower-middle-income	114	45%
Upper-middle-income	56	21.6%
High income	1	0.4%
<b>Total</b>	<b>256</b>	<b>100%</b>

Source: IOE elaboration based on portfolio analysis.

## 2. COSOP portfolio analysis

20. The purpose of this analysis is twofold: to assess whether IFAD has taken into consideration climate change in engaging with the government (mainstreaming); and to assess if the activities/investments were appropriate to address the climate risks identified at country level.

21. The portfolio includes all Country Strategic Opportunities Programme (COSOP) and Country Strategy Note (CSN) desk review approved on or after 2010, from 81 countries in the five regional divisions (table 18). Table 19 presents the number of COSOPs and CSNs analysed.

TABLE 18

Country strategies documents (approved during 2010-2019)

APR (17 countries)	ESA (18 countries)	LAC (14 countries)	NEN (12 countries)	WCA (20 countries)
Afghanistan	Angola	Argentina	Armenia	Benin
Bangladesh	Botswana	Brazil	Bosnia and Herzegovina	Burkina Faso
Bhutan	Burundi	Belize	Djibouti	Cabo Verde
China	Comoros	Plurinational State of Bolivia	Egypt	Cameroon
Cambodia	Eritrea	Colombia	Jordan	Central Africa Republic
Indonesia	Eswatini	Cuba	Kyrgyzstan	Chad
India	Ethiopia	Dominican Republic	Lebanon	Congo
Kiribati	Lesotho	Ecuador	Montenegro	Côte d'Ivoire
Lao People's Democratic Republic	Madagascar	El Salvador	Syrian Arab Republic	Gabon
Maldives	Malawi	Grenada	Tajikistan	The Gambia
Nepal	Mozambique	Guatemala	Turkey	Ghana
Papua New Guinea	Rwanda	Guyana	Uzbekistan	Guinea-Bissau
Pakistan	Seychelles	Haiti		Liberia
Samoa	South Africa	Venezuela		Mali
Sri Lanka	Sudan			Mauritania
Tonga	United Republic of Tanzania			Nigeria
Viet Nam	Zambia			Senegal
	Zimbabwe			Sierra Leone
				São Tomé and Príncipe
				Togo

Source: IOE elaboration based on portfolio analysis.

TABLE 19

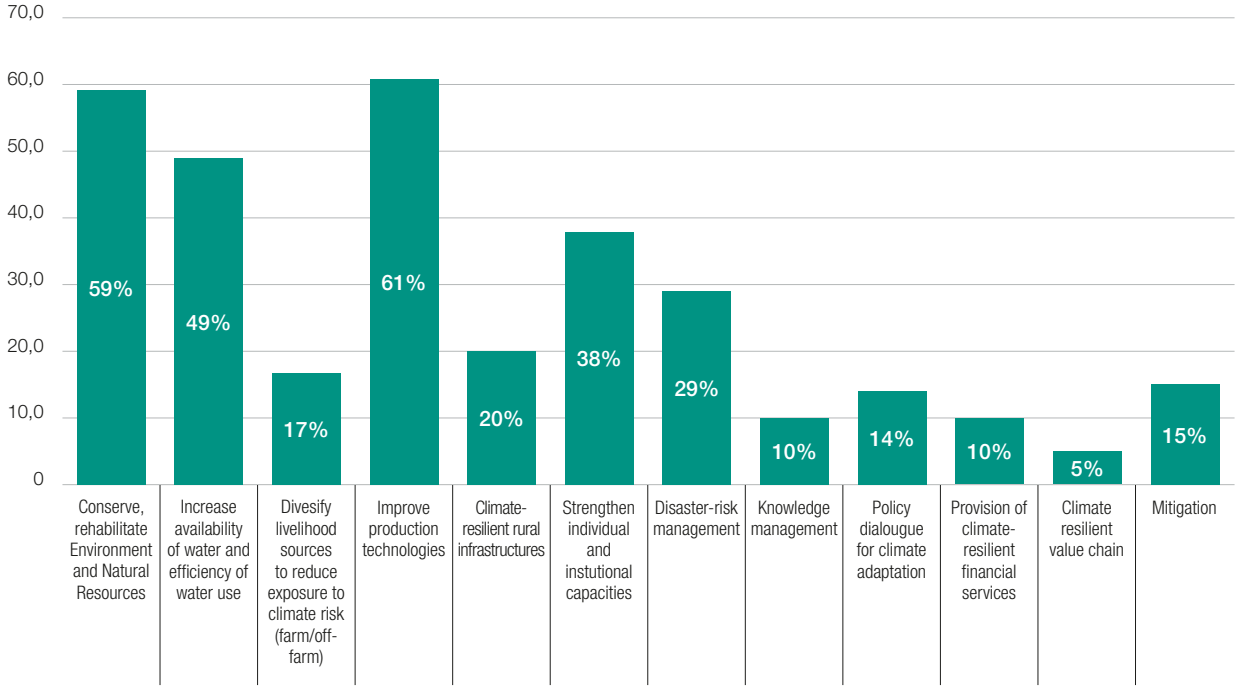
COSOPs and CSNs approved during 2010-2019

Type of document	Number of country strategy documents
COSOP	66
CSN	27
<b>Total</b>	<b>93</b>

Source: IOE elaboration based on portfolio analysis.

FIGURE 3

Main categories of climate interventions in country strategy documents



Source: IOE elaboration based on portfolio analysis.

# Annex X.

## List of persons met

Name	Function / organization
<b>IFAD</b>	
<b>Corporate Services Department (CSD)</b>	
Saadia Imad	HR Special Adviser, HRD
Robert Swinkels	HR Specialist, Business Partner, HRD
<b>External Relations and Governance Department (ERG)</b>	
Marie Haga	Associate Vice-President
Max Von Bonsdorff	Chief Partnership Office, GPR
Federica Cerulli	Senior Partnership Officer, GPR
Oana Denisa Butnaru	Partnership Officer, Supplementary Funds, GPR
<b>Financial Operations Department (FOD)</b>	
Vittorio Buonanno	Finance Specialist, FCD
Virginia Cameron	Senior Finance Officer, FMD
Alessandro Lembo	Former Finance Officer, FMD
Janeth Gamboa	Finance Consultant
<b>Office of the President and Vice President (OPV)</b>	
Constanza Di Nucci	Adviser to the President
<b>Programme Management Department (PMD)</b>	
Donal Brown	Associate Vice-President
Edward Heinemann	Lead Adviser to Associate Vice-President
<b>Asia and the Pacific Division (APR)</b>	
Nigel Brett	Regional Director, APR
Liam Chicca	Lead Portfolio Adviser, APR
Fabrizio Bresciani	Former Lead Regional Economist, APR
Ilaria Firmian	Log-frame Analyst/Regional Specialist, APR
<b>IFAD Bangladesh</b>	
Omer Zafar	Former Country Programme Manager (Bangladesh),
Rasha Omar	Former Country Director / Hub Head (Bangladesh, India, Maldives) - (at the time of the interviews)
Sherina Tabassum	Country Programme Officer (Bangladesh, Maldives, Sri Lanka)
Christa Ketting	CCRIP Ex-Programme Officer (Bangladesh)
<b>IFAD Nepal</b>	
Roshan Cooke	Country Director (Bhutan, Nepal)
Bashu Babu Aryal	Country Programme Officer (Nepal)
Nirajan Khadka	Country Climate Consultant
<b>Other CDs met</b>	
Matteo Marchisio	Country Director / Hub Head (China, Democratic People's Republic of Korea, Republic of Korea)
Thomas Rath	Former Country Director (Thailand, Viet Nam) (at the time of the interviews)
Ivan Cossio Cortez	Country Director (Indonesia, Malaysia, Papua New Guinea, Timor-Leste)
<b>East and Southern Africa Division (ESA)</b>	
Sara Mbago-Bhunu	Regional Director, ESA
Shirley Chinien	Regional Economist, ESA
Luisa Migliaccio	Lead Portfolio Adviser, ESA

Name	Function / organization
<b>IFAD Burundi</b>	
Joseph Rostand Olinga Biwole	Country Director a.i. (Burundi)
<b>IFAD Ethiopia</b>	
Han Ulac Demirag	Former Country Director/Hub Head (at the time of the interviews)
Mawira Chitima	Hub Director (Ethiopia)
<b>IFAD Kenya</b>	
Aissa Toure	Country Programme Manager (Kenya) (at the time of the interviews)
Ronald Ajengo	Country Programme Officer (Kenya)
<b>IFAD Rwanda</b>	
Francesco Rispoli	Country Director (Kenya, Rwanda, United Republic of Tanzania)
<b>IFAD Uganda</b>	
Lakshmi Moola	Country Director (Uganda) [As part of CSPE]
<b>Other CDs met</b>	
Ibrahima Bamba	Country Director (Comoros, Madagascar, Mauritius, Seychelles)
<b>Latin America and the Caribbean Division (LAC)</b>	
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Daniel Anavitarte	Regional Specialist, LAC
Rene Castro	Temporary Professional Officer
Pietro Simoni	Project Consultant
<b>IFAD Belize</b>	
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<b>IFAD Bolivia (Plurinational State of)</b>	
Marco Camagni	Andean and Southern Cone Hub Head a.i. & Country Director (Argentina, Bolivia (Plurinational State of), Paraguay, Peru, Uruguay)
Arnoud Hameleers	Former Country Director for Bolivia (Plurinational State of) and Honduras (currently the Country Director of Bangladesh, APR)
<b>IFAD Honduras</b>	
Arnoud Hameleers	Former Country Director for Bolivia and Honduras (currently the Country Director of Bangladesh, APR)
Oscar Roberto Grajeda Solorzano	Country Programme Officer (El Salvador, Guatemala, Honduras, Nicaragua)
Perla Carias Mossi	Consultant (El Salvador, Guatemala, Honduras, Nicaragua)
Raúl Espinoza Bretado	Consultant (El Salvador, Guatemala, Honduras, Nicaragua)
Rene Lopez Steiner	Consultant (El Salvador, Guatemala, Honduras, Nicaragua)
Juan Jose Pineda Mejia	Consultant (El Salvador, Guatemala, Honduras, Nicaragua)
Erayda Maria Briceno Viquez	Former Consultant (El Salvador, Guatemala, Honduras, Nicaragua) (at the time of the interviews)
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Raúl Espinoza Bretado	Consultant (El Salvador, Guatemala, Honduras, Nicaragua)
Rene Lopez Steiner	Consultant (El Salvador, Guatemala, Honduras, Nicaragua)
Juan Jose Pineda Mejia	Consultant (El Salvador, Guatemala, Honduras, Nicaragua)
Erayda Maria Briceno Viquez	Former Consultant (El Salvador, Guatemala, Honduras, Nicaragua) (at the time of the interviews)
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Dina Saleh	Regional Director, NEN
Sara Aya Kouakou	Senior Portfolio Adviser, NEN
Abdelkarim Sma	Former Country Director (Algeria - Kazakhstan) and Regional Economist of Near East, North Africa and Europe Division (at the time of the interviews)
Maliha Hussein	MTR Team Leader, Consultant (at the time of the interviews)



Name	Function / organization
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Umit Mansiz	Country Programme Officer (Egypt, Lebanon, Palestine, Yemen)
<b>IFAD Republic of Moldova</b>	
Samir Bejaoui	Country Director (Kyrgyzstan and Republic of Moldova)
Mia Madsen	Country Programme Officer (Azerbaijan, Republic of Moldova, Uzbekistan)
Isabelle Zimex	Consultant lead, Supervision Mission (Republic of Moldova)
Samvel Ghazarayan	Consultant and Infrastructure Specialist
<b>IFAD Kyrgyzstan</b>	
Samir Bejaoui	Country Director (Kyrgyzstan and Republic of Moldova)
Mikael Kauttu	Country Director (Kyrgyzstan) (at the time of the interviews)
<b>IFAD Sudan</b>	
Ahmed Subahi	Country Programme Officer (Iraq, Sudan)
<b>Other people met</b>	
Naoufel Telahigue	Head Hub/Country Director (Armenia - Morocco)
Taylan Kiyamaz	Country Programme Officer (Turkey)
<b>West and Central Africa Division (WCA)</b>	
Nadine Gbossa	Regional Director, WCA
John Hurley	Lead Regional Economist, WCA
Juan Jose Leguia	Regional Specialist, WCA (at the time of the interviews)
<b>IFAD Cabo Verde</b>	
Benoit Thierry	Head of Hub/ Country Director (Cabo Verde, Gambia, Guinea, Guinea-Bissau, Mauritania, Senegal)
Gianluca Capaldo	Country Director (Cabo Verde, Guinea-Bissau, Mauritania)
Jean Pascal Kabore	Country Director of the Cabo Verde portfolio, Ghana, (at the time of the interviews)
Nadia Cappiello	Programme Liaison Associate (Cabo Verde, Gambia, Guinea Guinea-Bissau, Mali, Mauritania, Senegal)
<b>IFAD Chad</b>	
Valantine Achancho	Country Director (Chad, Congo, Democratic Republic of the Congo)
Koundja Koularambaye	Country Programme Officer (Chad)
Marcelin Norvilus	Programme Officer (Chad, São Tomé and Príncipe)
<b>IFAD Madagascar</b>	
Rachel Senn	Country Programme Officer (at the time of the interviews)
<b>IFAD Mali</b>	
Manda Dite Mariam Sissoko	Country Programme Officer (Mali)
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<b>IFAD Niger</b>	
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<b>Other people met</b>	
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<b>Strategy and Knowledge Department (SKD)</b>	
Meike Van Ginneken	Former Associate Vice-President (at the time of the interviews)
Raniya Sayed Khan	Senior Technical Adviser to the Associate Vice-President
Helen Maree Gillman	Senior Knowledge Management Specialist
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Name	Function / organization
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Ndaya Beltchika	Lead Technical Specialist - Gender and Social Inclusion, ECG
Liza Leclerc	Lead Technical Specialist, ECG
Joyce Njoro	Lead Technical Specialist – Nutrition, ECG
Mfalila Kisa	Regional Climate and Environment Specialist (ECG/APR)
Paxina Chileshe	Regional Climate and Environment Specialist (ECG/ESA)
Oliver Page	Regional Climate and Environmental Specialist (ECG/LAC)
Nicolas Tremblay	Regional Climate and Environment Specialist (ECG/NEN)
Amath Pathe	Regional Climate and Environment Specialist (ECG/WCA) / Head of Hub/ Country Director a.i. (Benin- Burkina Faso- Côte d'Ivoire- Niger- Togo)
Erick Patrick	Regional Climate Specialist (ECG/WCA) (at the time of the interviews)
Renaud Colmant	Regional Climate Specialist (ECG/NEN) (at the time of the interviews)
Pierre Yves Guedez	Senior Technical Specialist - International Climate Trust Funds, ECG
Janie Rioux	Senior Technical Specialist - Climate Change, ECG
Sebastien Subsol	Senior Technical Specialist – Climate Change/ Lead ASAP Initiatives, ECG
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Symons Ricci	Technical Specialist, ECG
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Michael Hamp	Lead Regional Technical Specialist Rural Finance, Markets and Value Chains, PMI
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Harold Liversage	Lead Global Technical Specialist, Land Tenure, PMI
Antonio Rota	Lead Global Technical Specialist, Livestock, PMI
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Name	Function / organization
<b>Executive Board Representatives</b>	
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<b>India</b>	Bommakanti Rajender. Minister (Agriculture) Alternate Permanent Representative, Republic of India
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	Jeroen Rijniers. Senior Policy Advisor Ministry of Foreign Affairs of the Kingdom of the Netherlands
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<b>United States of America</b>	Elizabeth Lien. Director Office of International Development Policy Department of the Treasury of the United States of America
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Name	Function / organization
<b>Country Stakeholders</b>	
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Jahangir Hussain	Coastal Climate-Resilient Infrastructure Project (CCRIP) Livelihoods Specialist
Anwarul Islam	Former Executive Engineer, Barguna, Superintending Engineer, Local Government Engineering Department (LGED), Barishal
Sabina Islam	Coastal Climate-Resilient Infrastructure Project (CCRIP) Gender Specialist
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Abdur Rashid Khan	Chief Engineer, Local Government Engineering Department (LGED)
Anisul Wahab Khan	Project Director for project: Promoting Resilience of Vulnerable Through Access to Infrastructure, Improved Skills and Information (PROVATI3)
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Syeda Asma Khatun	Coastal Climate-Resilient Infrastructure Project (CCRIP) Deputy Project Director and former Secretary, Gender and Development Forum, Local Government Engineering Department (LGED)
Shahjahan Miah	Coastal Climate-Resilient Infrastructure Project (CCRIP) Monitoring, Evaluation and Knowledge Management Specialist
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<b>Country Partners</b>	
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Riccardo Riccardi	Helvetas, Country Programme Director, Bolivia
Jorge Arciénega	Expert in rural socio-productive development and territorial development (Former Project Consultant-Mission Member)

Name	Function / organization
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Marc Ntungwanayo	Climate Change Adaptation and Land and Water Development Officer, PIPARV-B Project, Programme Implementation Unit, Bujumbura
<b>Country Partners</b>	
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<b>Country Partners</b>	
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Katya Mascarenhas Neves	Head of Programme, FAO
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Name	Function / organization
<b>Chad</b>	
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Ayday Lintel	Head of Climatological Division, National Agency of Meteorology, ANAM, Ministry of Civil Aviation and Meteorology, N'Djamena
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Hadassa Issa Atche	Geographic Information System (GIS) Manager, PARSAT, Mongo, Programme Implementation Unit
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Naoura Yanne	Communication and Knowledge Management Officer, PARSAT, Mongo, Programme Implementation Unit
Bakary Couliblay	Former Coordinator, PAPAM, Bamako, Mali, Programme Implementation Unit
Adoum Seif Abakar	Vice-President AJDAF, Ambastna, Fitri
Nouradine Ouada Bioko	Enterprise Development, Fitri



Name	Function / organization
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Hany Darwish	Project Director, SAIL
Dr Mohamed Fahim	Early Warning System (DAIRNS), SAIL
Dr Fadl Hashem	Early Warning System (DAIRNS), SAIL
<b>Country Partners</b>	
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Mostafa Nehad	Technical Advisor, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
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<b>Honduras</b>	
<b>Government and Project Staff</b>	
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Roney Bueso	PROLENCA
Allan García	PROLENCA
Héctor García	PROLENCA
Melissa López	PROLENCA
Carlos Mejía	PROLENCA
Christian Montoya	PROLENCA
Jorge Pineda	PROLENCA
Suyapa Jovel	Vice Mayor. Belén municipality, Lempira
Wilson Membreño	Mayor. Belén municipality, Lempira
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Name	Function / organization
<b>Country Partners</b>	
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Stanley Muloma	Migori County Programme Coordinator (CPC), ABDP
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Grace Njagi	Aquaculture Specialist and Lead Component 1, ABDP
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<b>Country Partners</b>	
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Dubow Ummkalthum	CARE, PROFIT
<b>Kyrgyzstan</b>	
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Name	Function / organization
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Name	Function / organization
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Vella Baciboni	Karusi Province
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Cyprien Barikurubu	Muyinga Province
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Alexis Bizimana	Agronomy Instructor, Gitega Province
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Roger Hacimana	Ngozi Province
Thaddee Hakizimana	Karusi Province
Tharcisse Hakizimana	Karusi Province
Therance Hakizimana	Ngozi Province
Charles Hasabamutima	Ngozi Province
Benoît Karashiro	Ngozi Province
Canut Karenzo	Hill Leader, Kayenza Province
Eustache Katihabwa	Karusi Province
Baneste Manirakiza	Karusi Province
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Christine Miburon	Ngozi Province
Habiyambere Michel	Ngozi Province
Felix Moburo	Ngozi Province
Rebecca Nahimana	Kayenza Province
Michel Ndarugirire	Agricultural Monitor, Ngozi Province
Simon Ndarugirire	Kayenza Province
Abel Ndaruzainiye	Karusi Province
Claudine Ndayikeza	Karusi Province
Francine Ndayisaba	Muyinga Province
Geneviève Ndayisenga	Kayenza Province
Colette Nduwayezu	Karusi Province
Jérémie Nduwimana	Kayenza Province
Corrette Nimpagaritse	Gitega Province
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Filipe Furtado	Landowner, Ribeireta
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María Felix	Asociación de Productoras El Clavel
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Marvin Ovidio Lorenzo	CRAC Sta Teresa de Membrillo
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Alfred Rakoto	Farmer field schools
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Firengea Robuste	Farmer field schools
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Pierrette Sonie	Farmer field schools
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Fanomezautsea Stanislas Harolahy	Producers Organizations
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Jean Francis Longony	Producers Organizations
Robert Mamoronga	Producers Organizations
Esther Nivosoa	Producers Organizations
Alphonse Philbert	Producers Organizations
Lucie Vigna Rafafindrafara	Producers Organizations
Jean Claude Randrianarivo	Producers Organizations
Animalala Rasoa	Producers Organizations
Bertiner Rasoanirina	Producers Organizations
Vololoniaina Razafindravelo	Producers Organizations
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Fiarisoa Esther Roza	Producers Organizations
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Adrianu Ravelonamamtsoa	Water associations

Name	Function / organization
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Bintou Bouare	Tabacoro village, Koumantou, Bougouni
Bintou Coulibaly	Zantiebouyou, Bougouni
Fatoumata Coulibaly	Zantiebouyou, Bougouni
Sitan Coulibaly	Bougoula village, Zantiebouyou
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Fanta Diakite	Tabacoro village, Koumantou, Bougouni
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Fatoumata Doumbia	Tabacoro village, Koumantou, Bougouni
Kadia Doumbia	Tabacoro village, Koumantou, Bougouni
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Djetene Kone	Bougoula village, Zantiebouyou
Flateni Kone	Bougoula village, Zantiebouyou
Kadia Kone	Bougoula village, Zantiebouyou
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Mariam Mariko	Bougoula village, Zantiebouyou
Ramatou Mariko	Bougoula village, Zantiebouyou
Sanata Mariko	Bougoula village, Zantiebouyou
Minata Samake	Zantiebouyou, Bougouni

Name	Function / organization
Benta Sangare	Tabacoro village, Koumantou, Bougouni
Djeneba Sangare	Farmer Organization President, Zantiebougou, Bougouni
Amadou Togola	Tabacoro village, Koumantou, Bougouni
Awa Togola	Tabacoro village, Koumantou, Bougouni
Dansoba Togola	Tabacoro village, Koumantou, Bougouni
Dioba Togola	Tabacoro village, Koumantou, Bougouni
Harouna Togola	Zantiebougou, Bougouni
Koniba Togola	Tabacoro village, Koumantou, Bougouni
Kotou Togola	Tabacoro village, Koumantou, Bougouni
Madou Togola	Tabacoro village, Koumantou, Bougouni
Minata Togola	Tabacoro village, Koumantou, Bougouni
Orokia Togola	Tabacoro village, Koumantou, Bougouni
Saly Togola	Tabacoro village, Koumantou, Bougouni
Waraba Togola	Tabacoro village, Koumantou, Bougouni
NGolo Togoma	Tabacoro village, Koumantou, Bougouni
Sali Toure	Bougoula village, Zantiebougou
<b>Republic of Moldova</b>	
Eugen Adam	Lead Farmer of the Farmer Field School Roua Persicului
Vitalie Burlacu	Farmer, Natcuby AgroSRL
Mana Pancrat	President, Dairy Association
Pavel Prisacaru	President of the Sheep and Goats' Association
<b>Nicaragua</b>	
Judith Mayerling Gomez Meza	Jóvenes Emprendedores De San Juan Del Rio Coco (JESR)
Zulema Asbel Moreno Olivas	Jóvenes Emprendedores De San Juan Del Rio Coco (JESR)
Rafaela Oporta Mendez	Cooperativa De Servicios Agropecuarios Boaco Viejo R.L
Harold Alfonso Membreño Tinoco	Cooperativa Multifuncional Cacaotera la Campesina R.L.
Maritza Centeno Gonzalez	Cooperativa Agropecuaria De Servicios Tonanzintalli R.L.
Martin Antonio Gonzalez	Cooperativa Agropecuaria Multisectorial De Siuna R.L (Coopesiuna R.L)
<b>Sudan</b>	
Anonymous (male farmer)	Al Adara Village
Anonymous (female farmer)	Al Adara Village

TABLE 1

## Summary statistics of persons met

Category	Number of persons met
IFAD staff (HQ, Hubs)	127
Project Staff and Government	199
Country Partners	120
Beneficiaries	261
Executive Board Representatives	24
IFIs and donor institutions	11
<b>Total</b>	<b>742</b>



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