
Climate finance to strengthen food systems: An opportunity for IFAD

Document: EB 2022/137/R.2

Agenda: 3

Date: 8 December 2022

Distribution: Public

Original: English

FOR: REVIEW

Action: The Executive Board is invited to review the content of the document.

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I. Introduction

1. Climate change is eroding gains made in ending food insecurity and poverty. Predominantly rural, small-scale producers in developing countries produce one third of the food consumed worldwide. Yet they are among the most vulnerable to climate change and its impacts, and the most underserved by global climate finance. Food security is under threat, as a consequence of the failure to mitigate climate change and the inability to deal with the resulting variability and uncertainty.
2. That failure is largely attributable to the inability of climate finance to reach small-scale producers and rural areas at speed and scale. This is likely to undermine the international community's efforts to achieve many of the Sustainable Development Goals (SDGs), the goals of the Paris Agreement and the global biodiversity goals, and to sustainably feed the world's growing population. Unfortunately, the failure to reach small-scale producers and strengthen rural food systems is also likely to bring attendant risks of increased forced migration, instability and conflict.¹
3. This strategic discussion paper lays out opportunities and challenges for mobilizing climate finance in the context of rural development and possible directions that IFAD can take. The objective of the paper is to provide a space for dialogue with Member States on IFAD's ambition with regards to climate finance and discuss opportunities to strengthen food systems, using an integrated multisector and multilevel approach that can provide sustained co-benefits for climate, food security and agriculture.

II. Climate finance trends: overall and for small-scale agriculture

4. Climate finance reached US\$632 billion in 2019/2020. Of this amount, just US\$16.3 billion went to agriculture, forestry and other land uses (AFOLU). Although the overall amount of climate finance has increased over the past decade, the increase slowed from 24 per cent between 2015/2016 and 2017/2018 to 10 per cent between 2017/2018 and 2019/2020. The current amount represents only 2.5 per cent of total tracked climate finance, indicating that AFOLU sectors are underfunded in comparison to other sectors, like renewable energy generation (51 per cent) or low-carbon transport (nearly 26 per cent).² During the same period the world has also witnessed a reduction in financing for adaptation despite a growing need for resources to combat the consequences of climate change.
5. **The Paris Agreement and the mitigation/adaptation balance.** The 2015 Paris Agreement promised that equal amounts of new and additional climate finance would be allocated to adaptation and mitigation. The reality on the ground is different: climate mitigation finance accounted for 90 per cent (US\$571 billion) of total climate finance in 2019/2020. Renewables attracted US\$324 billion of total climate mitigation finance, primarily funded from private sources (69 per cent), reflecting the renewable sector's growing commercial viability and strong appeal for the private sector. In comparison, adaptation finance accounted for 7 per cent of total climate finance. In contrast to mitigation finance, adaptation finance is almost 100 per cent funded by public sources.
6. The unfunded portion of adaptation finance, also called the adaptation gap (the difference between needs and available finance), is widening. The United Nations Environment Programme (UNEP) Adaptation Gap Report 2021³ issued the following

¹ See IFAD [brief](#).

² [Landscape of Climate Finance for Agriculture, Forestry, Other Land Uses and Fisheries CPI](#).

³ Available at: <https://www.unep.org/resources/adaptation-gap-report-2021>.

key message: There remains an urgent need to scale up and further increase international public adaptation finance, for both direct investment and for overcoming barriers to private sector adaptation. The UNEP Adaptation Gap Report 2022⁴ estimates that overall annual adaptation costs in developing economies will reach US\$340 billion by 2030 and US\$565 billion by 2050. An analysis of a subset of Nationally Determined Contributions (NDCs) and National Adaptation Plans (NAPs), which provides sectoral estimates of adaptation finance needs, highlights that reported needs are highest in the agriculture sector (26 per cent of total needs), followed by infrastructure (22.6 per cent), water (15.2 per cent) and disaster risk management (12.5 per cent).

7. **Agriculture, forestry and other land uses.** The portion of climate finance that is critical for IFAD's beneficiaries is the portion allocated to AFOLU sector. Within AFOLU, the larger share of climate finance, equal to US\$8.5 billion, went to mitigation, US\$5.6 billion to adaptation, and the remaining US\$2.2 billion to dual benefit adaptation-mitigation investments.⁵ While new estimates are still coming out, given the significant drop in climate finance to AFOLU, it is predicted that the share of climate finance directed to small-scale agriculture in 2019/2020 is likely to have fallen to about 1 per cent⁶ (down from an earlier estimate of 1.7 per cent).

III. Beyond COP27: challenges and opportunities for climate financing directed at small-scale agriculture

8. In small-scale agriculture, public international finance represents 95 per cent of climate finance. Grants and concessional loans played a significant role at 50 per cent and 33 per cent respectively.⁷ Most governments use these sources of finance to tackle the main barriers to finance in the sector. International public finance supports mainly:
 - Technical assistance and capacity-building for incentivizing and adopting climate-smart agriculture practices; and
 - De-risking or building first-loss tranches in blended finance instruments to catalyse private investments.
9. **Challenges and opportunities.** Despite being billed as the "adaptation COP" and the "implementation COP", COP27 held at Sharm el-Sheikh this year highlighted key challenges (and some opportunities) for increased adaptation financing and underscored additional efforts by the international community, specifically international financial institutions and multilateral institutions to mobilize additional and new resources for adaptation and especially for small-scale agriculture.
 - Governments and developing countries are not keen to borrow, especially in the context of increasing interest rates, for adaptation or related areas such as social protection and building the resilience of especially vulnerable and poor populations.⁸
 - There is a large amount of private financing from sources that are keen to show responsibility in investments. At last count, private sector financing for environmental, social and corporate governance investments totalled US\$2.7 trillion. Impact investing in climate shows that there is approximately US\$130 trillion of assets under management that can potentially be leveraged.⁹

⁴ Available at: <https://www.unep.org/resources/adaptation-gap-report-2022>.

⁵ [Landscape of Climate Finance for Agriculture, Forestry, Other Land Uses and Fisheries \(climatepolicyinitiative.org\)](https://www.unep.org/resources/adaptation-gap-report-2022).

⁶ Author's calculations.

⁷ <https://www.climatepolicyinitiative.org/wp-content/uploads/2020/11/Examining-the-Climate-Finance-Gap-in-Small-Scale-Agriculture.pdf>.

⁸ https://unfccc.int/sites/default/files/resource/ODI_A_fair_share_of_climate_finance.pdf.

⁹ MUFG, 2022, ESG Analytics.

- Within this context, there are several challenges in leveraging financing for adaptation. Climate related and especially adaptation related bankable projects and investment opportunities in developing countries are scarce. This is primarily because many NDCs and NAPs are not costed: most require developing detailed designs and subsequent due diligence to convert them to climate projects that have a sufficient business case to attract private financing. Furthermore, there is a lack of understanding and knowledge on how to measure and standardize adaptation and resilience, and the debate in many corners conflates them with development. Indeed, there is a lack of technical expertise in countries to think through low-emission climate-resilient national pathways and generate innovative and attractive possibilities for the private sector to invest in, including structuring and deploying risk mitigation, and blended financing instruments. Additionally, there is uncertainty about the economic consequences of climate impacts and the efficiency of adaptation technologies, which affects project-level investments and under-prices risks that are serious hindrances to private investment.¹⁰
 - **Pledges and commitments in adaptation.** There has been an increasing call for adaptation finance both in the Glasgow pact in 2021 (at COP26), at high-level meetings such as the Africa Adaptation Summit, and at COP27 this year. However, it is clear that pledges were not translating into financing on the ground. The causes for this are manifold: recent increases in food, fuel and fertilizer prices; the pandemic induced fiscal crisis; and increased needs for humanitarian support have reduced attention to adaptation. The lack of country-level and regional investable project pipelines available for the private sector to invest in these opportunities, as described above, is still another reason. Additionally, food systems and agricultural production have been mostly dissociated from the climate finance discussion. COP27 was the first time that the Koronivia process was given a space in the main negotiations. This culminated in the four-year Sharm el-Sheikh joint work on implementation of climate action on agriculture and food security.
10. **COP27.** Despite these trends, some of the opportunities coming out of COP27 are important to note.
- Food systems entered the COP discussions for the first time. A critical outcome of COP27 was to go beyond sustainable agriculture and address all components of food systems, while also contributing to climate goals and human and planetary health. This raises the hope that the neglect of food and farming issues in the United Nations climate agreement is coming to an end and will lay the foundations for coordinated actions between the agriculture and food sectors and climate to tackle emissions, food security and agriculture simultaneously.
 - Voluntary carbon mechanisms represent an increased opportunity to engage in a market that is likely to grow and be formalized in a few years but where early entry and reputation building is important. Carbon markets provide an important opportunity to redistribute revenues from carbon credit sales back to vulnerable and poor populations, both to reduce the burden of adaptation and to compensate them for undertaking actions that are not priced but valued for sustainable growth and resilience (e.g. multiple cropping, agrobiodiversity, no-till practices, soil carbon management, managing alternate wetting and drying, leaving land fallow, agroecology and seasonal cropping).

¹⁰ International Monetary Fund (IMF) Staff Climate Note 2022/007.

- The loss and damage (L&D) facility unveiled at COP27 emphasized the need for financing for countries for unavoidable damage caused by climate change. While the nuances of the L&D facility are yet to be articulated, its importance lies in the fact that it prioritizes adaptation, promotes indigenous solutions and supports those most harmed by the unavoidable consequences of climate change, and that it is key for promoting climate justice.
 - With the Global Methane Pledge at COP26 and the visible announcements made at COP27, it is clear that reducing methane will be important for reducing global warming. Critical ways in which the agriculture sector can contribute to lowering methane include reducing enteric fermentation in livestock, increasing productivity through better management of feed, reducing loss and waste in livestock products and introducing alternative ways to grow rice. Not coincidentally, these are areas where IFAD works.
 - At COP26, as part of ambitious global efforts to reverse forest loss and land degradation a historic pledge of US\$1.7 billion was announced to directly support indigenous and local communities' land tenure and resource rights in recognition of the role they play in climate change mitigation and protecting biodiversity. Again, these are traditional areas where IFAD works and engages with key communities as part of its overall group of stakeholders.
 - COP27 also saw continued "commitments" from the private sector to shift their investment portfolio, such as the US\$130 trillion pledge by the Glasgow Financial Alliance for Net Zero (GFANZ),¹¹ but this pledge remains largely un-operationalized due to the absence of bankable projects. It is widely believed that unless corrective actions are taken, countries will fail in their transformation towards net zero and climate-resilient societies.
11. Multilateral climate funds are expected to continue to be a major source of climate finance for developing countries, in particular for AFOLU and adaptation. In 2019/2020, annual flows from multilateral climate funds increased to US\$3.5 billion, up by 18 per cent from the previous year. Forty per cent of this financing went to AFOLU projects. Almost half (47 per cent) of multilateral climate financing went to projects for adaptation or to those with dual benefits, a much higher percentage than was the case for public finance overall. In 2022, the Global Environment Facility (GEF) achieved a record replenishment of US\$5.25 billion for GEF8 (a 29 per cent increase over GEF7) and the Adaptation Fund (AF) managed to mobilize significant funding at COP26 and at COP27.
 12. **Fragile states.** One key area of focus remains fragile states, which find accessing climate finance challenging despite being vulnerable to climate shocks. An integrated approach toward climate, fragility, migration and rural agriculture development will simultaneously strengthen resilience outcomes and minimize threats to peace and prosperity. IFAD's work in the Sahel region with the Joint Programme for the Sahel in response to the Challenges of COVID-19, Conflict and Climate Change (SD3C) is one of many examples of how IFAD can help mitigate the simultaneous challenges of emergency situations, development and peace. Job creation, strengthening avenues for remittances and diaspora financing, and rapid interventions that lead to increased resilience and food security, all provide avenues for IFAD's continued involvement in this nexus.
 13. Private sector financing for adaptation continues to be challenged by information asymmetry, missing markets, and the uncertainty and timing of benefits and revenue flows. Blended finance opportunities in low-income countries (LICs) and fragile states are constrained by several factors, most notably a poor investment climate, market failures and high risks. Specifically, in the small-scale agriculture

¹¹ This was accompanied also by other announcements, many partnerships between multilateral development banks (MDBs) and private fund managers: [Public and Private Finance for Climate Action Takes Center Stage at COP26 | Insight | Baker McKenzie](#).

sector, high transaction costs involved in aggregating small-scale farmers and producers is a key challenge to structuring “investable” projects that could attract large private investors.

IV. Using IFAD’s experience to mobilize climate finance for strengthening food systems

14. As of November 2022, IFAD has committed US\$990 million in climate finance across 70 projects. With more than US\$300 million in supplementary funds in the Adaptation for Smallholder Agriculture Programme (ASAP), it has channelled additional climate and environmental finance to six million vulnerable producers in 41 countries. The enhanced Adaptation for Smallholder Agriculture Programme (ASAP+) will mobilize another US\$500 million. IFAD’s core programme of loans and grants (PoLG) aims to mobilize an additional US\$800 million over the next two and a half years.
15. **Layering finance with core, private sector and supplementary climate contributions.** Important lessons can be drawn from the Eleventh Replenishment of IFAD’s Resources (IFAD11)¹² and IFAD’s target to programme climate finance (the target set for IFAD11 was 25 per cent of the PoLG; for IFAD12 the target was raised to 40 per cent).¹³ IFAD’s programme on climate and grant programmes allows IFAD to report the climate impact of contributions to the PoLG (either through the replenishment or the Integrated Borrowing Framework) or through ASAP+, which is 100 per cent climate finance. The overall size of the ASAP+ today is US\$82 million. However, IFAD will consult with Member States during the IFAD13 replenishment process to identify and agree a common approach to scale up IFAD’s climate ambitions in the near and medium term.
16. In working with multilateral donors such as the AF, GEF and Green Climate Fund (GCF), IFAD is well positioned to expand its engagement. Working with GCF is significantly more demanding compared to AF and GEF (which are older funds). The establishment of the IFAD Climate Facility (ICF) in 2021 has strengthened IFAD’s capacity to step up its engagement with all three climate and environment funds. ICF resources have been used to help prepare complex projects that target sustainable agricultural production and low-emission climate-resilient pathways in food systems (including in Viet Nam and East and Southern Africa) work has been slow because of the time required for setting up systems and recruitment. In the coming year, IFAD expects to galvanize and leverage these engagements.
17. IFAD’s engagement in the United Nations Food Systems Coordination Hub has emphasized its commitment to transforming food systems and promoting the needs of the rural poor in a climate-resilient manner. IFAD and the World Bank are co-leading the financing agenda for food systems. IFAD is supporting the Hub to develop the first country budget tool to track financing to food systems transformation. The aim is to create a dynamic to influence domestic, donor and private resource flows towards highly performing and resilient food systems. IFAD is also leading the Public Development Banks (PDBs) Coalition, with the objective to increase green and inclusive investments in agriculture and across food systems. PDBs are key for mobilizing public and private finance to transform food systems. Their investments in food and agriculture account for two thirds of public financing to agriculture.
18. An important lesson of engaging with the private sector has been that its main motivation to engage in adaptation is to minimize supply chain risk. It is possible to build partnerships with the private sector to mobilize valuable technical capacities and scientific knowledge for climate adaptation, but the key challenge of absent bankable projects remains. Preparatory financing and financing for de-risking

¹² These use the MDB methodology for tracking climate finance with respect to IFAD’s PoLG.

¹³ See for example [IFAD’s Climate Action Report 2022](#).

climate investments will require greater attention if IFAD wishes greater engagement in this space.

V. IFAD's niche in the climate finance space

19. Three major dimensions to IFAD's value proposition in the climate finance space can be broken down as follows: strategic, financial and operational.
20. **Strategic.** From a strategic point of view, IFAD works with small-scale producers, who are vulnerable to climate change and need resources to make them resilient to climate and other shocks. IFAD is engaging with countries on the food system transformation pathways and NDCs/NAPs. This gives IFAD the ability to ensure that these pathways are coherent and consistent.
21. **Financial.** IFAD has the experience and capacity to blend climate finance with traditional official development assistance into well-integrated investment programmes. IFAD has mobilized significant finance in this way. It can also use country strategic opportunity programmes (COSOPs) to build stronger country level and private sector engagement and to structure blended instruments. IFAD's business model as a sovereign lender is enhanced by the existence of dedicated financial instruments to channel climate finance alongside the core portfolio.
22. **Operational.** IFAD has a strong track record and solid partnerships with governments and in-country stakeholders, and it has the ability to leverage rural civil society partners (Farmers' Forum, Indigenous Peoples' Forum). IFAD's climate financing can trigger mainstreaming climate change mitigation and adaptation in partners' national and international institutions, thus creating a multiplier effect in the agriculture sector and in rural development. Additionally, IFAD has the capacity to design, support implementation, and monitor, verify and report on results (including increased climate resilience) from agricultural, forestry, land use and rural development projects.
23. While all these are opportunities, it is also clear that IFAD's systems and capacities will need to evolve. Technical and policy advice at the country level, project preparation and pipeline preparation financing, country and international partnerships with national and international private sector actors, portfolio generation, aggregation, monitoring and verification and creating and setting up blended instruments requires due diligence, systems and capacities.

VI Potential way forward

24. Based on feedback from Member States, maintaining a high level of climate ambition to strengthen agricultural production and food systems will be a key priority to be explored in IFAD13 consultations. IFAD will aim to maximize its efforts to scale up climate finance from public and private sector sources to advance low-emission and climate-resilient development within the small-scale agriculture sector, especially in LICs, lower-middle-income countries and fragile and conflict affected countries.
25. IFAD will increasingly focus on food systems as a nexus approach, connecting the dots between climate, food security, and agriculture. Predicated on discussions with Member States, IFAD could examine supporting the consolidation of enabling frameworks for resilient food system transformation, carbon markets, support policies to build national and IFAD-wide institutional capacities including potential emerging from the recently announced L&D facility, and support access to finance and incentives nationally. Within food systems, IFAD could examine integrating food security, methane reduction and nutrition by focusing on neglected and underutilized crops for resilience, biodiversity, diet diversity, preventing food loss, scaling up climate-resilient biofortified crops, and enhancing metrics on climate and nutrition. Additionally, the linkages between climate and conflict could be explored further.

26. Efforts will continue to mobilize resources for climate adaptation and enhance their role in turbo-charging innovation and catalysing climate finance. IFAD's ability to earmark climate finance and generate rigorous evidence of results represents an attractive option for donors wanting to contribute climate-earmarked resources to small-scale agriculture adaptation. IFAD can de-risk investments to pilot climate innovations, which can then be scaled up by other partners and investors, including the private sector.¹⁴
27. The significant momentum generated around the climate-Indigenous Peoples nexus at COP27 opens interesting opportunities to step up IFAD's resource mobilization efforts for the benefit of Indigenous Peoples and local communities. A natural priority for IFAD is to scale up the Indigenous Peoples Assistance Facility (IPAF). Established in 2006, IPAF is an innovative mechanism that directly funds projects designed and implemented by Indigenous Peoples' communities and their organizations.
28. All three agencies – AF, GCF and GEF – recognize IFAD's comparative advantages and focus on adaptation and agriculture. An ambitious work programme for the three agencies aims to build capacities and totals approximately US\$1.5 billion to US\$2.0 billion. A pipeline development exercise aimed at maximizing mobilization of funds under GEF8 and AF is at an advanced stage of preparation. IFAD has also been selected as co-lead for the recently awarded GEF8 Food Systems Integrated Programme from 2023, which will further strengthen this partnership.
29. IFAD could strengthen its role as an aggregator of climate finance.¹⁵ Working in partnership with PDBs, this could take the following forms:
- **Assembling** more technical assistance grant support to address capacity, knowledge and policy gaps hindering the uptake of green investments in-country;
 - **Designing** bankable projects, using IFAD's sovereign and non-sovereign loan programmes in areas that could attract co-investment from private sector entities;
 - **Structuring** blended finance and other financial instruments to strengthen and scale up financing to effectively reach rural economies;
 - **Risk-sharing** by crowding in public financiers through credit enhancement mechanisms for leveraging private sector financing; and
 - **Greening** financial systems such as agricultural banks to advance low-emission and climate-resilient development within rural economies.

¹⁴ Going forward, this could focus on rolling out innovative projects like smallholder access to the carbon market in the case of Ethiopia; supporting policy-oriented work, particularly targeting Ministries of Finance, Planning and Agriculture; support the origination of more biodiversity focused projects in IFAD's pipeline.

¹⁵ IFAD has been stepping up its role as an aggregator of climate and biodiversity finance through scaled up programmes such as the Africa Rural Climate Adaptation Finance Mechanism (ARCAFIM), Inclusive Green Financing Initiative (IGREENFIN) and Africa Integrated Climate Risk Management Programme.

VII Discussion questions

30. Management puts forward the following discussion questions for Member States:

- Following COP27 commitments, how can Member States support IFAD to be a key fund through which additional adaptation finance for strengthening food systems is channelled?
- Should there be an increase in ambition with respect to climate at IFAD? What could this increase in ambition look like?
- IFAD is committed to doing more to support countries in fragile situations. How can IFAD step up support for fragile countries to access more climate finance since these are also countries that are most vulnerable to climate shocks?