
Climate, Environment and Biodiversity Strategy 2025–2031

Document: EB 2025/146/R.17

Agenda: 5(a)

Date: 3 November 2025

Distribution: Public

Original: English

FOR: APPROVAL

Useful references: IFAD Strategy and Action Plan on Environment and Climate Change 2019–2025 ([EB 2018/125/R.12](#)), [Biodiversity Strategy 2022–2025](#), [Climate, Environment and Biodiversity Strategy 2025–2031](#) ([EB 2025/145/R.14](#))

Action: The Executive Board is invited to approve the Climate, Environment and Biodiversity Strategy 2025–2031.

Technical questions:

Pieterneel Boogaard

Managing Director
Office of Technical Delivery
e-mail: p.boogaard@ifad.org

Juan Carlos Mendoza

Director
Environment, Climate, Gender and Social Inclusion Division
e-mail: juancarlos.mendoza@ifad.org

Jahan-Zeb Chowdhury

Lead Technical Specialist
Environment, Climate, Gender and Social
Inclusion Division
e-mail: j.chowdhury@ifad.org

Contents

Executive summary	II
I. Introduction	1
A. Background	1
B. The changing global policy context	3
II. Guiding principles and theory of change	3
A. Key principles driving the strategy	3
B. Theory of change	4
III. Climate, Environment and Biodiversity Strategy 2025–2031	4
A. Outcome of prior strategies	4
B. Lessons learned	5
C. Strategic goal	6
D. Strategic objectives and action areas	6
IV. Operational considerations	13

Annexes

I. Consultation process
II. Theory of change
III. Lessons learned
IV. Key findings of benchmarking and best practices review
V. Risk assessment and mitigation measures
VI. Assessment of integrated versus independent approaches to climate change impacts, biodiversity loss and environmental degradation
VII. Proposal for a high-level indicator of ecological impact
VIII. Relevance of resilience to climate change, environmental degradation and biodiversity loss to IFAD operations
IX. Action plan (2025–2027)

Executive summary

1. IFAD's mandate is to transform rural economies by eliminating poverty and food insecurity. The Climate, Environment and Biodiversity Strategy 2025–2031 outlines IFAD's comprehensive response to the interconnected climate, environmental and biodiversity-related threats facing small-scale farmers that endanger rural livelihoods and food security.
2. Climate change is disrupting agriculture through more extreme weather events like droughts, floods, heatwaves and erratic rainfall, as well as through slower gradual changes such as shifting seasons, rising temperatures and declining rainfall. These pressures, along with environmental degradation and biodiversity loss, are reducing yields and weakening the resilience of farming systems.
3. Agriculture is both a contributor to and a victim of these challenges. It produces around 29 per cent of global greenhouse gas emissions, drives deforestation and biodiversity loss, and depletes natural resources through intensive practices. In return, climate and environmental damage – such as soil erosion, water scarcity and pollution – threaten long-term food production and worsen the impact of droughts, pests and disease.
4. These pressures create vicious cycles that deepen environmental and agricultural stress. As a result, rural communities face greater vulnerability and poverty. Tackling these interlinked problems requires integrated solutions that address climate, environment and biodiversity together, not in isolation.
5. This strategy adopts a nexus approach that recognizes the deep interconnections between climate, environment and biodiversity challenges. By promoting integrated solutions that combine adaptation, mitigation, environmental sustainability, and the sustainable use and conservation of biodiversity within agricultural systems, the strategy leverages synergies and co-benefits. This integrated approach more effectively increases resilience and reduces rural poverty in line with IFAD's mandate.
6. Despite these identified challenges and solutions, there remains a significant financing gap to address country needs. Bridging this gap requires enabling policies, innovative finance mechanisms, coordinated investments and capacity-building to drive transformational change. This strategy delivers targeted support to ensure that small-scale producers have the resources and capabilities to effectively adapt to climate, environmental and biodiversity challenges. It does so through projects that emphasize environmental sustainability, the sustainable use and conservation of biodiversity, and the promotion of low-emission, climate-resilient practices.
7. This strategy presents a unified approach to overcoming barriers to climate resilience, environmental sustainability and the sustainable use and conservation of biodiversity, reaffirming IFAD's commitment to sustainable, inclusive rural transformation. Its development involved detailed internal and external consultations, with key principles and action areas refined through a review of IFAD country strategic opportunities programmes, IFAD's past and present portfolio, and lessons learned. Supporting this country-led approach, the strategy will be operationalized through the integration of contextually appropriate action areas into project designs, ensuring that IFAD operations align with both the strategy's objectives and national commitments. The strategy and its key action areas will serve as entry points from which countries can select and tailor interventions when designing investment projects.
8. The strategy will be implemented through three focused objectives:
 - **Objective 1:** Enhance scaling and adoption of climate-resilient and environmentally sustainable practices and the sustainable use and conservation of biodiversity;

- **Objective 2:** Enable increased investments for climate resilience, environmental sustainability, and the sustainable use and conservation of biodiversity; and
 - **Objective 3:** Strengthen policy engagement, knowledge management, capacity development and innovation to enhance rural resilience.
9. The relevant monitorable actions and Results Management Framework indicators of IFAD13¹ and those of forthcoming replenishments will guide the implementation of this strategy and its ambition to strengthen adaptive capacity, promote innovation, and deliver measurable impact across climate, environment and biodiversity thematic areas – ultimately contributing to rural poverty reduction and improved food security.
 10. To support effective implementation, IFAD will roll out a comprehensive capacity engagement plan, including new guidance on integrated approaches, training on adaptation finance, regular stocktakes through communities of practice, and an internal help desk for technical support. Lessons learned will be systematically documented and shared to reinforce institutional learning and ensure quality and consistency across the portfolio.

¹ See in particular those corresponding to the commitment: “1.3 Investing in climate resilience and biodiversity”.

Climate, Environment and Biodiversity Strategy 2025–2031

I. Introduction

A. Background

1. **IFAD's mandate is to transform rural economies by eliminating poverty and food insecurity.** A key part of this entails strengthening the long-term economic resilience of rural communities so that they can meet growing demand for sustainable and diversified food production, supported by agrobiodiversity and healthy ecosystems. However, rural populations are highly vulnerable to both the immediate effects of climate change – such as floods, droughts, extreme weather events and sudden temperature shifts – and its long-term impacts, including changing rainfall and temperature patterns, altered seasonality, land degradation, deforestation and biodiversity loss. In this context, small-scale farmers play a vital role as stewards of land and agrobiodiversity and their adoption of sustainable practices is critical to preserving the natural resources that underpin resilient and adaptive farming systems.
2. **Agriculture plays a dual role, both contributing to and being impacted by climate change, environmental degradation and biodiversity loss, which underscores the urgency of this integrated strategy.** Agricultural activities account for approximately 29 per cent of global greenhouse gas emissions, contribute significantly to deforestation and habitat loss, and are a primary driver of biodiversity decline through land-use change and intensive farming practices.^{2,3} Simultaneously, unsustainable practices accelerate soil degradation, water pollution and ecosystem disruption, creating a feedback loop that undermines food production systems. These interconnected challenges demand coordinated solutions that cannot separate climate, environmental and biodiversity issues from agricultural transformation.
3. **The economic implications of environmental degradation are profound, threatening the stability of rural systems.** The World Bank estimates that the collapse of ecosystem service – such as marine fisheries and native forests – could reduce global GDP by US\$2.7 trillion annually by 2030.⁴ The Dasgupta Review further highlights that human demands exceed nature's capacity, putting biodiversity under severe pressure and increasing risks of ecosystem collapse, economic instability and social disruption.⁵ Land degradation alone costs the global economy over US\$6.3 trillion annually, approximately 8.3 per cent of global GDP,⁶ while biodiversity loss significantly impacts economic production, with over half of global economic output (US\$44 trillion) dependent on nature.⁷
4. **Conversely, supporting investments in ecosystem restoration delivers substantial economic returns.** The sustainable use and conservation of agrobiodiversity, including crop varieties, livestock breeds and associated non-commercial beneficial species, enhances productivity through improved pollination services, soil health, natural pest control and genetic resilience against climate and market shocks. Every US\$1 invested in ecosystem restoration can yield US\$7 to US\$30 in economic returns through improved ecosystem services, sustainable

² FAO. 2024. *Greenhouse gas emissions from agrifood systems – Global, regional and country trends, 2000–2022*. FAOSTAT Analytical Brief Series, No. 94. Rome.

³ Cabernard, Livia, Stephan Pfister, and Stefanie Hellweg. 2024. Biodiversity impacts of recent land-use change driven by increases in agri-food imports. *Nature Sustainability*, vol. 7, pp. 1512–1524. <https://doi.org/10.1038/s41893-024-01433-4>

⁴ World Bank. 2021. [Protecting nature could avert global economic losses of US\\$2.7 trillion per year](#).

⁵ Dasgupta, Partha. 2021. *The Economics of Biodiversity: The Dasgupta Review*. London: HM Treasury.

⁶ Sutton, Paul C., and others. 2016. The ecological economics of land degradation: Impacts on ecosystem service values. *Ecological Economics*, vol. 129, pp. 182–192.

⁷ World Economic Forum. 2020. [Nature risk rising: Why the crisis engulfing nature matters for business and the economy](#).

production processes and reduced disaster risks.⁸ Sustainable land management practices and agroecological approaches can mitigate risks by restoring soil health, enhancing agrobiodiversity and strengthening ecosystem services that directly support agricultural productivity and food security.

5. **The Climate, Environment and Biodiversity Strategy 2025–2031 builds on IFAD’s track record by strengthening its technical and operational approaches to long-term threats.** It promotes holistic solutions that help rural communities and economies adapt and thrive. The strategy applies a nexus approach, recognizing the interlinkages between climate, environmental and biodiversity challenges as critical levers for reducing rural poverty and improving food security.
6. **Small-scale farmers and rural value chain actors are central to the solution, and IFAD’s approach distinctively focuses on the sustainable use and conservation of natural resources and biodiversity within agricultural systems for rural development.** By harnessing synergies and leveraging co-benefits across these areas, the strategy aims to build rural communities’ resilience to climate change and promote long-term development through enhanced environmental sustainability and the sustainable use and conservation of biodiversity, particularly agrobiodiversity.
7. **Achieving systemic transformation requires coordinated action across multiple levels.** Research emphasizes the necessity of alignment and improved coordination at the policy and planning level to achieve systemic transformation.⁹ IFAD promotes whole-of-government approaches, strengthening coordination between agriculture, finance and environmental ministries to enhance policy coherence and build adaptive capacity within small-scale production systems. However, slow finance deployment and limited institutional capacity remain major obstacles to rural transformation. IFAD estimates that small-scale farmers require US\$75 billion in climate finance annually to achieve resilience and long-term livelihood improvements.¹⁰ Policy gaps, market barriers and high transaction costs restrict access to these critical resources, necessitating urgent action to scale investment, enhance financial accessibility and bolster rural resilience.
8. **This strategy aligns with IFAD's Poverty Targeting Policy 2023,¹¹ prioritizing vulnerable rural groups inclusive of small-scale and subsistence farmers, Indigenous Peoples, women and youth.** It emphasizes that rural communities have historical and contextual connections to the land they farm and recognizes that traditional knowledge and practices are central to the sustainable use and conservation of natural resources and biodiversity while improving livelihoods, food security and nutrition through more climate-resilient practices. By adopting a people-centred approach, interventions are tailored to meet diverse community needs, promoting active participation in sustainable rural transformation while reinforcing IFAD's commitment to inclusive rural development. The strategy emphasizes gender equality and women's economic empowerment, enhancing women's access to financial resources and economic returns from agriculture.
9. **This strategy is informed by feedback from IFAD Member States, evaluations, public consultations and comparative analyses with multilateral development banks (MDBs) (see annexes I and IV).** It builds on IFAD's success in integrating local-level solutions into broader rural transformation efforts, ensuring that investments are both effective and scalable.

⁸ See footnote 3.

⁹ Intergovernmental Panel on Climate Change (IPCC) (2023). [Climate Change 2023: Synthesis Report](#).

¹⁰ IFAD. 2024. [The US\\$75 billion climate finance gap: An imperfect but important figure for small-scale farmers](#).

¹¹ IFAD. 2023. [IFAD Poverty Targeting Policy 2023](#).

B. The changing global policy context

10. **While governments increasingly integrate resilient practices into national planning to address land degradation, biodiversity loss and food insecurity, public finance alone is insufficient to meet investment needs.** With declining aid flows and escalating fiscal pressures, resources must be leveraged more efficiently and be deployed more strategically to maximize economic impact. MDBs, commercial banks and private investors are aligning with global sustainability frameworks, emphasizing the critical importance of mobilizing private capital to effectively address these interconnected challenges.
11. **At the same time, the global context is becoming more complex.** Many developing countries are facing shrinking development budgets, high debt burdens and growing political and economic instability, further compounding the effects of climate change and environmental degradation. These stressors are narrowing fiscal space, weakening institutional capacity and increasing vulnerability in rural areas. The convergence of these crises is shifting development priorities and calls for more targeted, cost-effective and resilient investment strategies that can deliver impact under constrained conditions.
12. **In this evolving global context, IFAD's strategy is designed to respond effectively by harnessing synergies among climate resilience, environmental sustainability and the sustainable use and conservation of biodiversity.** Through targeted investments and strengthened partnerships, IFAD supports rural communities in addressing these challenges while unlocking opportunities for sustainable economic transformation. The strategy also ensures that IFAD's operations are contextually appropriate and aligned with its mission to transform rural economies by eliminating poverty and food insecurity, while supporting countries in implementing their National Development Plans and fulfilling their commitments as Member States, including those linked to the Sustainable Development Goals (SDGs), the three Rio Conventions, the Kunming-Montreal Global Biodiversity Framework and the Paris Agreement.

II. Guiding principles and theory of change

A. Key principles driving the strategy

13. To align with IFAD's mandate, the following principles are embedded across the action areas:
 - (a) **Multiple-benefit approaches** – prioritize nexus interventions¹² that enhance rural livelihoods by securing land tenure, boosting productivity and nutrition, and strengthening the climate resilience and sustainability of natural resources and rural economies;
 - (b) **Market-focused innovation** – promote the development and contextually appropriate use of market-based mechanisms such as carbon markets, incentive-based conservation models and biodiversity credits. The strategy will also leverage blended climate finance, public-private-producer-partnerships (4Ps) and results-based financing to incentivize sustainable practices and attract greater investment into rural economies;
 - (c) **Concurrently addressing key threats and risks** – address resource degradation, pollution, habitat loss and natural hazards, inclusive of physical, climatic and economic shocks, to increase sustainable rural development

¹² Nexus interventions refer to integrated approaches that address interlinked challenges across multiple sectors – such as climate, environment and agriculture – simultaneously. These interventions seek to generate co-benefits by aligning efforts in rural development, food security, energy provision and natural resource management, ensuring sustainable and resilient outcomes for communities. This integrated approach is proactive, embedding and building anticipatory actions and capacity to reduce the impact of climate change, environmental degradation and biodiversity loss through preparedness and planning.

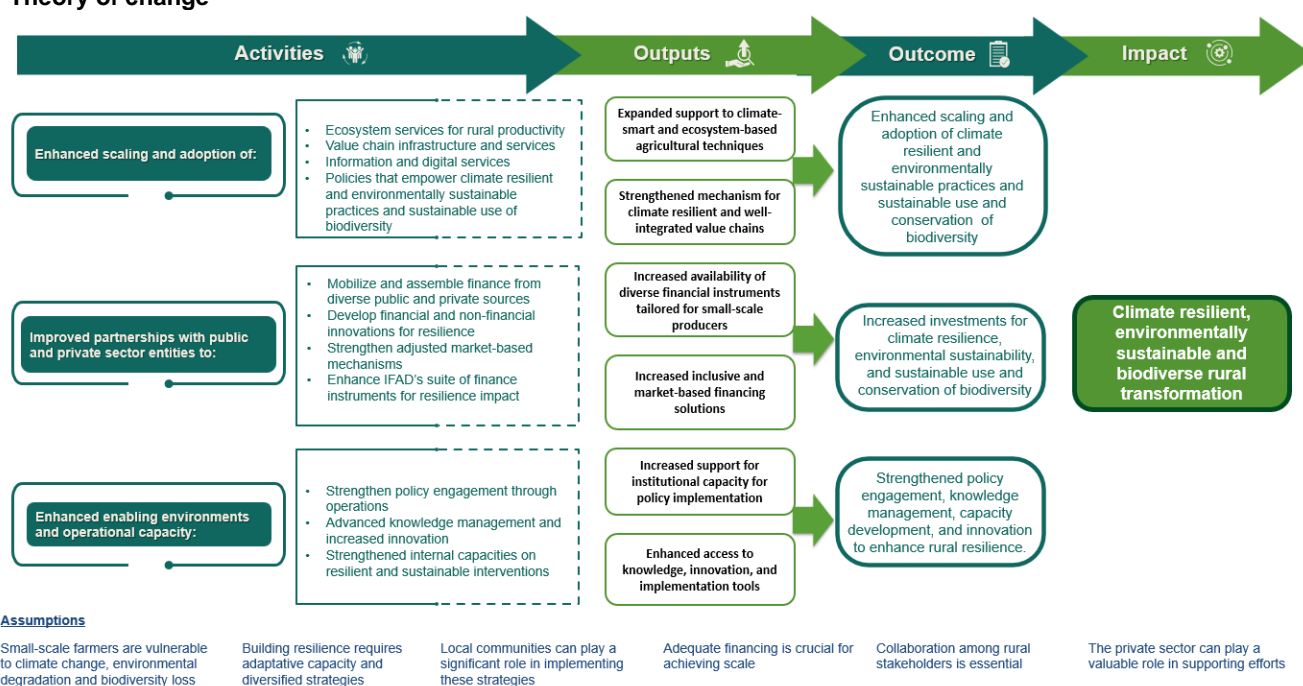
approaches and reduce the negative impact of disaster risks, fragility and conflicts;

- (d) **Promoting macroeconomic stability** – design interventions that minimize inflationary pressures and stabilize markets by enhancing local production, reducing supply chain disruptions and improving access to affordable and climate-resilient resources;
- (e) **Encouraging partnerships and collaboration** – foster multi-stakeholder partnerships, including public-private collaborations, to mobilize resources, share expertise and scale impactful solutions; and
- (f) **Simplicity with impact** – focus on practical, cost-effective solutions with a strong business case, reducing transaction costs and ensuring ease of implementation.

B. Theory of change

14. The theory of change links targeted investments to long-term rural resilience and sustainability. Key outputs – enhanced climate resilience, ecosystem-based productivity, stronger value chains, increased financial flows and improved policies – directly result from IFAD’s actions and drive the strategy’s goals. By ensuring measurable outcomes, it creates a clear path from intervention to systemic transformation, fostering resilient, sustainable and biodiverse rural economies.

Figure 1
Theory of change



III. Climate, Environment and Biodiversity Strategy 2025–2031

A. Outcome of prior strategies

15. **IFAD has made significant progress in strengthening rural economies by addressing key risks such as drought, flooding, land degradation and deforestation.** In the last funding cycle (Twelfth Replenishment of IFAD’s Resources [IFAD12] 2022-2024), IFAD allocated 49 per cent of total investments to climate finance in support of interventions that enhance climate resilience, improve productivity and rural livelihoods. This resulted in approximately US\$300 million more in climate financing than initially projected, reflecting the increasing demand

for targeted resilience-boosting investments at the country level.¹³ IFAD has increased investments in land restoration, soil fertility and sustainable production to boost long-term resilience and reduce risks of food supply disruptions and declining output to increase rural economic growth and livelihoods. However, small-scale farmers still face major financial barriers, limiting their ability to adopt risk-reducing strategies.

16. **To strengthen impact, IFAD has expanded partnerships with governments, development banks and the private sector, mobilizing financial and technical support for small-scale farmers.** Through initiatives like the Adaptation for Smallholder Agriculture Programme, IFAD has raised over US\$400 million since 2012, benefiting rural communities in over 40 countries.¹⁴ In addition, IFAD has raised over US\$1 billion from multilateral funds such as the Green Climate Fund (GCF), Global Environment Facility (GEF) and Adaptation Fund (AF).

B. Lessons learned

17. **Key evaluations highlight the importance of embedding climate resilience planning early in project design and ensuring a balance between immediate risk reduction and long-term impact.** Multiple assessments conducted by the Independent Office of Evaluation of IFAD (IOE) emphasize the benefits of investing in drought-resistant crops, early warning systems, soil restoration and sustainable water management to strengthen food security and rural livelihoods.¹⁵ The Multilateral Organisation Performance Assessment Network (MOPAN) report stresses the need for expanding IFAD's strategic partnerships, particularly in fragile and conflict-affected states, where risks to production and economic stability are highest.¹⁶
18. **External evaluations highlight private sector engagement as crucial for unlocking finance, incentivizing sustainability and enhancing IFAD's impact.** Thematic evaluations and internal assessments stress the importance of policy engagement, knowledge management and capacity-building for long-term success. Strengthening private sector collaboration, blended finance and policy integration will be key to embedding resilience in national strategies. Expanding knowledge-sharing and refining strategies will support IFAD's operations in remaining effective, scalable and aligned with country priorities (see annex III for a full account of lessons learned).
19. **A key lesson emerging across evaluations is the need for a more integrated, systems-based approach that links climate resilience, environmental sustainability and biodiversity outcomes.** Operationally, this means designing investment projects that reflect the interdependence of rural livelihoods, ecosystems and climate risks, starting from country-owned priorities such as Nationally Determined Contributions, National Adaptation Plans and National Biodiversity Strategies and Action Plans (NBSAPs). Integrated approaches combine joint diagnostics (e.g. mapping climate and nature risks), context-specific targeting and coordinated multi-stakeholder planning to identify co-benefit interventions such as agroecology, nature-based solutions and resilient infrastructure. Implementation relies on adaptive and inclusive delivery models, backed by harmonized safeguards, spatial planning and diversified financing from both public and private sources. Embedding this approach early in the project cycle enhances the resilience, sustainability and scalability of IFAD's investments while reinforcing its contribution to national and global commitments.

¹³ IFAD. 2023. [Report on IFAD's Mainstreaming Effectiveness \(RIME\) 2023](#).

¹⁴ Ibid.

¹⁵ IOE. 2024. [2024 Annual Report on the Independent Evaluation of IFAD](#).

¹⁶ MOPAN. 2024. [MOPAN assessment of IFAD 2023](#).

C. Strategic goal

20. The goal of this strategy is to support climate-resilient and environmentally sustainable practices and the sustainable use and conservation of biodiversity enhancing the livelihoods of IFAD's target groups and resulting in inclusive rural transformation.
21. This goal aligns with Member States' priorities to expand partnerships with financial institutions, the private sector and key groups – including youth, men, women and Indigenous Peoples – while supporting national commitments under global frameworks.

D. Strategic objectives and action areas

22. **This strategy defines IFAD's corporate approach to advancing climate-resilient and environmentally sustainable practices and promoting sustainable use and conservation of biodiversity across its operations.** Implemented flexibly and country-driven, the strategy will align with national priorities, institutional capacities and rural socioeconomic realities. Countries will be able to choose from the action areas outlined in the strategy when designing investment projects, allowing for tailored, context-specific solutions. The strategy will inform IFAD's investment pipeline and policy engagement at country, regional and global levels, ensuring that interventions are locally relevant, adaptable and impactful, while also reinforcing IFAD's role in global policy dialogue.
23. The strategy is built around three interconnected objectives. Objective 1 defines the **what** – scaling practices that are climate resilience-focused and environmentally sustainable and that sustainably use and conserve biodiversity to enhance agricultural productivity and rural livelihoods. Objective 2 focuses on the **how** – targeted financial investments through blended finance, cofinancing models and partnerships with private investors across international, regional and national sources to support these practices across IFAD's portfolio. Objective 3 establishes the **enabling conditions** – strengthening policy engagement, capacity-building, innovation and knowledge management to ensure effective implementation and long-term sustainability. Delivering this multidimensional strategy requires breaking down institutional silos, promoting policy coherence across climate, environment, agriculture and finance ministries, and balancing national flexibility with strong sectoral integration.
24. IFAD scales practices that are climate-resilient, environmentally sustainable and sustainably use and conserve biodiversity while deploying targeted financial solutions such as blended finance, cofinancing and investments in rural infrastructure and value chains. By these means, IFAD empowers small-scale producers to boost productivity and participate in structured, higher-value markets. This is achieved through support for certification schemes, aggregation models, improved logistics and inclusive business partnerships. Complementary investments in policy reform, digital tools and capacity-building provide the enabling environment required to sustain adoption and scaling. Together, these coordinated efforts drive inclusive rural economic growth, stabilize food supply and prices, and advance shared prosperity across communities, countries and regions.
25. **The strategy outlines 10 areas of action, offering a wide range of support options that countries – including small island developing states, low-income countries and those in fragile contexts – can select from based on their capacities, income levels, commitments and specific priorities.** These areas are intentionally designed to be flexible and adaptive, allowing countries to tailor interventions to their unique circumstances through a participatory process led by relevant ministries during the design phases of country strategic opportunities programmes (COSOPs) and projects. In fragile contexts, climate and environmental considerations will be systematically integrated into the

quality assessment of interventions, ensuring that sustainability¹⁷ and resilience are core to project design and delivery. Through this country-led approach, IFAD will ensure that its operations are contextually appropriate and aligned with its mission to transform rural economies by eliminating poverty and food insecurity, while supporting countries in implementing their National Development Plans and fulfilling their commitments as Member States, including those linked to the SDGs, the three Rio Conventions,¹⁸ the Kunming-Montreal Global Biodiversity Framework and the Paris Agreement.

Objective 1: Enhance scaling and adoption of climate-resilient and environmentally sustainable practices and the sustainable use and conservation of biodiversity

Action area 1.1: Promote climate-resilient activities across rural economies that protect, restore, sustainably use and conserve ecosystem services and biodiversity

26. To increase sustainable production and strengthen rural livelihoods, particularly in areas reliant on subsistence agriculture, this action area promotes the scaling of agricultural practices, systems and services that are climate-resilient, environmentally sustainable, and rooted in the sustainable use and conservation of biodiversity. These efforts are guided, where appropriate, by local taxonomies and traditional knowledge. While climate, environment and biodiversity interventions are distinct, together they form the foundation of a holistic approach to transforming food systems and building resilience.
27. Building on this integrated vision, the action area advances a three-tiered framework centred on practices, systems and services. At the farm level, sustainable practices focus on managing land, water and natural resources to secure production for future generations. These include agroecology, agroforestry, regenerative agriculture, improved seeds and techniques that enhance soil health, water use and biodiversity, such as diversified cropping and pollinator protection. These efforts reduce degradation and preserve ecosystem services like carbon storage, water regulation and soil fertility. At a broader system level, landscape-based approaches¹⁹ link farm interventions with watershed management, ecosystem conservation and value chain integration. These balance food production with ecological and social needs by coordinating diverse land uses and stakeholder actions across rural areas. Supporting these layers are enabling services, technical support, market access and institutional mechanisms that help scale and sustain approaches that are climate-resilient and environmentally sustainable, and that sustainably manage and conserve biodiversity. Together, these elements drive the sustainable transformation of rural economies and strengthen their resilience to climate change.
28. Within this framework, climate-resilient practices play a central role by strengthening farmers' ability to anticipate, adapt to and recover from climate-related shocks such as extreme temperatures, erratic rainfall, droughts and floods. These practices include agroecology, agroforestry, regenerative methods, watershed management, and improved seeds and cultivars that enhance soil and water management while promoting the sustainable use and conservation of

¹⁷ Under this strategy, sustainability is defined as actions that meet the needs of the present without compromising the ability of future generations to meet their own needs. This is in line with common United Nations language as determined by the [United Nations Brundtland Commission](#).

¹⁸ The Rio Conventions are a set of interconnected international agreements focused on addressing environmental and development issues. They include the Convention on Biological Diversity, the United Nations Framework Convention on Climate Change, and the United Nations Convention to Combat Desertification.

¹⁹ Landscape-based approaches aim to achieve environmental, social and economic objectives by integrating diverse land uses and stakeholder needs through collaborative action. They balance competing demands for food production, ecosystem services, biodiversity, resilience and livelihoods while considering interactions between human activities and natural systems.

agrobiodiversity. When applied at scale, these approaches not only reduce vulnerability but also contribute to long-term productivity and stability.

29. Closely linked to resilience are environmentally sustainable practices, which reinforce the ecological foundations needed for climate adaptation. These focus on the careful management of land, water and ecosystems to protect production systems over time. By promoting sustainable land use, reducing pollution, including from agrochemical overuse, and applying nature-based solutions, these approaches help prevent degradation and support critical ecosystem services. Biodiversity conservation, especially agrobiodiversity, is integral to this effort, supported by practices that protect pollinators, encourage diverse cropping systems and restore natural habitats to maintain healthy and functioning ecosystems at both farm and landscape levels.
30. Another integral co-benefit of climate-resilient, environmentally sustainable and agrobiodiversity-focused agricultural practices is the enhancement of rural and smallholder nutrition outcomes. Diversified and resilient agricultural systems increase the availability and accessibility of nutrient-dense foods such as legumes, fruits, vegetables and Indigenous crops, thereby improving dietary diversity. By boosting local production, these systems also help lower costs and improve the affordability of nutritious foods. When paired with efforts to shift consumer behaviour towards healthier and more diverse diets, these approaches can drive lasting improvements in food security and nutrition at the household and community levels.
31. Integrating Indigenous knowledge and locally rooted practices is central to the strategy's goal of enhancing sustainable production, climate resilience and food security. Multigenerational understanding of climate adaptation – such as intercropping Indigenous crops with modern cultivars and applying traditional soil and water conservation techniques – can be seamlessly woven into modern farming systems to improve yields, strengthen agrobiodiversity and boost the nutritional quality of produce. These practices, often guided by national taxonomies and frameworks, are especially effective in fragile contexts and contribute to linking ecosystem health with human health. By promoting sustainable agribusiness models and addressing issues such as land degradation and desertification, the strategy supports the long-term viability of these approaches. It also emphasizes equitable benefit-sharing arrangements, particularly with Indigenous Peoples and local communities, recognizing their vital role as custodians of traditional knowledge and biodiversity. This enhances rural households' access to safe, nutritious diets year-round and contributes to improved food security and reduced malnutrition among IFAD's target groups.
32. The focus of the strategy on incentive-based conservation mechanisms will further encourage farmers to adopt and maintain the sustainable use and conservation of biodiversity and land management practices. Securing land tenure rights and supporting land governance policies and by-laws in agricultural systems will empower rural communities to confidently invest in long-term solutions that improve productivity and climate resilience while protecting natural resources.
33. Finally, recognizing the diversity of country contexts, no single approach will be prescribed. Countries will have the flexibility to select the most appropriate interventions based on their priorities, capacities and development goals, ensuring that all actions are aligned with national strategies, taxonomies and rural realities. To support this, IFAD will continue to partner with the South-South and Triangular Cooperation (SSTC) to facilitate effective knowledge transfer across the Global South to support countries in developing fit for context solutions in alignment with national priorities.

Action area 1.2: Invest in climate-resilient infrastructure and services that support agricultural value chains to enhance rural people's livelihoods

34. Investments will integrate climate-resilient infrastructure with efforts to strengthen rural producers' participation in sustainable value chains. Rural infrastructure incorporating adaptive materials, nature-based solutions, water-efficient technologies and energy solutions will create jobs, enhance connectivity across value chains and landscapes, and support economic growth. This will be complemented by decentralized solutions to reduce food waste and improve food safety across the value chain.
35. To maximize impact, IFAD will leverage 4Ps, aligning private sector investment with the public sector objectives of enhancing rural resilience, driving innovation and promoting sustainable solutions. Strengthening rural producers' capacity to engage in profitable and sustainable value chains is a key priority. This includes investments in mechanisms that enable producers to adopt sustainable practices while reducing transaction costs for accessing certified markets.
36. Investments will also support the modernization of rural value chains to help producers transition to more climate-resilient and adaptive economies. IFAD will promote access to climate information, low-emission and energy-efficient technologies and other climate-smart solutions across value chains. This transformation will be underpinned by greater investment in digital agriculture innovations, aiming to enhance profitability, resilience and mitigation potential.

Action area 1.3: Invest in early warning systems, digital services and data for adaptation towards increased resilience

37. By expanding rural digital connectivity, IFAD will strengthen policies, legal frameworks and institutions to improve access to real-time weather forecasting for climate change risk mitigation. Scaling hydrometeorological data, soil and water monitoring and pest tracking will enhance adaptive capacities. These efforts will be complemented by the delivery of tailored market insights and practical guidance that integrate both modern innovation and local and Indigenous knowledge. By bridging the digital divide and fostering agribusiness opportunities, these innovations in digital agriculture and early warning systems reflect IFAD's commitment to transformative change: equipping rural communities with the tools and technologies needed for proactive adaptation and long-term resilience.
38. Granular, context-specific data are essential for designing impactful investments and monitoring results. IFAD will deepen partnerships and deploy advanced digital innovations, including geospatial and remote sensing technologies to generate real-time insights, integrate verified national data and align with locally defined classification systems. These data systems will help track climate shocks and environmental change, optimize resource allocation and improve adaptation outcomes across rural value chains. Ensuring the quality and inclusivity of digital services will be critical: solutions must be demand-driven, locally adapted and designed with the needs of farmers in mind – including women, youth and the most vulnerable groups – to drive truly transformative, innovation-led change.

Objective 2: Enable increased investments for climate resilience, environmental sustainability and the sustainable use and conservation of biodiversity

Action area 2.1: Mobilize and assemble diverse international, regional and national sources of climate, environmental and biodiversity finance

39. To close the finance gap for resilient agriculture, IFAD will mobilize resources from multilateral funds such as the GCF, GEF, AF and Global Biodiversity Framework Fund – specifically to support small-scale farmers who face significant barriers in accessing funding. IFAD will navigate complex processes on behalf of small-scale producers securing timely and substantial cofinancing to complement IFAD's own

investments. By securing grants and blending them with core financing, IFAD expands concessional financing, easing financial burdens on partner countries while unlocking capital for climate resilience, environmental sustainability and practices focused on the sustainable use and conservation of biodiversity. These efforts support the broader goal of closing the agricultural climate finance gap.

40. IFAD will expand supplementary financing mechanisms, including the enhanced Adaptation for Smallholder Agriculture Programme, positioning it as a catalytic tool to reduce risk, attract cofinancing and support investments in agricultural productivity, water and food security and private sector engagement. Aligning these resources within IFAD's portfolio will amplify impact and enhance financial sustainability. Through SSTC, IFAD will strengthen synergy and cohesion across climate finance streams to reduce fragmentation, enhance direct access and improve the sequencing of climate finance across the Global South. This includes deeper engagement with public development banks (PDBs) to expand reach and coordination.
41. In parallel, IFAD will support alignment with nationally developed climate finance taxonomies: structured classification systems that define which activities qualify as climate-aligned or sustainable investments. These taxonomies are increasingly being adopted by countries to ensure consistency, comparability and transparency in climate finance flows. By aligning its interventions with these national frameworks, IFAD can help improve the targeting of finance, reduce duplication and ensure that investments are directed towards priorities identified in countries' climate strategies, such as Nationally Determined Contributions, National Adaptation Plans or biodiversity plans.

Action area 2.2: Build and strengthen adjusted market-based mechanisms to enhance rural economies and reward small-scale producers

42. To incentivize greater adoption of practices that account for the sustainable use and conservation of biodiversity and that are environmentally sustainable, IFAD will catalyse market-based mechanisms that align economic incentives with climate resilience efforts where these are contextually appropriate and in line with socioeconomic needs and capacities. Recognizing the trade-offs between enhancing public value and ensuring the profitability of private entities, including small-scale farmers and their organizations, IFAD will work to create enabling policy frameworks and conduct relevant market analyses to identify viable opportunities for sustainable rural enterprises.
43. To effectively manage these trade-offs, IFAD will deploy blended climate finance solutions and results-based payment mechanisms to balance economic returns with environmental objectives. Expanding blended finance for climate will be a core priority, strategically combining public, philanthropic and private capital to reduce risks and attract private sector participation in sustainability and resilience-focused projects, thereby acting as a powerful catalyst (through its concessional rates) for broader investment and systemic transformation. Collaboration with PDBs will be critical, leveraging their local presence, financial instruments and market expertise to mobilize additional resources and amplify the impact of blended finance initiatives.
44. IFAD will innovate and integrate financial tools with ecosystem services metrics and new agroecological indicators that demonstrates the environmental and economic benefits of holistic resilient approaches. These mechanisms will be designed to reduce financial risks, attract private investments and provide small-scale farmers with tangible incentives for adopting sustainable practices that conserve biodiversity, soils, water and other natural resources. IFAD will support frameworks that enhance disbursement and verification for results-based payment or incentive schemes, ensuring that small-scale producers receive fair compensation for their contributions to environmental sustainability.

45. In addition, IFAD will expand access to emerging results-based payment mechanisms, including agricultural insurance, carbon trading, biodiversity credits and ecosystem service rewards, to recognize and compensate farmers for their role in soil rehabilitation, reforestation and efficient water use. These will be implemented with robust environmental and social safeguards in place to protect communities, ecosystems and Indigenous rights. The majority of these instruments are already familiar to IFAD, as the organization has experience in deploying and facilitating such mechanisms across its portfolio. These mechanisms also offer significant co-benefits, including climate mitigation, by incentivizing practices that reduce emissions and enhance carbon sequestration.

Action area 2.3: Enhance access to IFAD's suite of financial solutions for Member States to meet national sector priorities

46. IFAD will mobilize climate finance in response to country demand and in line with commitments agreed during the IFAD13 Consultation – including, during the implementation period of 2025–2027, meeting the IFAD13 target of allocating at least 45 per cent of the programme of loans and grants to climate finance, and operationalizing additional climate contributions. IFAD will also enhance financial innovation in rural investments by aligning its range of financial products with national agricultural strategies and climate risk reduction objectives. This includes expanding agriculture-focused bonds, credit guarantees and risk-sharing mechanisms to catalyse public and private investment in resilient agricultural practices and rural infrastructure. It will also promote access to financial services such as credit, insurance, savings and digital financial solutions, with a focus on rural areas and partnerships with microfinance institutions to increase financial flows at the national level.
47. To attract financial resources, this strategy aligns with IFAD's Private Sector Operational Strategy 2025–2030, deploying financial instruments, and supporting banks and microfinance institutions that stimulate private investment in sustainable practices and promote partnerships for market access, technology and services. IFAD will continue to position itself as a sustainable bond issuer in international markets, with a focus on resilience outcomes.

Action area 2.4: Engage in inclusive partnerships with a broad set of public and private actors for financial and non-financial innovations

48. IFAD will expand partnerships with global, regional and national institutions, working with subregional and national development banks, financial institutions and platforms to scale adaptive and climate resilience initiatives. Collaborating with other international financial institutions and the other United Nations Rome-based agencies will enhance IFAD's access to large-scale development financing, strengthen technical expertise and facilitate policy exchange.
49. IFAD will deepen partnerships with the private sector, financial institutions and tech providers to unlock rural investment. By fostering collaboration, it will attract capital, innovation and financial tools to boost smallholder climate resilience, sustainable productivity and rural growth, while scaling impact nationally and regionally as follows:
- (a) Facilitate structured dialogues and investment platforms to connect institutional investors, agribusinesses and technology firms;
 - (b) Promote climate technology and innovation adoption by supporting the integration of precision farming, digital finance and smart agriculture solutions that are climate-resilient into IFAD-supported projects; and
 - (c) Work with venture capital firms, accelerators and impact investors to pilot scalable climate-resilient and nature-based solutions business models that improve market access, rural infrastructure and agricultural finance solutions.

50. IFAD will collaborate with Indigenous Peoples, youth, women's organizations and farmers' organizations in an inclusive manner to mobilize resources for climate resilience, environmental sustainability and biodiversity-focused investments. This will include direct financing to rural and community-based groups.

Objective 3: Strengthen policy engagement, knowledge management, capacity development and innovation to enhance rural resilience

Action area 3.1: Strengthen policy engagement for rural resilience

51. IFAD will strengthen its engagement with policymakers and key stakeholders to advocate for policies that promote investments in resilient rural economies. This includes participating in policy dialogues at national, regional and global levels and building strategic partnerships to support sustainable agriculture, land restoration and rural infrastructure. The strategy will ensure that operations are contextually appropriate and aligned with IFAD's mission to transform rural economies by eliminating poverty and food insecurity, while supporting countries in implementing their National Development Plans and fulfilling their commitments as Member States, including those linked to the SDGs,²⁰ Nationally Determined Contributions under the Paris Agreement, and NBSAPs under the Global Biodiversity Framework. IFAD will also support countries in integrating climate resilience, environmental sustainability and biodiversity measures into national development planning, taxonomies and budgeting processes.
52. IFAD will focus on whole-of-government approaches, fostering coordination between finance, agriculture and environment ministries to enhance policy coherence and unlock financing for rural investment programmes. This cross-sector collaboration will bridge policy gaps and create synergies that maximize impact. Further, IFAD will continue to engage with the SSTC to facilitate international policy engagement and dialogue to strengthen policies in this space across the Global South.
53. In this context, governments have a critical role in repurposing public support, including agricultural subsidies that have negative trade-offs, such as those that contribute to land degradation, biodiversity loss and greenhouse gas emissions. Redirecting public support, including subsidies, towards more effective and multi-functional outcomes, in particular for climate resilience and environmental sustainability is essential for driving systemic change and maximizing the impact of both public and private investments in rural development.
54. Additionally, IFAD will advocate for enabling policy frameworks that reduce market entry barriers for private sector players while ensuring that investments align with national development goals and smallholder needs.

Action area 3.2: Advance knowledge and foster innovation to strengthen agricultural systems

55. IFAD will enhance knowledge generation, dissemination and application to drive evidence-based decision-making and transformative innovation in rural investment strategies. It will strengthen its evidence base by systematically integrating scientific research into programme design and implementation, ensuring that all climate, environment and biodiversity interventions are grounded in robust field evidence. Through its established partnerships with leading research institutions and academic institutions, IFAD will continue to implement robust knowledge management systems that capture, analyse and synthesize research findings from operational experiences, grounding its knowledge generation in science-based evidence. By institutionalizing lessons learned, leveraging advanced analytics and

²⁰ This integrated strategy directly contributes to the following SDGs; No Poverty (SDG 1), Zero Hunger (SDG 2), Gender Equality (SDG 5), Clean Water and Sanitation (SDG 6), Affordable and Clean Energy (SDG 7), Climate Action (SDG 13), Life Below Water (SDG 14), and Life on Land (SDG 15).

fostering a culture of continuous learning, IFAD will strengthen adaptive management and scalability of rural investment solutions.

56. To increase knowledge translation into actionable strategies, IFAD will promote knowledge-sharing platforms, communities of practice and collaborative networks that connect governments, research institutions and development practitioners. These platforms will focus on agricultural risk management, soil restoration techniques, resilient seed development, climate information systems, financial innovations and scalable models for rural economic resilience. Further, IFAD will continue to support the SSTC and leverage its unique strengths in knowledge-sharing, technology adaptation, and inclusive capacity-building among developing countries to overcome climate, environment and biodiversity challenges facing the Global South.

Action area 3.3: Build capacity for effective implementation

57. IFAD will strengthen institutional and human capacities to embed climate resilience, environmentally sustainable practices and sustainable use and conservation of biodiversity into its projects. Comprehensive training will enhance staff expertise in economic risk assessment, climate financing, financial tracking and impact evaluation. Capacity-building initiatives will equip project teams, policymakers and rural stakeholders with the tools to implement investment strategies that boost agricultural productivity, stabilize rural economies and mitigate the impacts of environmental degradation, biodiversity loss and extreme weather. IFAD will also refine tools like the resilience design and measurement tool and the enhanced economic and financial analysis framework to improve risk-informed decision-making and investment efficiency.
58. IFAD will adopt standardized frameworks, including cost-benefit analysis and financial tracking methodologies, to ensure consistent reporting and accountability, aligning with the International Financial Reporting Standards. IFAD's sustainability disclosure standards will enhance transparency, credibility and investor confidence, attracting greater financial commitments from Member States and donors.

IV. Operational considerations

59. IFAD will streamline existing climate resilience and adaptive capacity indicators into its operations and Results Management Framework (RMF) for effective monitoring and evaluation.²¹ The strategy will be operationalized through IFAD's existing project cycle procedures and systematically translated into implementable actions during the project design phase. This process will ensure that strategic objectives are tailored to national contexts, aligned with country-led priorities and responsive to local needs and capacities. The strategy may be complemented by other operational instruments or internal management tools, such as IFAD's roadmap for alignment to the Paris Agreement, which was previously developed as an IFAD13 commitment.
60. Recognizing the critical role of human capital, IFAD will implement capacity-building initiatives by leveraging existing staff and external expertise as needed. Incremental costs related to the implementation of this strategy, including enhancing capacity on carbon markets, will be mobilized through supplementary funds and utilizing in-house technical expertise and knowledge where appropriate. Regular engagement will be conducted with country directors (CDs), project delivery teams (PDTs), COSOP design teams (CDTs) and other key staff to integrate the strategy's objectives into operations. This will place emphasis on the integration of relevant actions from the strategy into IFAD investments and ensure their alignment with country priorities, taxonomies and national strategies, including IFAD COSOPs.

²¹ To facilitate streamlined reporting, a separate RMF will not be developed for the strategy. IFAD will be guided by RMFs adopted under agreed replenishment processes.

61. To support implementation, IFAD will take a coordinated and institution-wide approach to capacity-building, operational guidance and learning, targeting both IFAD staff and project management units. The following measures will be undertaken:
- (a) **Operational guidance and training:** IFAD will issue dedicated guidance on applying integrated approaches to climate, environment and biodiversity within project design and implementation. Targeted training will be provided to staff and partners to ensure consistent application across the portfolio.
 - (b) **Adaptation finance business case:** A guidance note will be developed to help articulate the economic rationale for adaptation investments. This will be accompanied by training to strengthen internal and external capacity to mobilize and deploy adaptation finance effectively.
 - (c) **Knowledge-sharing and institutional learning:** A six-monthly stocktake will be conducted through communities of practice, bringing together staff from across IFAD to share progress, lessons learned and implementation challenges. Insights from early implementation will be documented and disseminated to strengthen institutional knowledge and inform continuous improvement.
 - (d) **On-demand technical support:** IFAD will pilot a help desk or internal advisory function to provide real-time technical support to country teams and project designers working on integrated and climate-relevant investments.
62. These actions aim to embed the strategy across IFAD's operations, strengthen the quality of investment design, and enhance the institution's ability to deliver high-impact, country-aligned and innovation-driven solutions in the face of growing climate and environmental risks.
63. By enhancing in-house capabilities, IFAD will increase the effective delivery of the strategy's objectives, with CDs and PDTs/CDTs aligning COSOPs and project interventions with the strategy's action areas. Strategic partnerships will play a key role in addressing capacity gaps within IFAD, enabling countries to fully utilize the comprehensive range of services offered under the strategy. IFAD will utilize ongoing collaborations with MDBs, United Nations agencies and bilateral donors to tap into existing resources and frameworks.
64. The strategy's impact and effectiveness will be evaluated through the RMF indicators and project reports, ensuring accountability and continuous learning. A high-level agroecological indicator will be developed (see annex VII).
65. To ensure effective strategy implementation, IFAD will focus on key operational actions between 2025 and 2027, as set out in the action plan contained in annex IX.

Consultation process

1. This strategy, developed through a comprehensive consultation process aligned with IFAD's guidelines, incorporates diverse perspectives to address the evolving needs of rural poor people.
2. Key stakeholders consulted include:
 - (a) **Technical working group.** A specialized IFAD team from the Environment, Climate, Gender and Social Inclusion Division, including climate, environment and biodiversity experts, were consulted to improve technical soundness and alignment with global best practices;
 - (b) **Interdivisional working group.** Experts from across IFAD's divisions contributed to align the strategy with the Report of the Consultation on the Thirteenth Replenishment of IFAD's Resources (IFAD13 Report) and other priorities;
 - (c) **Country directors.** IFAD's country directors, with their deep understanding of local contexts, helped align the strategy's relevance across diverse country situations;
 - (d) **Senior leadership**
 - (i) The Programme Management Committee provided strategic oversight to align the strategy with IFAD's mission and operations;
 - (ii) The Operational Strategy and Policy Guidance Committee assessed alignment with operational priorities and policy frameworks;
 - (iii) The Executive Management Committee provided executive-level feedback and endorsement;
 - (e) **External stakeholders.** Two public consultations were held with IFAD Member States:
 - (i) **First consultation.** Input was gathered on an approach paper outlining goals, objectives and action areas via IFAD's Member States Interactive Platform, engaging Member States and 15 external organizations, including multilateral development banks, civil society, research institutions and private sector entities; and
 - (ii) **Second consultation.** Two informal Executive Board seminars facilitated detailed feedback from Member States and observers on the full strategy.

Theory of change

1. The theory of change envisions long-term inclusive rural transformation by enhancing livelihoods, food security and resilience while ensuring youth inclusion, the engagement of men and women, and Indigenous Peoples' rights, in line with IFAD's approach to country strategic opportunities programmes and the IFAD Poverty Targeting Policy 2023. The strategy highlights the economic and social benefits of integrated approaches, supporting sustainable yields, higher incomes and climate-resilient rural economic processes through digital tools, enhanced utilization of financial instruments and innovative mechanisms, and improved policies for agricultural production and value chain transformation.
2. The strategy adopts landscape-based approaches that link farm-level interventions with watershed management, ecosystem conservation and value chain integration. These system-level approaches balance food production with ecological and social needs by coordinating diverse land uses and stakeholder actions across rural areas, moving beyond individual farm practices to achieve broader transformation at scale. Central to this is integrating Indigenous knowledge and locally rooted practices, weaving traditional climate adaptation and mitigation techniques into modern farming systems to strengthen agrobiodiversity and enhance resilience.
3. To support this, IFAD mobilizes financial resources from international, regional and national sources via replenishment contributions, concessional loans, private placements and multilateral finance. Additional funding is leveraged through partnerships with development finance institutions, commercial banks, impact investors and public development banks.
4. The strategy emphasizes non-sovereign operations, enabling private sector financing through financial intermediaries and small and medium-sized enterprises, fostering blended finance. By integrating private and public financing and amplifying the voices of vulnerable populations, IFAD increases inclusive, demand-driven solutions.
5. Public-private partnerships, including with Indigenous Peoples, youth and farmers' organizations, foster a whole-of-society approach. These partnerships align sectors, promote incentives for sustainability, and enhance last-mile resource delivery, following IFAD's Partnership Framework.
6. Digital tools and services enhance planning, monitoring and evaluation for resilient actions. IFAD promotes rural digital connectivity, leveraging geospatial data and remote sensing to guide investments, optimize resources and support targeted policy interventions.
7. The strategy strengthens policy engagement, knowledge management and capacity development through a country-led, demand-driven approach. Partnerships with governments, research institutions and the private sector drive innovation, expand practices that are climate-resilient and environmentally sensitive, and promote the sustainable use and conservation of biodiversity for long-term rural transformation.

Lessons learned

- Over the past decade, IFAD has significantly strengthened its performance, environmental and natural resources management, and climate change adaptation. According to the 2023 Annual Report on the Independent Evaluation of IFAD, data from 288 project evaluations and 45 country strategy evaluations reveal consistent improvements in these areas. The share of well-performing projects increased from 71 per cent in 2011–2013 to 90 per cent in 2019–2021, underscoring IFAD's sustained commitment to integrating climate and environmental considerations into its interventions. The latest Multilateral Organisation Performance Assessment Network (MOPAN) report highlights IFAD's strong capacity to respond to critical global challenges, particularly climate change impacts. Alongside these achievements, valuable lessons have been learned, highlighting the importance of adaptive and responsive approaches in complex rural contexts.

<i>Recommendation</i>	<i>Details</i>	<i>Source</i>
Ramp up climate resilience finance	Increase climate resilience finance for high-impact projects in areas such as resilient agriculture, early warning systems and disaster risk reduction. Recommendations include focusing on on-farm resilient agriculture practices and small-scale farmers in fragile states.	Thematic evaluation; Strategic directions of the Thirteenth Replenishment of IFAD's Resources (IFAD13); MOPAN report.
Adopt a blended funding approach	Leverage the programme of loans and grants and supplementary funds to maximize resilience finance impact. A blended approach combines traditional and additional financial mechanisms for larger-scale impact.	Thematic evaluation; IFAD13 Consultation.
Integrate climate resilience focus in early project design	Include climate resilience and nutrition considerations in early project design, especially when preparing country strategic opportunities programmes.	MOPAN report, p. 78, impact assessment findings.
Boost policy engagement and advocacy	Intensify policy engagement and advocacy for resilience, nutrition enhancement and biodiversity management. IFAD should prioritize scaling up and non-lending activities with dedicated resources. Building a supportive policy environment ensures long-term sustainability.	Thematic evaluation; MOPAN report; Agroecology stocktake.
Balance value chain focus in agrifood systems	Support market innovations and enhance market access for producers while incorporating environmental, resilience, nutrition and biodiversity considerations across the value chain. Agroecology projects should better support commercialization and market access for products.	Internal agroecology stocktake; Impact assessment findings.
Deploy advanced technologies	Invest in advanced technologies such as geographic information systems, blockchain and artificial intelligence (AI) for improved project implementation, monitoring and impact assessment. These technologies enhance tracking progress and increase efficient, impactful interventions.	Internal work on AI usage at IFAD.
Strategic support in fragile states	Develop strategies for supporting small-scale farmers in fragile and conflict-affected states, focusing on climate-resilient agriculture. Enhance impact and efficiency in line with IFAD13 commitments.	MOPAN report; IFAD13 Consultation.
Increase private sector engagement	Deepen partnerships with private sector actors for financing small-scale producers. Explore co-investment opportunities with impact investors and innovative financing mechanisms such as blended finance tools.	Thematic evaluation; IFAD13 Consultation; Agroecology Stocktake.
Engage in carbon markets	Expand carbon market interventions to reward small-scale farmers for carbon sequestration efforts. Carbon markets offer potential financial rewards and sustainability for climate-resilient agricultural practices and offer mitigation potential.	IFAD13 Consultation.
Better define, communicate and	With the effort to mainstream nutrition in at least 60 per cent of IFAD projects, there is a need to clearly define the	MOPAN report;

measure nutrition impact	indicators and improve their understanding within IFAD, at the regional and country level. This will enable IFAD projects to better measure the level at which improvements in food security and nutrition have been achieved.	IFAD13 Consultation.
Better measure biodiversity impacts	Develop tools to accurately measure the impact of biodiversity interventions on income generation, climate resilience, food security and conservation. Accurate measurement is crucial for improving intervention outcomes.	Internal agroecology stocktake.
Strengthen capacity-building	Enhance capacity within IFAD to provide technical support and manage climate change solutions. Increase both human and financial resources for scaling climate resilience efforts through non-lending activities.	Thematic evaluation.
Improve knowledge management	Strengthen organizational learning by documenting best practices and lessons learned from resilience and biodiversity interventions and sharing them across regions and at multiple levels. A clear framework for a learning and communications strategy improves future project outcomes.	Thematic evaluation on knowledge management; Management response to knowledge management evaluation.
Enhance integration of traditional knowledge	Promote the integration of traditional and Indigenous Peoples' knowledge into climate resilience strategies, ensuring participation by both Indigenous Peoples and local communities. Combining traditional and modern practices enhances resilience interventions.	Internal agroecology stocktake; Thematic evaluations; Global Biodiversity Framework target 22.

Key findings of benchmarking and best practices review

1. This annex reviews the resilience and biodiversity strategies of key financial institutions and bilateral partners, analysing objectives, approaches and innovations. It highlights private sector engagement, resource mobilization, portfolio management, capacity-building and partnerships, identifying trends to inform IFAD's integrated strategy.

Integration of climate and biodiversity

2. Multilateral development banks (MDBs) increasingly recognize the link between climate resilience and biodiversity, integrating these into broader development plans. While the Inter-American Development Bank (IDB) has a dedicated biodiversity action plan, most MDBs align with the Paris Agreement and are beginning to align with the Global Biodiversity Framework. Nine MDBs have signed the Joint Statement on Nature, People and Planet, though most strategies predate these frameworks and are evolving.
3. MDBs focus on integrating biodiversity with climate resilience and social targets. While the Asian Development Bank (ADB), IDB and the World Bank have dedicated biodiversity investments (e.g. ADB biodiversity and nature bonds), others incorporate biodiversity targets within resilience finance goals. About one third have specific environmental or biodiversity targets. MDBs are also refining taxonomies and strengthening capacity for biodiversity and climate investments.
4. MDBs use safeguards to assess climate change and biodiversity risks, increasingly emphasizing net gains. Tools like natural capital valuation are being incorporated into project appraisals.

Scope of financed interventions

5. In 2022, MDBs provided US\$60.9 billion in climate finance for resilience actions. Nearly 73 per cent set explicit adaptation finance targets, typically allocating 40 to 50 per cent of resilience finance for adaptive capacity-related action. MDBs also promote nature-based solutions for disaster risk reduction and biodiversity conservation.
6. MDBs prioritize sectors where nature-based solutions and green infrastructure play critical roles, particularly in water, agriculture, land use and energy. For example, investments in sustainable agribusiness practices are essential to resilience-building. Additionally, cross-sectoral strategies, such as the water-food-energy nexus approach used by ADB, help increase investments that consider synergies and trade-offs across sectors.
7. Sustainability reporting is gaining attention, with MDBs aligning with established standards and committing resources to compliance.

Climate, environment and biodiversity financing

8. MDBs and international financial institutions (IFIs) are expanding private sector engagement through de-risking investments, public-private partnerships and green bonds, though mobilizing private finance for nature remains a challenge. Innovations like carbon pricing, sustainability-linked bonds and green banking frameworks help bridge the gap. The Sustainable Banking and Finance Network supports environmental finance in 40 countries, while the World Bank develops thematic funds to leverage carbon credit markets. Emerging tools like resilient debt clauses and resilience bonds support countries facing increased incidence of extreme weather events.
9. Results-based loans are growing, with 55 per cent of IFIs linking incentives to environmental outcomes. For example, IDB offers financial discounts for meeting biodiversity and resilience targets.

Public policy and technical assistance

10. IFIs emphasize government engagement and capacity-building. The African Development Bank supports regional hubs to enhance planning and biodiversity finance, while ADB provides technical assistance to improve project bankability and policy development.

Staffing and capacity-building

11. To manage these growing climate resilience and biodiversity portfolios, IFIs are focusing on building internal capacity through staff training and expanding technical teams. Decentralizing climate resilience and biodiversity experts to regional offices and collaborating with external partners are key trends.

Adopting best practices for IFAD

12. IFAD can adopt best practices from leading MDBs by:
 - (a) Integrating climate resilience, environment and biodiversity goals into broader development frameworks;
 - (b) Promoting nature-based solutions in adaptation and climate resilience;
 - (c) Setting specific biodiversity targets alongside climate resilience goals, similar to the Agence Française de Développement;
 - (d) Exploring innovative financial mechanisms such as biodiversity-linked financing;
 - (e) Engaging the private sector through de-risking mechanisms;
 - (f) Benchmarking and exchanging views with other MDBs on sustainability reporting based on the International Financial Reporting Standards Sustainability Disclosure Standards; and
 - (g) Enhancing decentralized technical capacity across these themes.

Risk assessment and mitigation measures

Risk	Mitigation measure
While the nexus approach aims to maximize synergies among resilience, environment and biodiversity, there is a risk that competing priorities, trade-offs or gaps in enabling policy frameworks could dilute the effectiveness of integration efforts, resulting in limited impact or unintended negative outcomes.	Strengthen capacity development through targeted training programmes, technical guidance and knowledge-sharing initiatives to equip IFAD staff and stakeholders with the skills and tools needed to effectively implement an integrated approach and navigate trade-offs.
The strategy's success relies on alignment among IFAD staff, Member States and partners. Differing priorities, inconsistent engagement or unclear roles may hinder implementation.	Implement a stakeholder engagement plan with regular consultations, clear communication channels and defined roles to increase shared understanding and commitment.
The strategy's ambitious, integrative approach may face implementation challenges due to coordination, capacity-building and financing gaps. Limited resources could hinder success.	<p>Regular progress assessments in Programme Management Committee meetings will track implementation, address bottlenecks and allow for adjustments as needed.</p> <p>Proactive resource mobilization and diversified funding strategies will be pursued to bridge potential financing gaps.</p> <p>Draw lessons from recent studies such as the report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES 2024, etc.) to lower risks and leverage the significant co-benefits that integrated approaches have proven to provide.</p>
There is a potential reputational risk of greenwashing if the roadmap is not effectively implemented.	Strengthen transparency and accountability by embedding robust monitoring, reporting and verification systems, aligned with international standards, to track progress and demonstrate tangible results.
Limited private sector financing for adaptive practices due to perceived low returns, high transaction costs and policy uncertainties may hinder investment flows.	Leverage blended finance instruments to de-risk private sector investments and promote scalable, profitable adaptation solutions for small-scale producers.
A broad range of adaptation options increases the risk of maladaptation, posing reputational and accountability risks to IFAD.	IFAD's enhanced Social, Environmental and Climate Assessment Procedures (SECAP) safeguard projects against maladaptation, as strengthened in 2021 to reduce risks. Its modular approach enables COSOP-level strategies to be tailored to country contexts and capacities, preventing overly ambitious or unsuitable activities.

Assessment of integrated versus independent approaches to climate change impacts, biodiversity loss and environmental degradation

A. Context

1. Climate change impacts, environmental degradation and biodiversity loss are interconnected crises that pose significant threats to rural livelihoods and the natural resources they depend on. Balancing and ensuring equitable outcomes across these areas is a complex challenge.²² Addressing these issues together requires high technical capacity and long-term vision, while addressing them independently can lead to unintended and negative consequences in other focus areas. Consequently, these trade-offs must be considered when deciding an operational model for development impact.

B. Impact effectiveness

2. These threats to agriculture systems are interrelated and require an integrated approach to sustainability. While carbon mitigation efforts can deliver targeted results, ignoring environmental and biodiversity concerns may cause harm. For example, monoculture and land conversion for renewable energy support carbon sequestration and also financial flows from carbon credits, boosting economic resilience, but can degrade soils and harm biodiversity.
3. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Thematic Assessment Report on the Interlinkages Among Biodiversity, Water, Food and Health²³ underscores the interconnections between climate change impacts, biodiversity loss and environmental degradation, emphasizing that an integrated approach to addressing these challenges yields significant co-benefits across social, economic and ecological dimensions. The report identifies over 150 case studies demonstrating that integrated approaches can deliver benefits across biodiversity, soil, water, health and agricultural production. For example, addressing water pollution and invasive species in Senegal led to a 32 per cent reduction in schistosomiasis infections among children, improved fresh water access and generated new revenue streams for local communities. Tackling these issues simultaneously enhances the effectiveness of interventions by leveraging synergies, avoiding unintended trade-offs, and fostering climate resilience in ecosystems and communities. Key co-benefits include:
 - (a) **Enhanced ecosystem services.** An integrated approach preserves and restores ecosystems, ensuring the continued provision of essential services such as clean water, fertile soils and pollination. For example, protecting biodiversity-rich areas can simultaneously sequester carbon for healthy soils and stabilize local production, benefiting sustainable production and food security.
 - (b) **Increased climate resilience.** Integrated strategies strengthen ecosystem and community resilience to extreme weather events. Biodiverse ecosystems, such as mangroves and forests, act as natural buffers against extreme weather events, reducing vulnerabilities for human populations.
 - (c) **Economic efficiency and cost savings.** Addressing climate change impacts, biodiversity and environmental challenges through a unified strategy reduces costs by optimizing resource use and aligning objectives. For example, agroforestry systems deliver co-benefits by increasing crop yields, enhancing biodiversity and sequestering carbon to access carbon markets, offering a higher return on investment compared to siloed interventions.

²² IPBES-IPCC. 2021. [Co-Sponsored Workshop on Biodiversity and Climate Change](#).

²³ IPBES. 2024. [Thematic Assessment Report on the Interlinkages among Biodiversity, Water, Food and Health](#).

- (d) **Support for livelihoods and food security.** Simultaneous action on these fronts safeguards the natural resources on which rural communities depend, supporting sustainable livelihoods and improving food security and nutrition. Integrated approaches that promote sustainable land management and conservation practices empower small-scale farmers while preserving ecosystems.
 - (e) **Improved policy coherence and governance.** An integrated approach aligns policy objectives across sectors, fostering cooperation among stakeholders and reducing conflicts. It enables the design of comprehensive frameworks that address root causes of environmental degradation and biodiversity loss while mitigating negative impacts of climate change.
4. Siloed approaches that fail to consider the ways climate change, biodiversity loss and environmental degradation feed into and compound one another can lead to an underestimation of the cumulative risks involved. Recent research by the United Nations Environment Programme (UNEP) highlights that integrated approaches for biodiversity conservation and carbon capture secure 95 per cent of the biodiversity benefits and nearly 80 per cent of the carbon stock compared to independent investment results.²⁴ A major co-benefit of increased soil carbon and biodiversity conservation is reduced land degradation. This underscores that integrated approaches maintain a higher level of impact effectiveness, and mitigate negative trade-offs, in comparison to independent approaches.

C. Long-term sustainability and cost-effectiveness

5. Over the last decade, scientific consensus has highlighted the importance of addressing complex issues through holistic, system-wide approaches.²⁵ Agricultural systems are multifaceted and are impacted by these threats in multiple interconnected ways.
6. Addressing these threats individually allows for targeted, cost-effective interventions that reduce upfront costs and align with sectoral policies. This approach enables quick wins against specific national policy targets.
7. Despite this, targeted efforts miss out on co-benefits and synergies that enhance sustainability at the systems level. Further, they can result in increased fragmentation of development efforts and increased duplication of effort.²⁶ This increases development spending and can reinforce divergence in the policy space, hindering progression towards transformative change.
8. In contrast, integrated approaches bridge policy spheres and leverage co-benefits to maximize impact across systems. The optimization of co-benefits can result in significant long-term cost benefits and economic gains across rural systems.²⁷ For example, regenerative agricultural practices provide co-benefits across these areas, saving on development costs and increasing profitable farm-level output. This leads to long-term sustainability and economic outlooks for rural populations. In Africa, it is estimated that by 2040 regenerative approaches will result in a gross value added of US\$70 billion, approximately one fifth of the GDP of sub-Saharan Africa, and yield increases of between 68 and 300 per cent at farm level.²⁸
9. While the complexity involved in establishing integrated approaches can increase start-up costs, the leveraging of co-benefits enhances synergies and cross-sectoral collaboration, reduces fragmentation, and provides opportunities for innovation and

²⁴ De Lamo, Xavier, et al. 2020. [Strengthening synergies: How action to achieve post-2020 global biodiversity conservation targets can contribute to mitigating climate change](#).

²⁵ Liu, Jianguo, et al. 2015. Systems integration for global sustainability. *Science*, vol. 347, no. 6225.

²⁶ Smith, Risa, et al. 2019. [Ensuring Co-benefits for Biodiversity, Climate Change and Sustainable Development](#).

²⁷ Agliardi, Elettra, Rossella Agliardi, and Willem Spanjers. The economic value of biodiversity preservation. *Environmental and Resource Economics*, vol. 87, pp. 1593-1610.

²⁸ International Union for Conservation of Nature (IUCN). 2021. [Regenerative Agriculture: An opportunity for businesses and society to restore degraded land in Africa](#).

taking impact to scale.^{29,30} Consequently, in the long term, integrated approaches streamline development efforts, reduce costs, increase policy coherence and leverage co-benefits for system-wide sustainability.

²⁹ Schmidt-Traub, Guido, et al. 2021. Integrating climate, biodiversity, and sustainable land-use strategies: innovations from China. [*National Science Review*](#), vol. 8, no. 7.

³⁰ IOE. 2020. [Community-driven development in IFAD-supported projects: Evaluation synthesis](#).

Proposal for a high-level indicator of ecological impact

A. Context

1. Following the Development Effectiveness Framework,³¹ IFAD conducts impact assessments on a representative sample of at least 15 per cent of the projects in the portfolio during each replenishment cycle (a three-year period). Each impact assessment compares the outcomes of those who participated in the supported projects against those who did not. The aggregated impacts on income, productivity, market access, resilience and nutrition are applied to closed projects, allowing IFAD to assess corporate-level outcomes. During the Consultation on the Thirteenth Replenishment of IFAD's Resources (IFAD13), IFAD was asked to explore a high-level ecological impact indicator.

B. Relevance

2. IFAD promotes sustainable rural transformation through climate-resilient, environmentally sustainable practices and investment that focus on the sustainable use and conservation of biodiversity. An ecological impact indicator will help improve IFAD's strategies and investments by enabling the organization to:
 - (a) Track changes and provide an evidence base on IFAD's intervention impacts on ecological conditions over time;
 - (b) Showcase IFAD's commitment to sustainability by providing transparent, measurable evidence of its ecological impacts, strengthening its credibility with partners;
 - (c) Inform the design and implementation of investment projects aiming at improving ecological conditions, which are vital for the livelihoods and resilience of rural populations;
 - (d) Support countries align with global frameworks, like the Sustainable Development Goals (SDGs), by measuring contributions to environmental and biodiversity targets; and
 - (e) Identify successful practices and recommendations for improvement, enabling the organization to continuously refine its approaches and promote scalable innovations.

C. Methodology

3. The ecological impact indicator will be designed during IFAD13 in alignment with the:
 - (a) Multilateral development banks' common approach to measuring resilience results;³²
 - (b) Report by the High Level Panel of Experts on Food Security and Nutrition (HLPE) on the 13 principles of agroecology;³³
 - (c) International Finance Corporation (IFC) supplement on biodiversity finance metrics for impact reporting;³⁴ and
 - (d) The monitoring framework of the Global Biodiversity Framework (GBF), which measures progress towards the four goals and 23 targets of the post-2020 GBF.³⁵

³¹ IFAD. 2016. [IFAD Development Effectiveness Framework](#).

³² World Bank. 2024. [Common Approach To Measuring Climate Results](#).

³³ HLPE. 2019. [Agroecological and other innovative approaches for sustainable agriculture and food systems that enhance food security and nutrition](#).

³⁴ IFC. 2024. [Biodiversity Finance Metrics for Impact Reporting](#).

³⁵ Convention on Biological Diversity. 2023. [Monitoring Framework for the Kunming-Montreal Global Biodiversity Framework](#).

4. The indicator will be piloted with a focus on a single ecological dimension, soil health,³⁶ to ensure a targeted and practical approach during the initial phase. Soil health has been selected due to its foundational role in supporting agricultural productivity, biodiversity, and ecosystem resilience. The indicator will be developed through systematic data collection and analysis, using surveys, remote sensing, national data and structured questionnaires, while considering cost and time constraints. Technologies such as GPS will enhance remote sensing and satellite imagery analysis.
5. Key principles to follow for the development of the ecological impact indicator:
 - (a) Use accessible data from farm, household, ecosystem and landscape levels, ideally aligning with IFAD's core indicators;
 - (b) Embed data collection in existing impact assessments for simplicity and feasibility;
 - (c) Design the indicator to be cost-effective and efficient;
 - (d) Design for comparability across geographies and ecosystems;
 - (e) Ensure the indicator is responsive to the interventions of IFAD projects;
 - (f) Make the indicator simple enough for stakeholders to understand and interpret; and
 - (g) Align with global standards like the SDGs and biodiversity targets for relevance.

D. Approach and timeline

6. The ecological impact indicator will be developed during the IFAD13 period. It will be tested and piloted in some of the IFAD13 impact assessments (between 2025 and 2027). During the testing phase, several conceptual designs of the indicator will be prepared by a core team of IFAD experts, led by the Office of Development Effectiveness, and these will be discussed in a wider group of IFAD staff and, where required, external experts. Subsequently, the most promising of these indicators will be tested in a small number of specific IFAD projects and enhanced based on the test outcomes.
7. Data availability will be integrated from the start to support a practical and cost-effective approach. IFAD will use remote sensing, targeted surveys and household questionnaires, focusing on a scalable indicator relevant to IFAD and other international financial institutions.
8. The indicator will be subsequently finalized, systematically assessed and reported starting with the IFAD14 impact assessments (2028 for reporting in 2030). Required resources for data collection and reporting will be included in the proposal development.

³⁶ Selection is indicative and subject to further analysis and technical discussions, in line with best practices.

Relevance of resilience to climate change, environmental degradation and biodiversity loss to IFAD operations

1. IFAD strengthens the resilience of rural communities (its target group) threatened by weather events, environmental degradation and biodiversity loss by addressing these thematic areas together. The table details the relevance of these challenges to IFAD's target area and sector.

Challenges/threats	Relevance and impact on rural development and the small-scale agriculture sector
<p>Weather events</p> <p>Agricultural systems are heavily dependent on climate. Global weather patterns are increasing in variability, shifting growing seasons and increasing the incidence of flooding and agricultural drought events.</p>	<p>Individuals and communities in rural areas of the Global South face vulnerability to weather-related disasters with limited support.³⁷ Their livelihoods rely heavily on weather-sensitive sectors such as agriculture and the extraction of increasingly degraded natural resources. With low welfare levels and limited adaptive capacity, their ability to adapt to challenges is limited,³⁸ especially when there are insufficient institutional arrangements in place to support them.³⁹ These areas often face high levels of fragility, socioeconomic instability and political unrest.⁴⁰</p> <p>Rural livelihood depletion. Extreme weather events (droughts, floods) disrupt production, leading to food shortages and price volatility that directly impact rural livelihoods and economies.</p> <p>Household instability. Climate and economic or market shocks result in increased farm-level costs that exacerbate poverty and reduce net incomes. This reduces financial buffers to support households in times of need, such as responding to market fluctuations. Consequently, households have reduced ability to absorb impacts from economic or physical shocks.</p> <p>Rural displacement. Forced rural-urban migration by farmers due to weather-induced land degradation.⁴¹</p> <p>Macroeconomic pressures. Variable weather patterns are a major driver of inflation, with global food prices increasing by 0.5 to 1.2 percentage points in 2022,⁴² as droughts and floods disrupted production. While there are significant regional variations, projections indicate that this physical threat could reduce crop yields by up to 25 per cent by the end of the century.⁴³ By 2035 – just over a decade away – this could contribute to a 50 per cent increase in the rate of food inflation across all categories.⁴⁴</p> <p>In regions such as sub-Saharan Africa, where food accounts for up to 40 per cent of household expenditures, these price hikes disproportionately affect the poorest households.⁴⁵ Weather events also strain public finances, with related damages adding up to 10 per cent of GDP in debt for some vulnerable countries.⁴⁶ At the same time, displacement – over 20 million refugees annually – is</p>

³⁷ Nguyen, Trung Thanh, et al. 2023. Security risks from climate change and environmental degradation: implications for sustainable land use transformation in the Global South. [Current Opinion in Environmental Sustainability](#), vol. 63.

³⁸ Ibid.

³⁹ Nguyen, Thanh-Tung, et al. 2022. Shocks, agricultural productivity, and natural resource extraction in rural Southeast Asia. [World Development](#), vol. 159.

⁴⁰ See footnote 31.

⁴¹ Hermans, Kathleen, and Robert McLeman. 2021. Climate change, drought, land degradation and migration: exploring the linkages. [Current Opinion in Environmental Sustainability](#), vol. 50, pp. 236-244.

⁴² Kotz, Maximilian, et al. 2024. Global warming and heat extremes to enhance inflationary pressures. [Communications Earth and Environment](#), vol. 5, no. 1.

⁴³ Liu, Jianguo, et al. 2015. Systems integration for global sustainability. [Science](#), vol. 347, no. 6225.

⁴⁴ Smith, Risa, et al. 2019. [Ensuring Co-benefits for Biodiversity, Climate Change and Sustainable Development](#).

⁴⁵ FAO Food Price Index, October 2024.

⁴⁶ Maldonado, Franco, and Kevin P. Gallagher. 2022. [Climate Change and IMF Debt Sustainability Analysis](#).

	increasing pressure on urban infrastructure and social services, further destabilizing economies. ⁴⁷
Environmental degradation Over a quarter of the Earth's ice-free land area is already observably degraded, affecting at least 1.3 billion people, primarily in the Global South. ⁴⁸ Globally, natural resources (i.e. land, forests and water) have been reported to be increasingly degraded or depleted. ⁴⁹	<p>Loss of productive land for small-scale producers. Soil erosion, deforestation and desertification reduce land productivity and increase vulnerability to climate variability.⁵⁰</p> <p>Reduced yields. Reduced access to fertile land limits agricultural production and livelihoods.</p> <p>Natural resource depletion. Overexploitation of natural resources leads to long-term sustainability challenges as resources available are reduced, straining current methods and practices. This increases financial pressure on rural economies, limits their competitiveness, and constrains economic growth in agriculture-dependent regions.</p> <p>Increased production costs. Small-scale farmers may need to invest more in inputs (fertilizers, water) due to degraded resources, reducing profit margins.</p> <p>Health impacts. Exposure to polluted water and air can negatively affect the health of rural communities.</p>
Biodiversity loss Biodiversity is in crisis, with species extinction rates higher than in the past 10 million years, driven largely by agriculture, which threatens 86 per cent of species at risk. ⁵¹ Further, 33 per cent of soils are heavily degraded, and by 2050 as much as 90 per cent could be degraded if deforestation and intensive cultivation are not checked. ⁵²	<p>Reduced yields. Decreased pollination, soil fertility decline and increased pest outbreaks reduce agricultural productivity. This can negatively impact farm-level incomes and livelihoods and threaten food security.</p> <p>Natural resource management. Biodiverse ecosystems support rural communities by regulating agriculture and water sources. Loss of pollinators, soil organisms and natural pest control harms productivity and water security.</p> <p>Economic vulnerability from biodiversity loss. Declining ecosystem services can raise input costs, lower yields and threaten farm incomes, increasing food costs and endangering rural economies reliant on biodiversity.</p> <p>Indigenous and traditional knowledge. This is vital for effective, low-cost climate solutions. Erosion of such knowledge reduces livelihood opportunities.</p> <p>Reduced nutrition. Reduced dietary diversity due to loss of valuable locally sourced agricultural and wild biodiversity products.</p>

⁴⁷ World Economic Forum. 2019. [The cost of the climate crisis? 20 million homeless every year.](#)

⁴⁸ IPCC. 2019. [Climate Change and Land: An IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems.](#)

⁴⁹ Feng, Yu, et al. 2022. Doubling of annual forest carbon loss over the tropics during the early twenty-first century. [Nature Sustainability](#), vol. 5, pp. 444-451.

⁵⁰ Hermans, Kathleen, and Robert McLeman. 2021. Climate change, drought, land degradation and migration: exploring the linkages. [Current Opinion in Environmental Sustainability](#), vol. 50, pp. 236-244.

⁵¹ UNEP. 2021. [Our global food system is the primary driver of biodiversity loss.](#)

⁵² FAO and Intergovernmental Technical Panel on Soils (ITPS). 2015. [Status of the World's Soil Resources \(SWSR\) – Main Report.](#)

Action plan (2025–2027)

<i>Action area</i>	<i>Key activities and deliverables</i>	<i>Timeline (2025–2027)</i>
Guidance	Develop guidance for integrating climate resilience, environmental management and sustainable use and conservation of biodiversity practices into the project cycle	Q4 2025
Capacity-building for adaptation finance	Phase 1: Concept design for a capacity-building programme focused on the business case for adaptation finance	Q2 2025
	Phase 2: Design of a practical handbook/toolkit on the business case for adaptation finance integration	Q3 2025
	Phase 3: Delivery of training modules for country directors, project design teams and technical specialists	Q1 2026 – Q1 2027
Development of an ecological impact indicator	Design and pilot a high-level agroecological indicator (focused on soil health) aligned with global frameworks, e.g. Global Biodiversity Framework, Sustainable Development Goals	Concept design: Q3 2025; Pilot phase: 2026–2027; Finalization for IFAD14: Q4 2027
Development of operational guidelines on additional climate contributions (ACCs)	Prepare and finalize guidelines for deploying ACCs under IFAD13	Q2 2025
Project design support	Continue to provide on-demand technical support to project design teams to incorporate integrated approaches (climate resilience, biodiversity, climate risk management) into project design	Ongoing (2025–2027)
Climate finance tracking and reporting	Continue to support calculation of climate finance contributions, and track and report progress against IFAD13 commitments (45 per cent climate finance target)	Ongoing (2025–2027)